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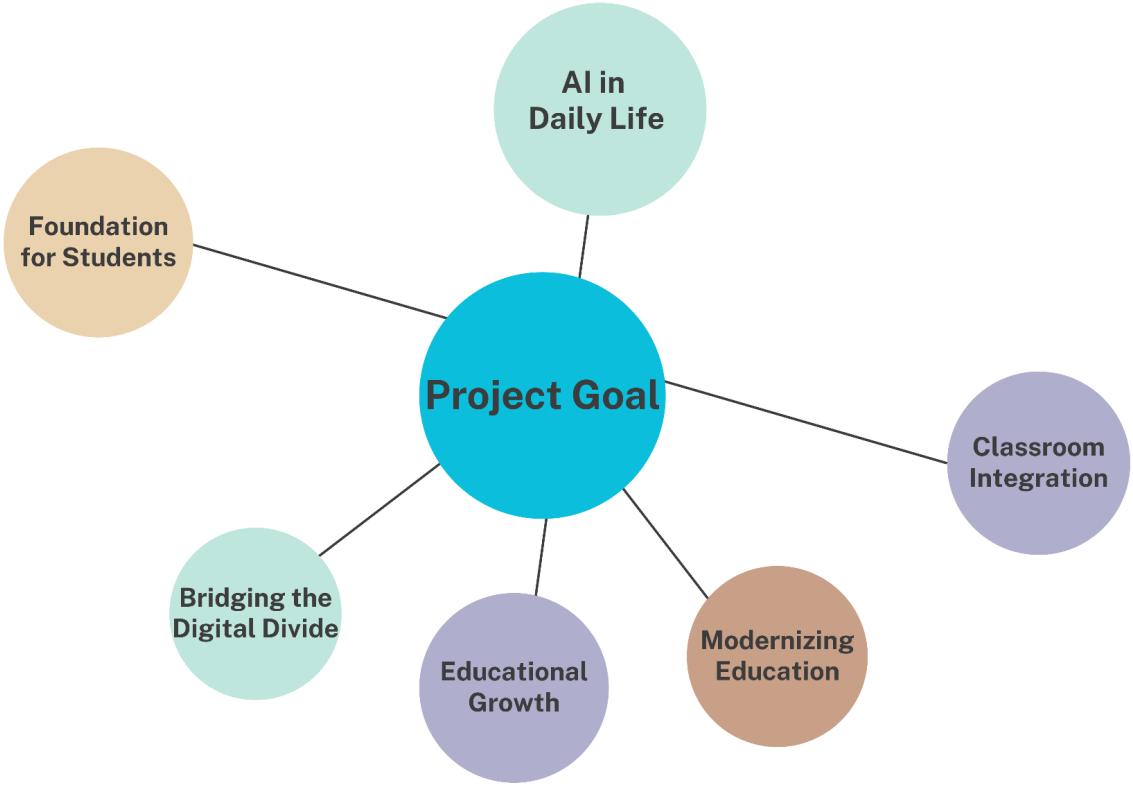
Incorporating AI in the Classroom: Tools and Techniques

Project Background

With Artificial Intelligence (AI) becoming a major part of our daily lives, the classroom is one of the best places to introduce students to AI concepts and tools. The project aims to provide teachers with an effective, resource-friendly model for integrating AI into classroom settings. It emphasizes using AI for educational growth, giving students a foundation to understand and utilize AI across subjects. This approach not only brings exciting, modern technology into the classroom but also addresses the digital divide by introducing accessible AI activities.



Problem Description

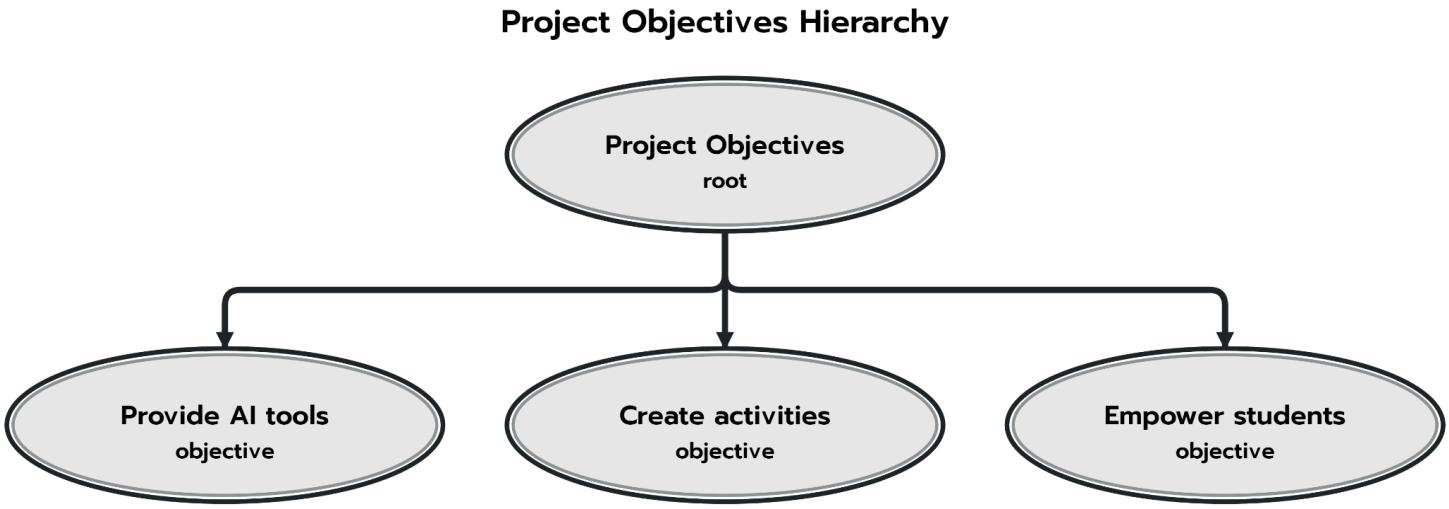
In today's world, AI is all around us, from virtual assistants like Alexa, Siri, and Google Assistant to recommendations on YouTube and Netflix. However, there's a growing gap in AI awareness, especially in classrooms with limited resources. Many students don't fully understand AI's role or how it works, which limits their readiness for a tech-driven world. **Additionally,**

resource constraints and geographical challenges in areas like Uttarakhand highlight the need for simple yet impactful AI education solutions.

This project aims to make AI accessible, engaging, and relevant for students. Through simple AI tools and techniques, teachers can introduce AI concepts to students from diverse backgrounds, even with minimal resources. By bridging the knowledge gap, this project prepares students for a future where AI is a crucial skill, giving them a foundational understanding of the technology shaping our lives.

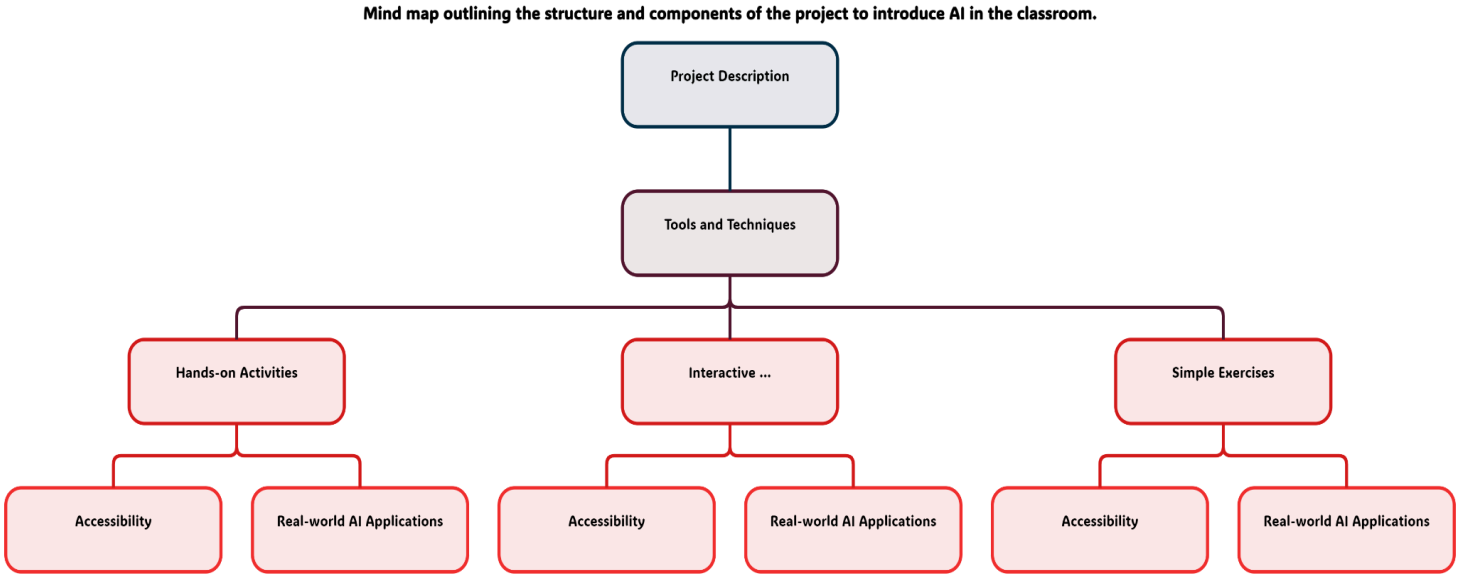
Project Objectives

- To provide easy-to-use AI tools and methods that teachers can utilize with minimal setup.
- To create engaging and interactive activities that allow students to explore AI concepts through hands-on learning.
- To empower students with knowledge of AI's applications, preparing them for a tech-based future.



Description

This project outlines several tools and techniques that teachers can use to introduce AI in the classroom. The model includes hands-on activities, interactive demonstrations, and simple exercises that make AI concepts easy to understand. Each tool has been selected based on accessibility and its ability to demonstrate real-world AI applications.



The following elements make up the classroom AI model:-

Activities

Activity No. 1

Lesson 1: What is AI?

In this lesson, you will learn what AI is. This lesson aims to provide school teachers with a comprehensive understanding of Artificial Intelligence through engaging activities. Teachers will explore the components of AI, discuss examples, and participate in the **"AI or Not"** activity to enhance their ability to identify AI and non-AI examples, promoting logical and evidence-based reasoning. The lesson emphasizes understanding where intelligence in AI resides, appreciating how machines can make independent decisions, going beyond mere programming.

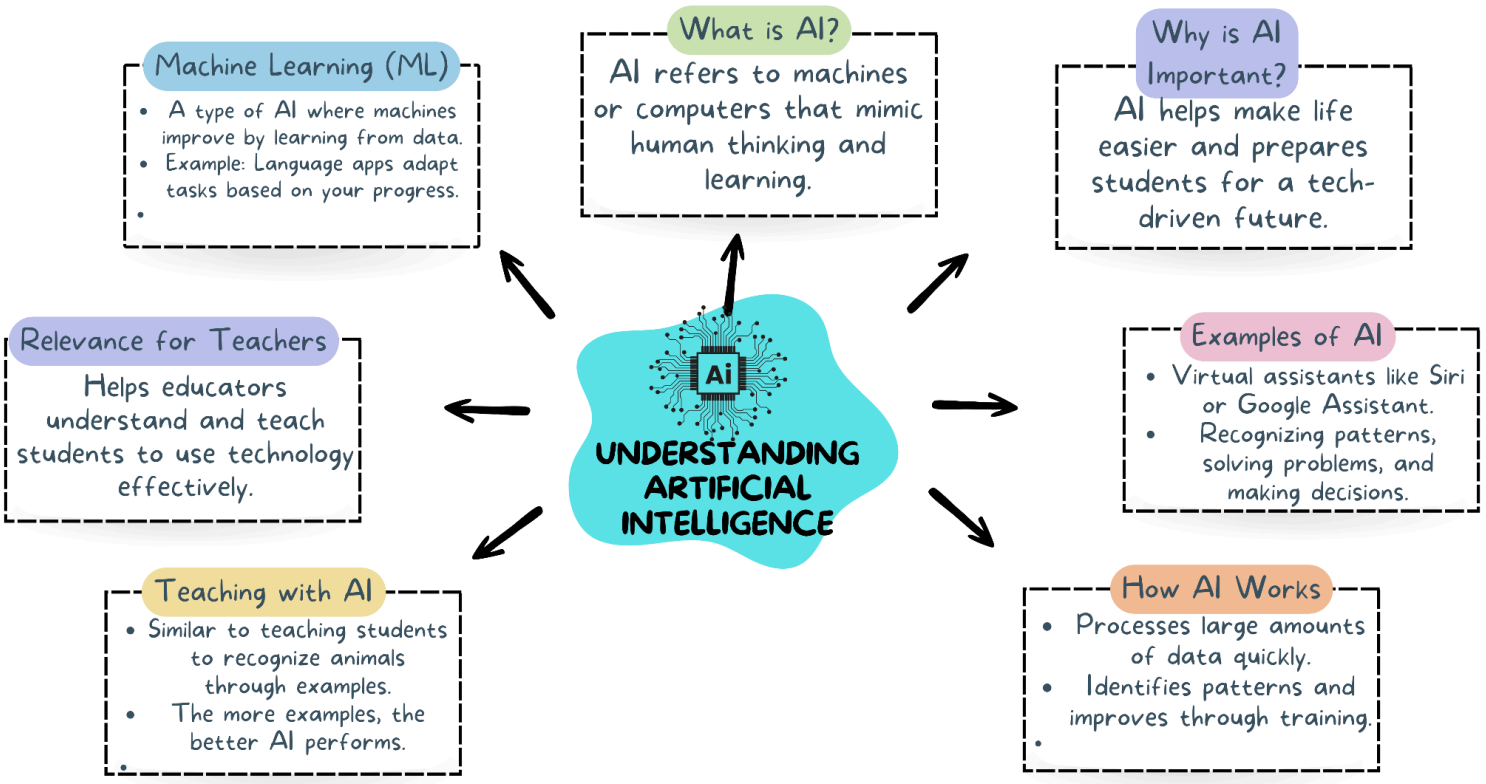
Understanding Artificial Intelligence

Artificial Intelligence (AI) may sound complex and impressive, but at its core, it simply refers to machines or computers that can mimic human thinking and learning. AI is all around us, helping make life easier, even if we don't realize it. As teachers, understanding AI can help us better prepare students for a future where technology will play an even bigger role.

AI refers to the ability of computers to perform tasks that typically require human intelligence. These tasks include recognizing patterns, solving problems, learning from experiences, and making decisions. A good example of AI you already use is your smartphone's virtual assistant (like Siri or Google Assistant). It can understand your voice commands, answer questions, set reminders, and even help you find directions.

AI works by processing large amounts of data quickly and identifying patterns in that data. Imagine teaching students to recognize different animals; a human teacher shows pictures and explains the differences. Similarly, AI is "trained" by showing it many examples. The more data it receives, the better it becomes at recognizing patterns and making decisions.

For teachers, understanding Machine Learning—one type of AI—is especially beneficial. In Machine Learning, machines learn from given information and improve over time. For instance, if you use a language learning app, it adapts to your level, providing harder or easier tasks based on your performance.

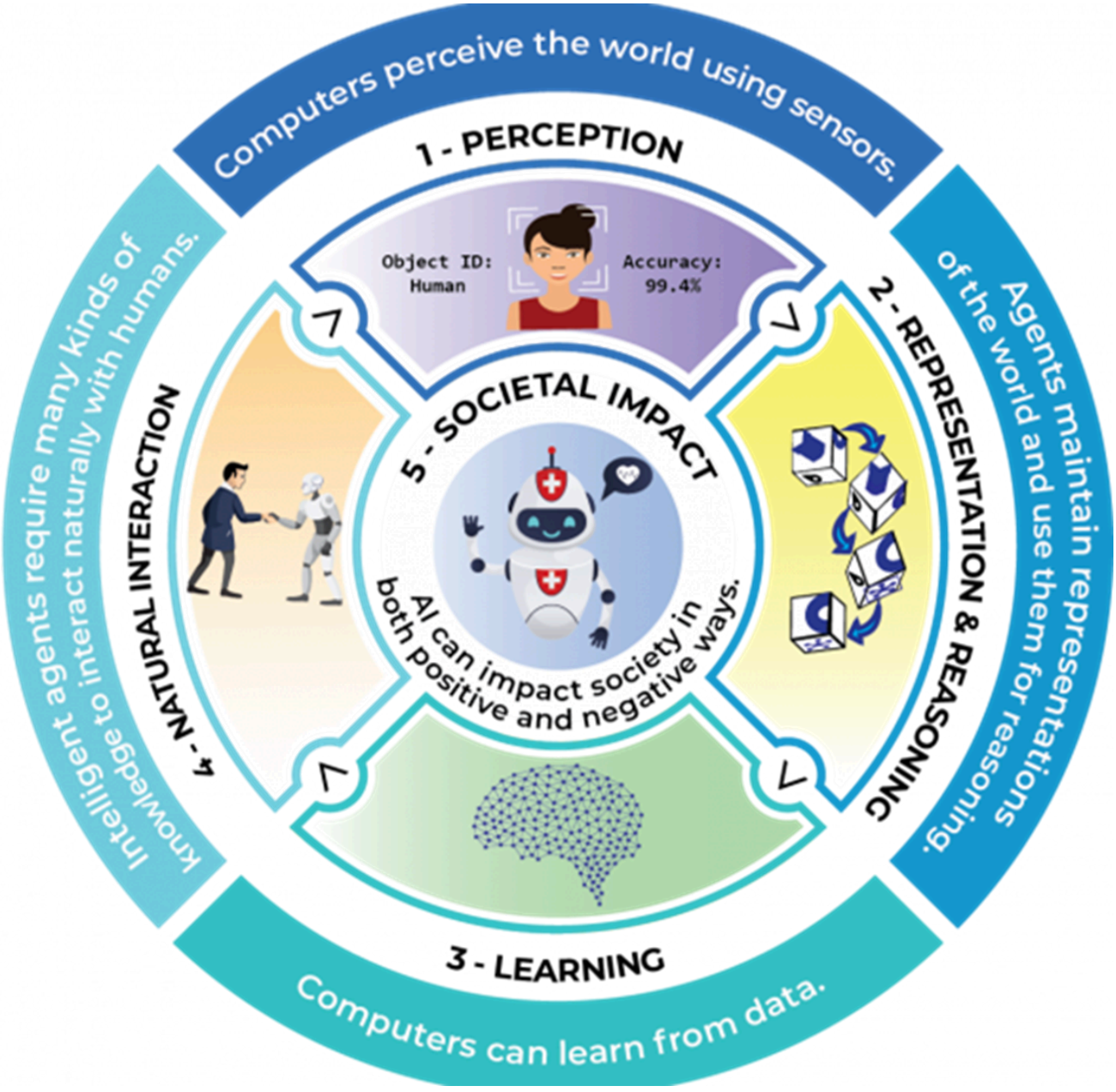


How to Introduce AI to Students

1. **Ask Students**: When they hear the term "Artificial Intelligence," what comes to mind?
2. **Define Each Word**: After a few minutes, ask students to break down each word separately. Use a whiteboard or chart paper for definitions and examples (e.g., artificial flavors in food, artificial limbs, artificial flowers). Make sure to discuss technology, machines, and robots.
3. **Explain Intelligence**: Intelligence is the ability to understand, learn, and think. Share examples where they used intelligence, like solving a problem or learning something new. If students struggle with examples, provide your own to connect with their experiences.
4. **Combine Ideas**: Define Artificial Intelligence as follows: *"Artificial Intelligence (AI) is when computers or machines can think, learn, and solve problems like humans. They can recognize patterns, make decisions, and help with tasks like answering questions or finding information. It's like teaching a computer to be smart and helpful, just like people!"*
5. **Show Two Videos**: Watch a video of a robotic dog and a traffic light signal.

ROBOTIC DOG VIDEO TRAFFIC LIGHT VIDEO

6. **Class Discussion**: Ask students if they think the dog and traffic lights are artificially intelligent. Why or why not? Explain that AI can perform four main tasks: understand the environment, learn new skills, plan and decide, and interact with humans and the environment. These are four of AI's "Five Big Ideas." The fifth is its impact on people.
7. **Discuss Examples from Videos**:
    - **Understanding**: Cameras and sensors in robotic dogs and traffic lights help them understand objects around them.
    - **Learning**: Robotic dogs and traffic lights improve over time in predicting how they should act or operate on highways.
    - **Deciding/Planning**: Robotic pets decide based on the time of day; traffic signals are designed to manage the smooth flow of traffic.
    - **Interacting**: Robotic pets control their limbs and tails as per commands, and traffic lights help cars and pedestrians cross intersections.



SOURCE OF IMAGE :https://www.pattan.net/Evidence-Based-Practices/STEM/computer-science/AI-Toolkit/AI-Overview/Five-Big-Ideas-in-Artificial-Intelligence **CC BY NC AND**

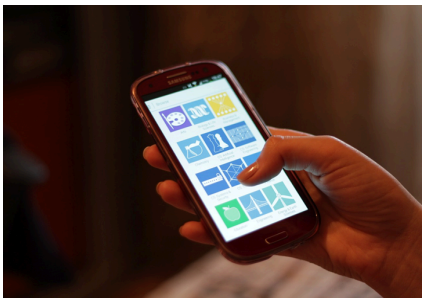
Activity No. 2

AI or Not

This activity can be conducted in multiple ways. One way is for the entire class to discuss each example together and decide if it is AI. In this discussion, all students will present their opinions and reasoning. Another way is to divide students into groups, provide each group with examples, and have them share their thoughts with the class.

Steps:

1. As students understand AI and its principles better, apply this knowledge through examples to determine which are AI and which are not.
2. If possible, bring AI-equipped machines (like a smartphone or smartwatch) and non-AI machines (like a regular watch or calculator) into the classroom. Guide students in distinguishing AI from non-AI by asking key questions:
    - Does the machine understand its environment?
    - Does it keep learning?
    - Does it plan and make decisions?
    - Does it interact with the environment?
    - Is it intelligent, or is it merely following programming?



3. **Show Examples and Discuss**: Display an image of a television and ask if it is AI, using these points as guidance. Similarly, show images of a calculator and a smartphone and discuss whether they demonstrate AI.

By the end of this activity, students will have a solid understanding of Artificial Intelligence.

Correct Answers for Examples:

- **Not AI**: Television, analog watch, bicycle, calculator.
- **AI**: Robotic dog, smartwatch, Google Maps, smartphone.

Activity 3

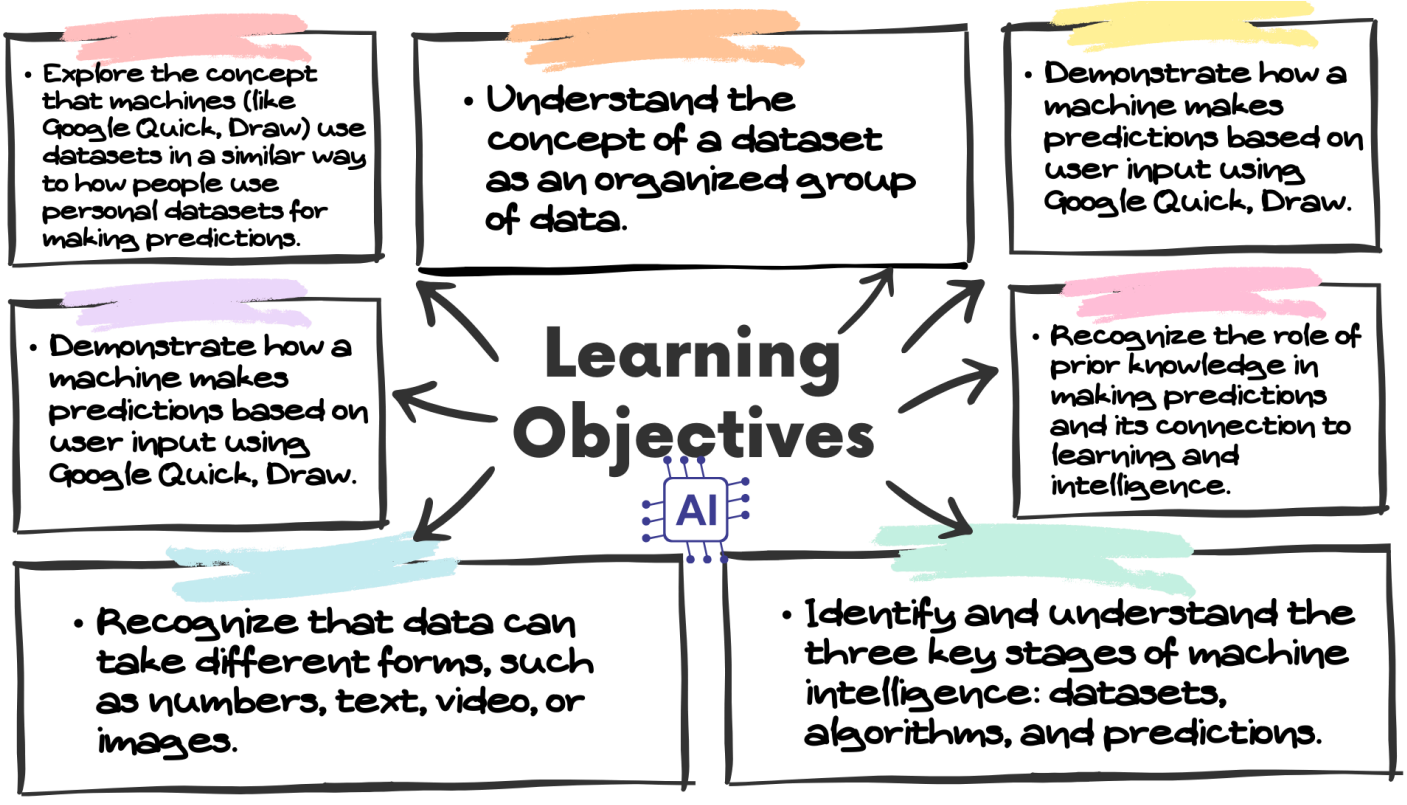
Lesson 2: How Do Machines Acquire Intelligence?

In this lesson, we'll explore how machines acquire intelligence. The development of machine intelligence is a complex process involving data collection, organized data sets, and algorithms. Machines learn from experience, largely by using extensive data. Through techniques like machine

learning and deep learning, these machines interact with their environment and optimize their actions over time. In this lesson, we'll examine these processes and understand how machines make decisions, make predictions, and perform various tasks.

Learning Objectives

1. Understand the concept of a dataset as an organized group of data.
2. Recognize that data can take different forms, such as numbers, text, video, or images.
3. Identify and understand the three key stages of machine intelligence: datasets, algorithms, and predictions.
4. Recognize the role of prior knowledge in making predictions and its connection to learning and intelligence.
5. Demonstrate how a machine makes predictions based on user input using Google Quick, Draw.
6. Explore the concept that machines (like Google Quick, Draw) use datasets in a similar way to how people use personal datasets for making predictions.

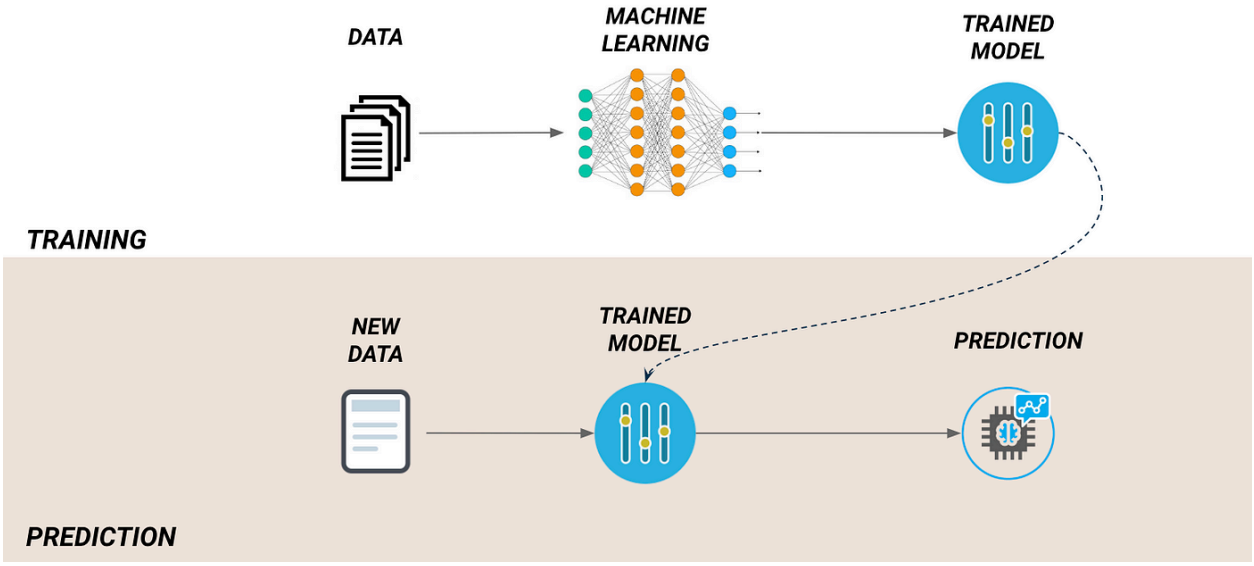


Vocabulary

- **Dataset**: An organized group of data.
- **Prediction**: A statement about what will or might happen in the future, or a guess about something based on information.

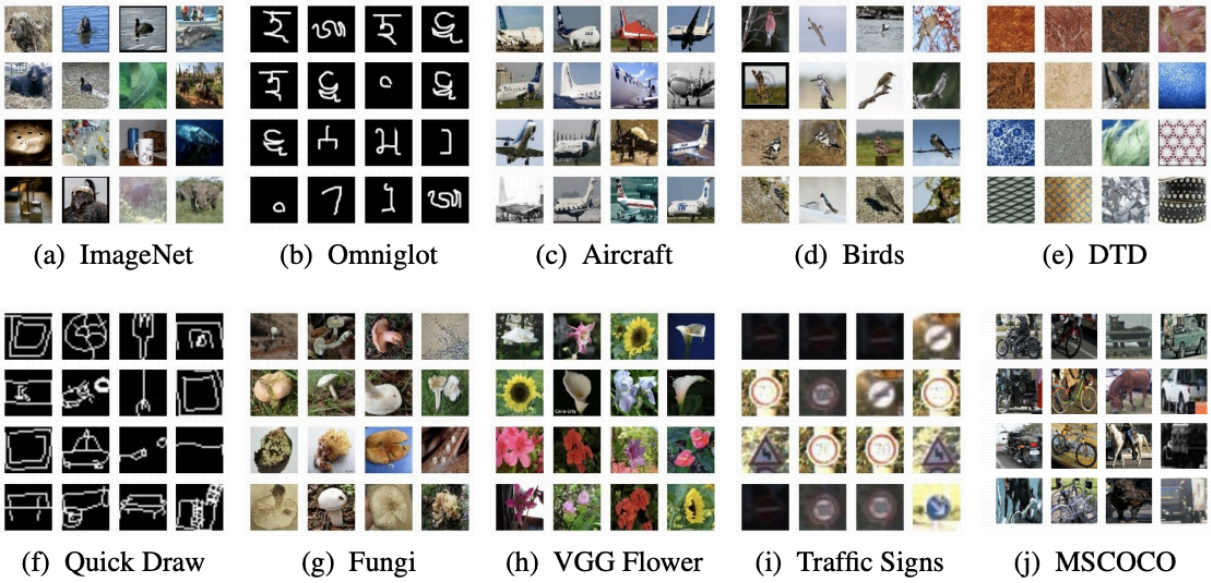
Activity: How Do Machines Acquire Intelligence?

1. **Ask the class** how they think machines made of plastic and metal can become intelligent. If there are no answers, hint that human-made programs or codes give intelligence to machines.
2. **Show a slide** illustrating the three steps through which most machines gain intelligence: datasets, algorithms, and predictions. We'll talk about algorithms later, but let's start with datasets and predictions.



Source : LinkedIn

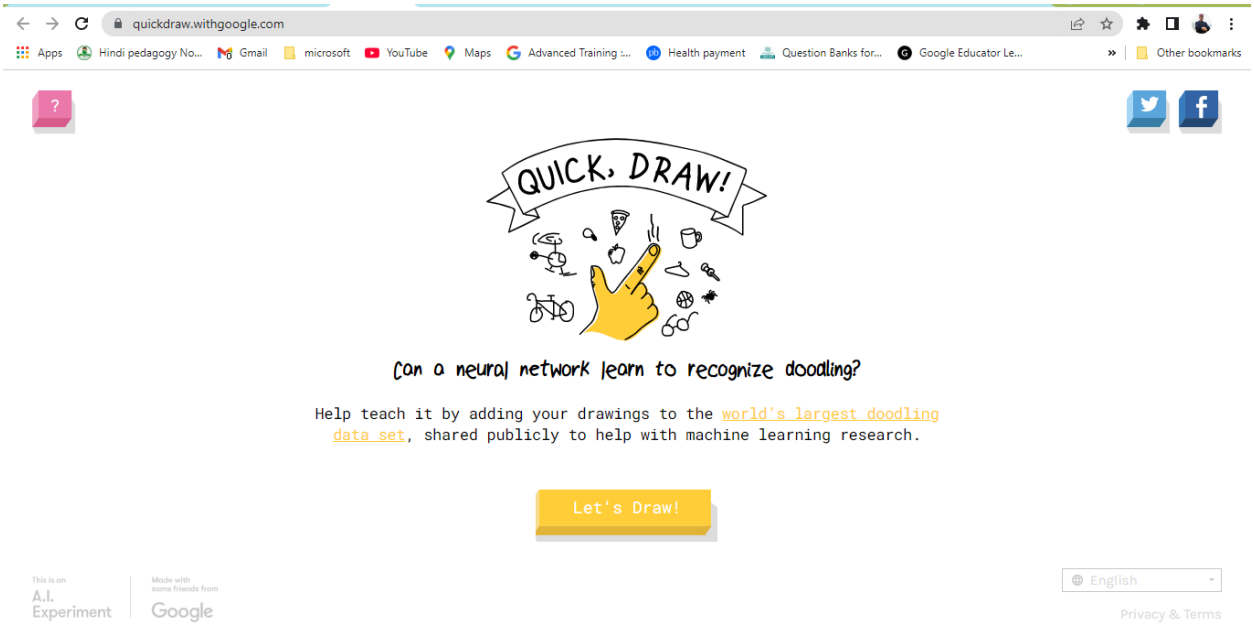
3. **Ask the class** if anyone knows what a dataset is. If not, get them to brainstorm.
4. **Explain** that a dataset is a collection of data. Data can be anything! Usually, we think of data as numbers, but it could also be collections of text, videos, or pictures. given below is a exampler data set .



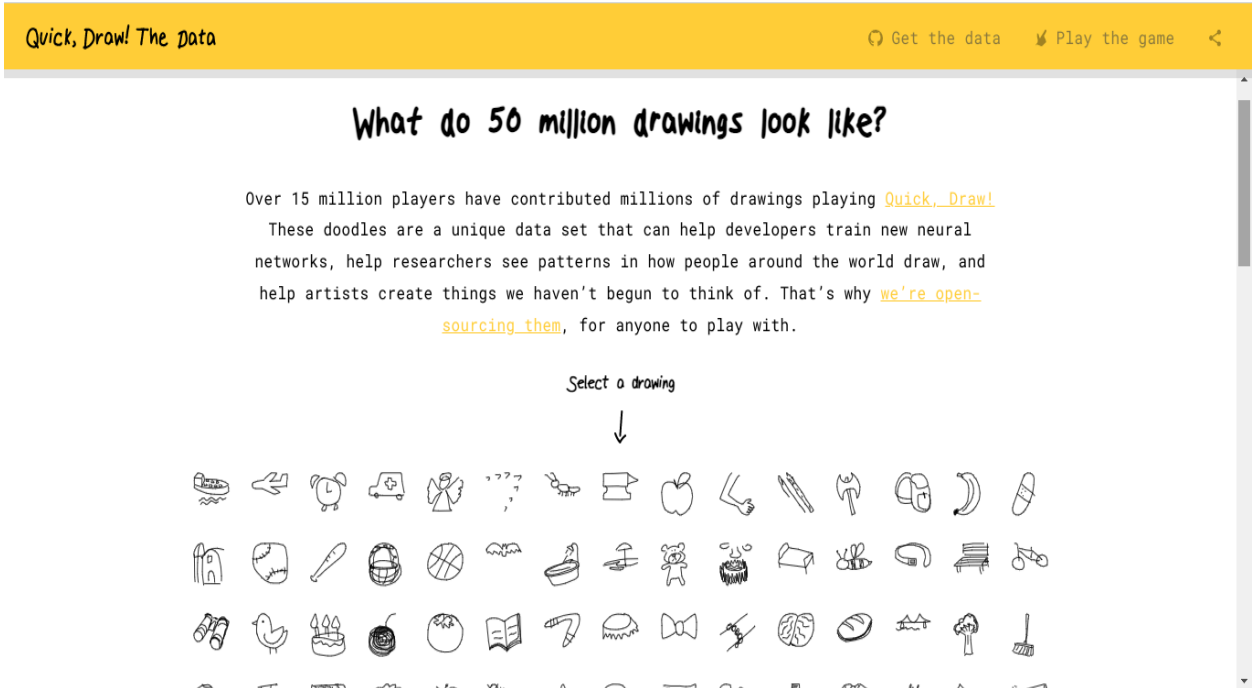
Source: Triantafillou et al.

5. **Ask the students** if they know what a prediction is. How does a person make a prediction? If there are no answers, explain that predictions are often based on prior knowledge, which is part of learning and intelligence.
6. **Announce a game**: Start drawing something on the board, and they have to guess what it is in under 20 seconds. Ask one student to be the timer, while the rest are guessers.
7. **Draw simple pictures** (like a house, bird, clock, apple, or something easy for students to identify). Tell them to make guesses as you draw, and the timer will record how long it takes them to get the correct answer. You can draw as many as you want but aim for at least 3-4 drawings.
8. **Ask students** how they could guess the drawing correctly even if they hadn't seen that exact picture before. Explain that images they've seen before are part of their personal "dataset," something they don't often think about but use all the time. Discuss how we often make predictions and decisions without realizing why. Ask them to name other datasets they use similarly, like food or danger: "I've never tried that type of snack, but it looks like something I'd like." Or "I won't ride on that road because there are too many potholes, and I could fall."
9. **Introduce the concept of testing a machine** that will try to do what they just did. Have students go to the Google Quick ,Draw webpage on

their devices. Each student should follow the instructions to draw objects as prompted.

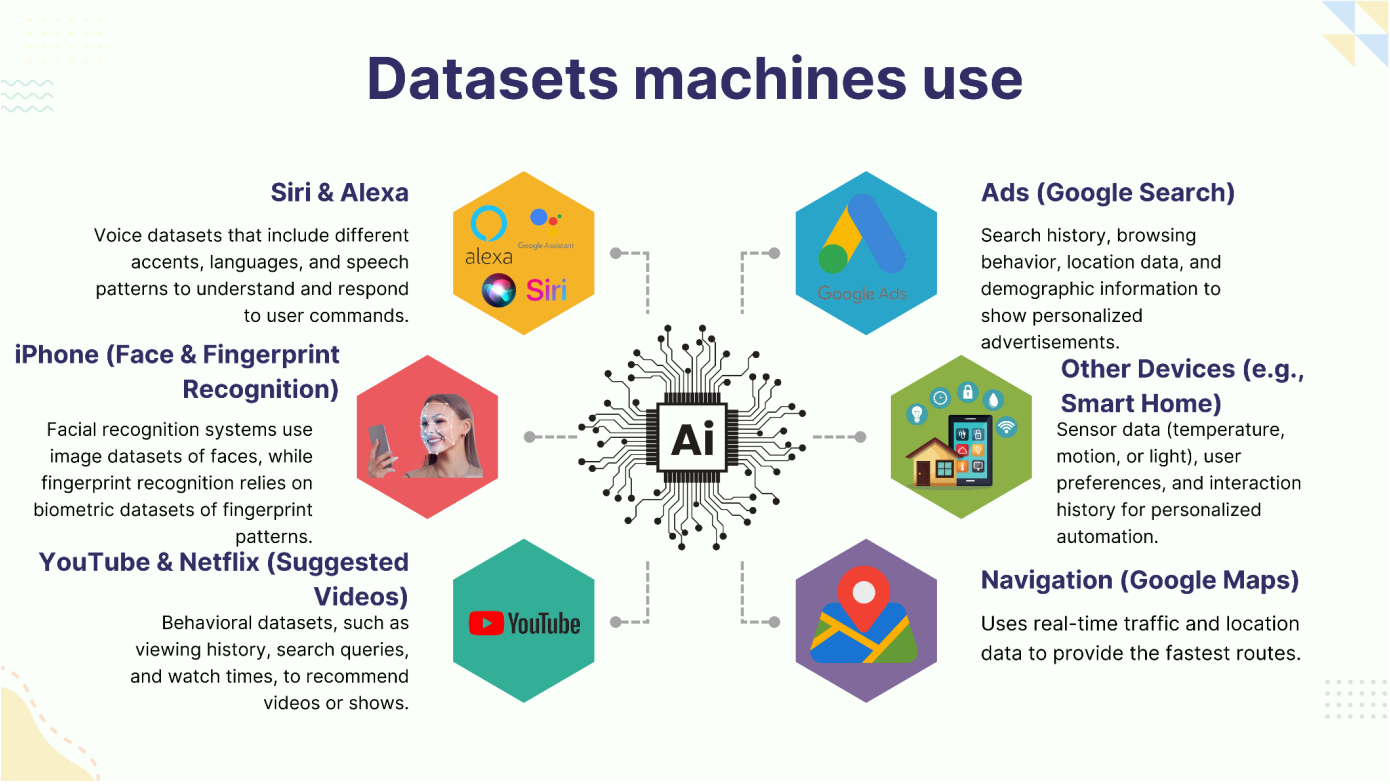


10. **Ask students** how many of their drawings were guessed correctly by Google Quick, Draw. Ask them how they think Google Quick, Draw did that.
11. **Show them** [Google Quick, Draw's dataset] and explain that the machine uses that dataset in the same way we use personal datasets. Ask if they think Google Quick, Draw is intelligent. Why or why not?



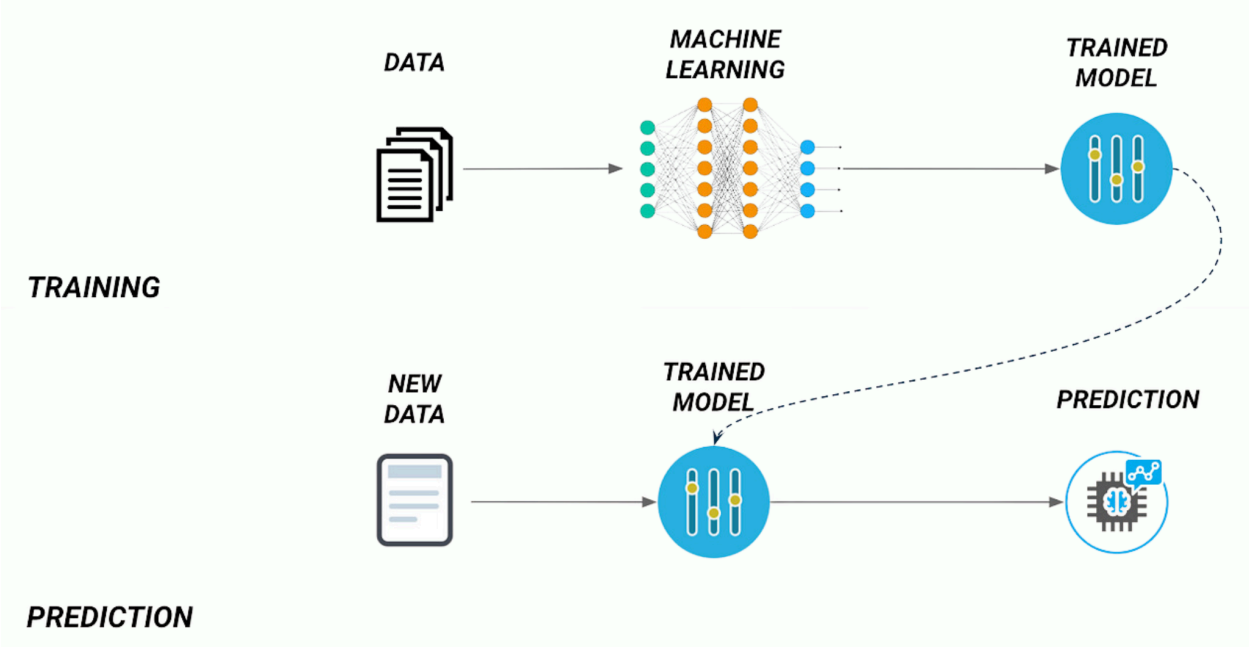
When you click on an airplane picture, you will see thousands of similar airplane images, which come from the dataset associated with that particular picture.

12. **Ask students** to think about a machine they interact with today that uses datasets to make predictions. If no ideas come up, suggest Siri, Alexa, iPhone (face and fingerprint recognition), YouTube, Netflix (suggested videos), ads (Google Search), or any other familiar device. Ask what datasets these machines might use.



Activity 4: Trainable Machines

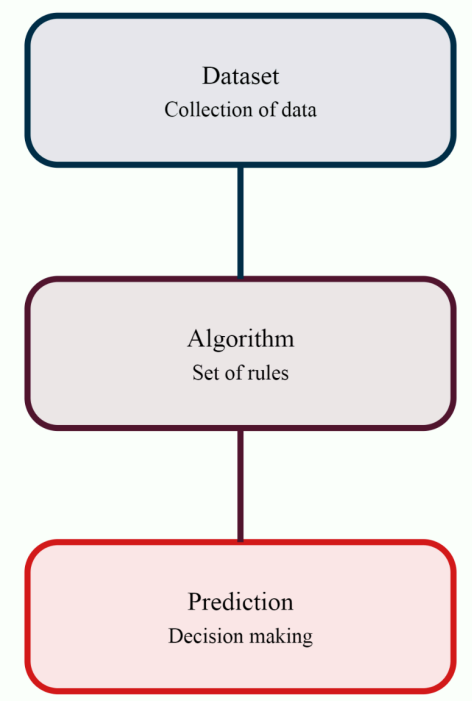
Trainable Machines are machines that can be trained to perform tasks more effectively. They improve through exposure to data, experience, and specialized programming. As they work with new data, their performance improves, allowing them to make more accurate predictions over time.



For example, if we show a machine images of cats and dogs and teach it to tell the difference, it will later be able to identify whether a new image is of a cat or a dog. This process is called **machine learning,** which relies on algorithms that enable machines to learn and improve.

There are three main stages in this process:

1. **Dataset**: A collection of data used to train the machine. This data can be in any form, such as images, numbers, text, or videos.
2. **Algorithm**: A set of rules or instructions that guides the machine on what to learn from the data and how to act.
3. **Prediction**: Based on what it has learned, the machine can make decisions or predictions with new data.



The advantage of trainable machines is that they do not just follow static instructions. Instead, they continuously improve, making them capable of handling complex tasks without human assistance. Examples include self-driving cars, voice assistants (like Siri and Alexa), and recommendation systems (like Netflix movies).

The machine learning program that students will use is called the **Teachable Machine**. It was created by Google computer scientists and classifies images using a neural network. The more data you input into the program, the more accurately it identifies the objects it's meant to recognize.

Steps to Follow:

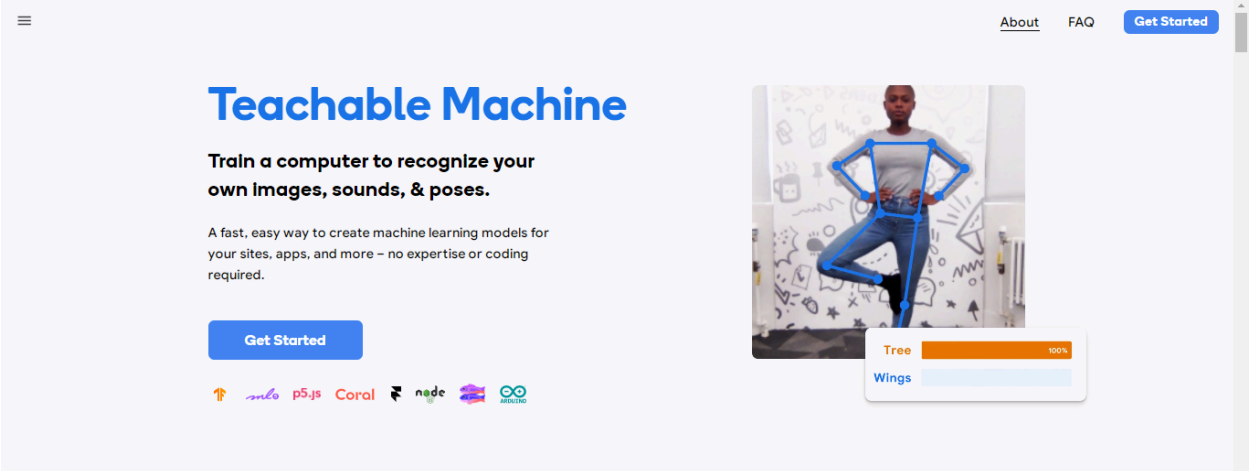
1. **Introduction**: Tell students it's time for them to train their machines to become intelligent. Their task will be to create a program that allows their computer to identify whether an image shows a cat or a dog. Ask them what they think they need to do, reminding them of the previous lesson on datasets, algorithms, and predictions if needed.
2. **Navigate to Teachable Machine Website**: Guide students to open the **Teachable Machine** website. Have the whole class follow along so you can address any questions. Ask everyone to click on **Image Project** and then **Standard Image Model**. Start by training with three fruits: apples, oranges, and mangoes.

3. **Group Work for Image Collection**: If there are enough cameras, divide the class into six groups. Each group will take photos of apples, oranges, and mangoes. Have one group take photos of fruits against a wall as the background, while others use different backgrounds like whiteboards, windows, or doors. Each group should take about 15 photos.
4. **Upload and Train the Model**: After the pictures are taken, upload each group's photos to the **Standard Image Model** on the Teachable Machine website. Click **Train Model** once the photos are uploaded.
5. **Test the Model**: After training, export and test your model. You can find tutorials on these steps in the resources provided.
6. **Observe Background Influence**: When students test the machine, they may notice that the machine focuses more on the background of the images than the fruit shapes. Explain how the background influences the machine's learning process, showing it sometimes picks up details unintentionally.
7. **Improve Model with More Data**: Upload additional photos from the other groups and retrain the model to see if it performs better with more examples and diverse backgrounds.
8. **Discussion**: Ask students what surprised them about teaching the machine to recognize fruits. Discuss how they needed to be careful since computers interpret images literally and don't automatically know what's important in a picture. Machines need many examples to learn effectively, at least 30 images in this case.
9. **Advanced Activity**: Provide students with datasets of cats and dogs, allowing them to train their own models to classify these animals.
10. **Independent Work**: Let students work on this project alone or in small groups. When they're ready, test different models with new cat and dog images to see how accurate their predictions are.
11. **Testing with Other Animals**: Finally, have students test the model with images of animals other than cats or dogs. If the machine can't identify them, explain that it's because it hasn't been trained with those animals yet.

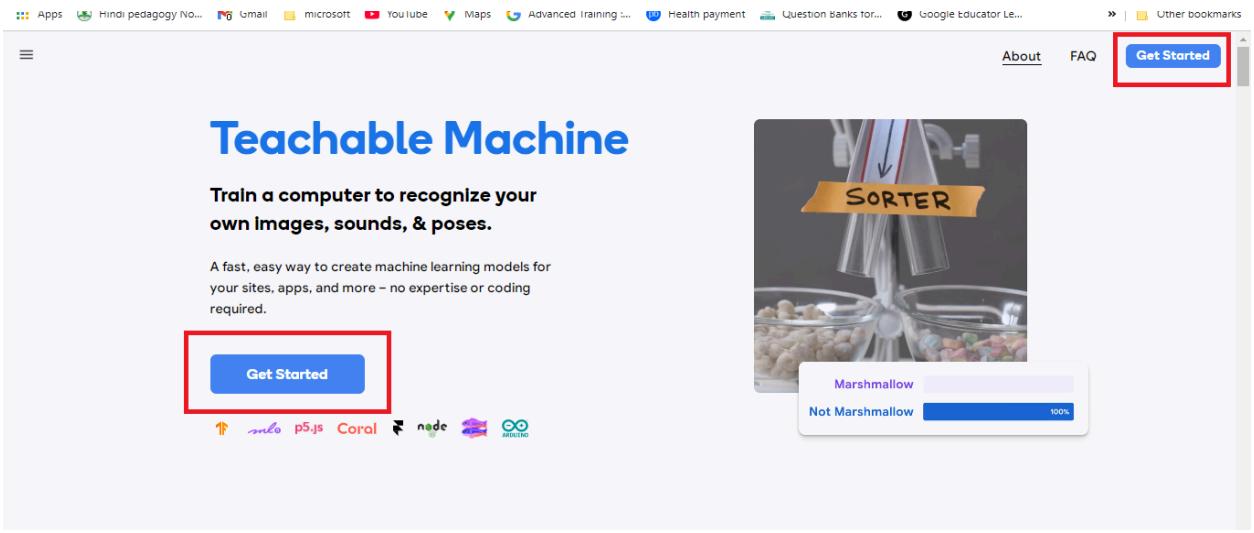
★ **Now ,here's a step-by-step procedure to use Google Teachable Machine:**

Steps to Use Google Teachable Machine

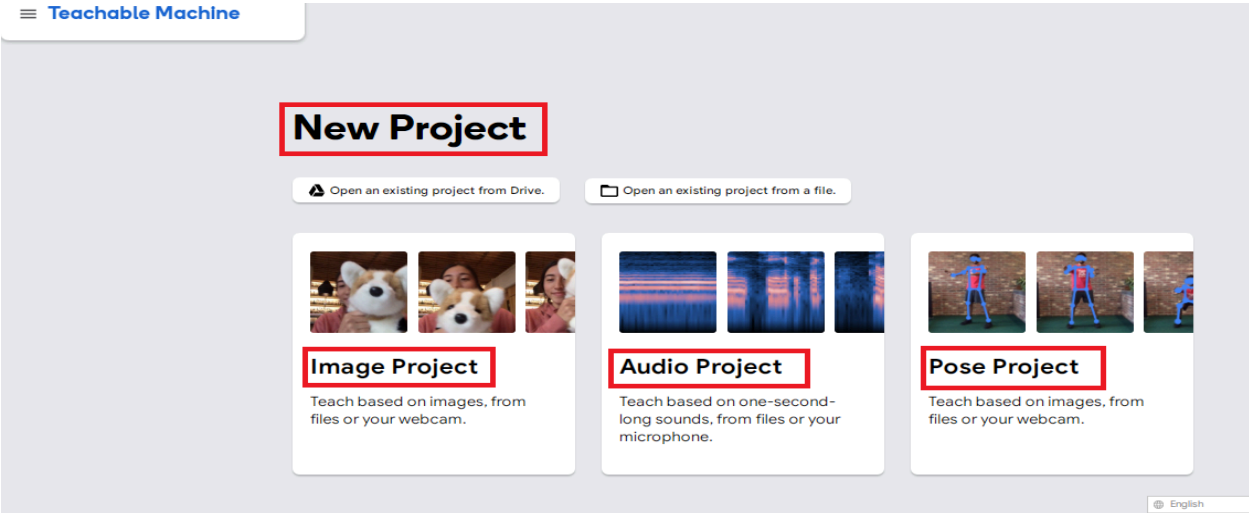
1. **Access the Platform:**
   - Visit https://teachablemachine.withgoogle.com.



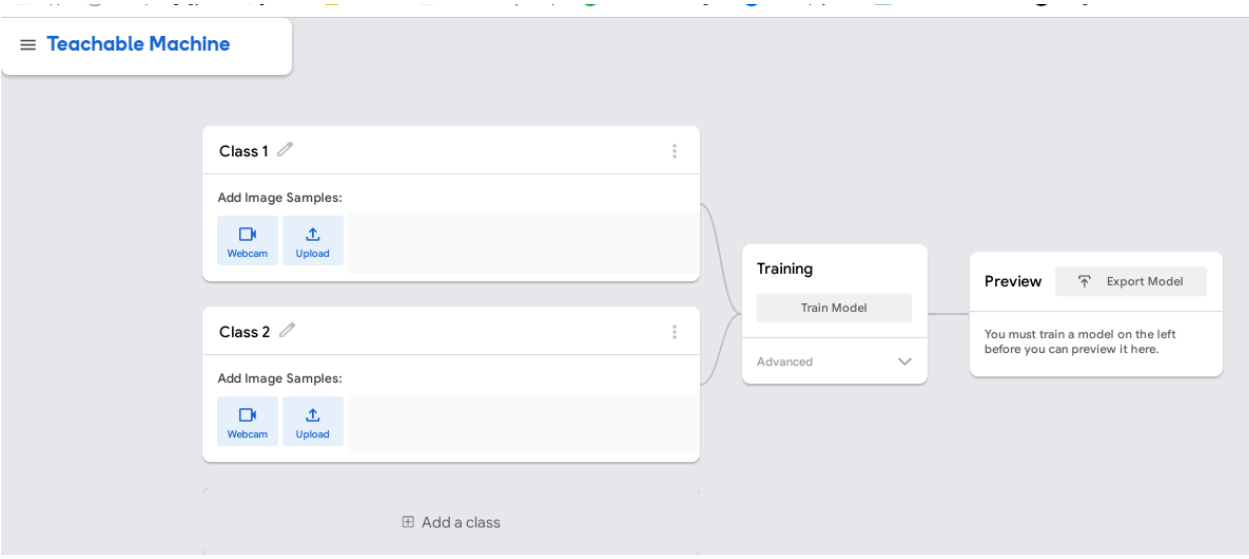
2. **Click Get Started:**



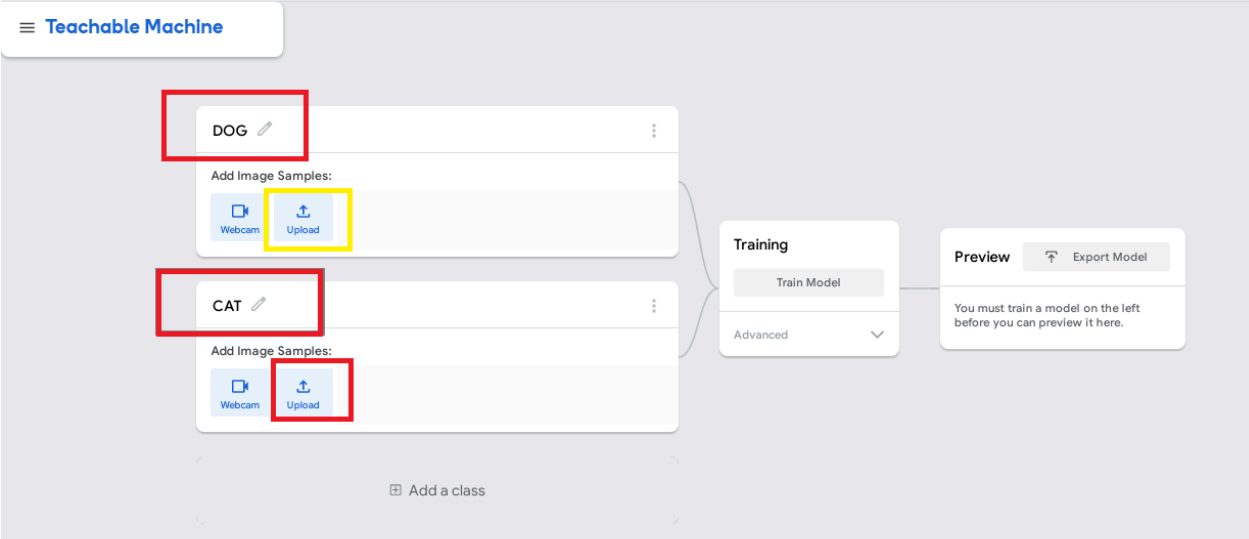
3. **Choose a Project:**
   - Select the type of project you want to create:
     - **Image Project:** Recognizes objects or images.
     - **Audio Project:** Recognizes sound patterns.
     - **Pose Project:** Recognizes body poses or gestures.



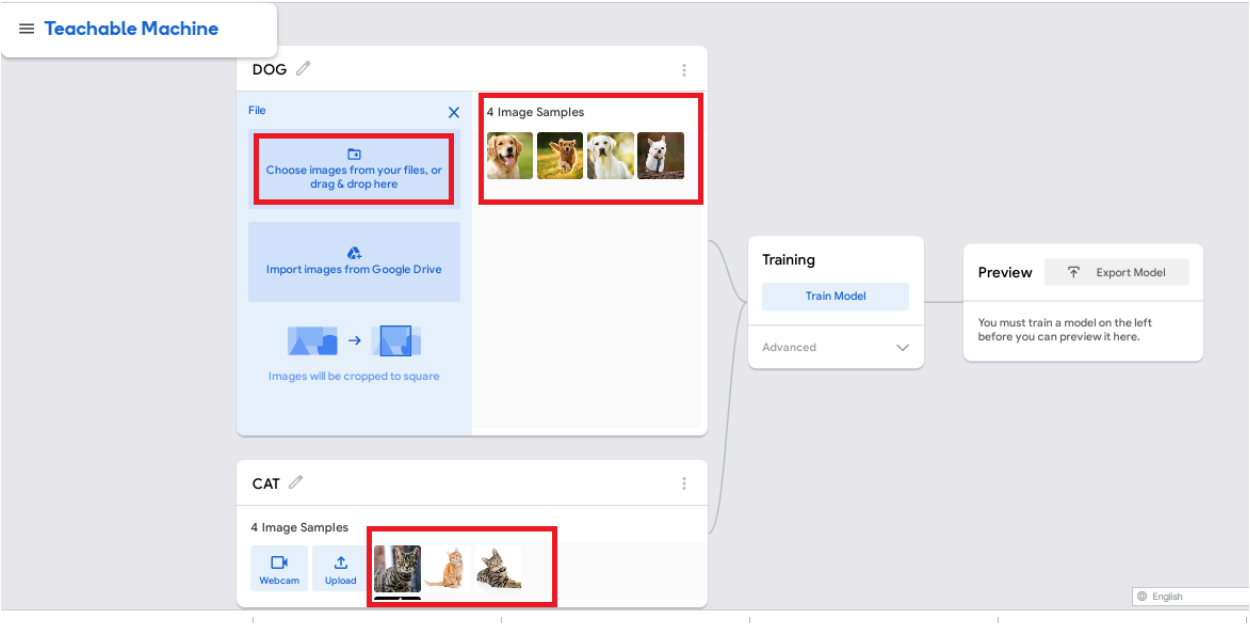
4. **Click on Image Project**



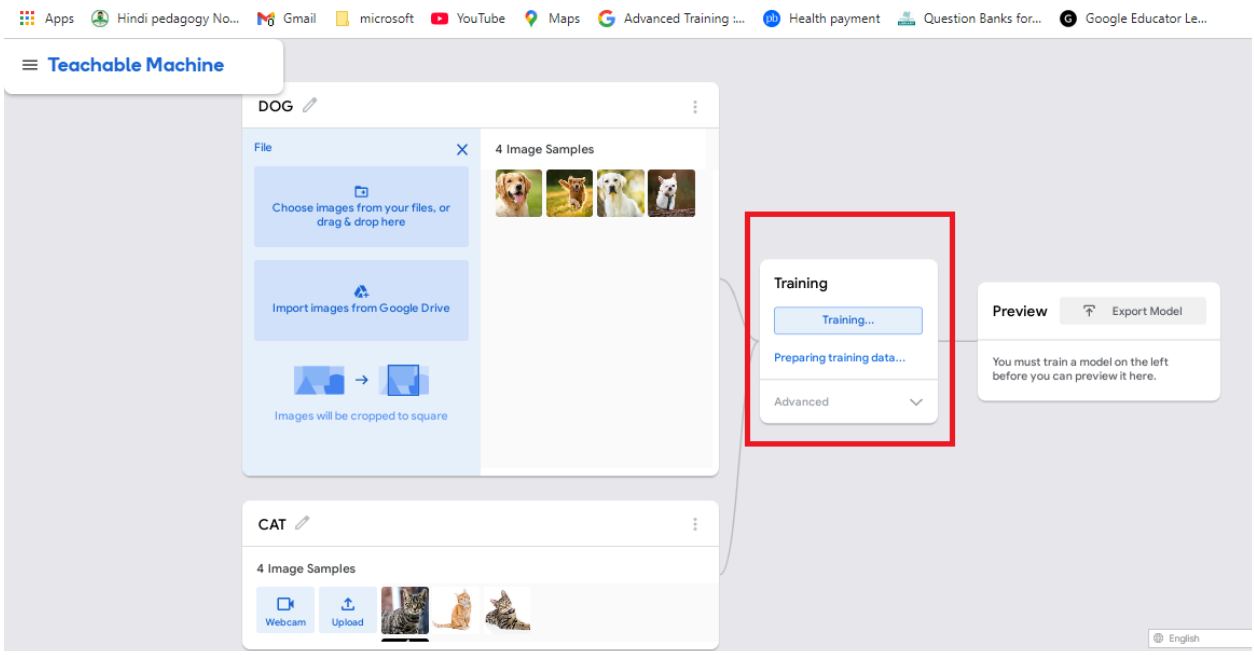
5. **Create Classes:**
   - Define categories or labels (classes) for your model.
     - For example, if building an image project, create classes like **"Cat"** and **"Dog"**.



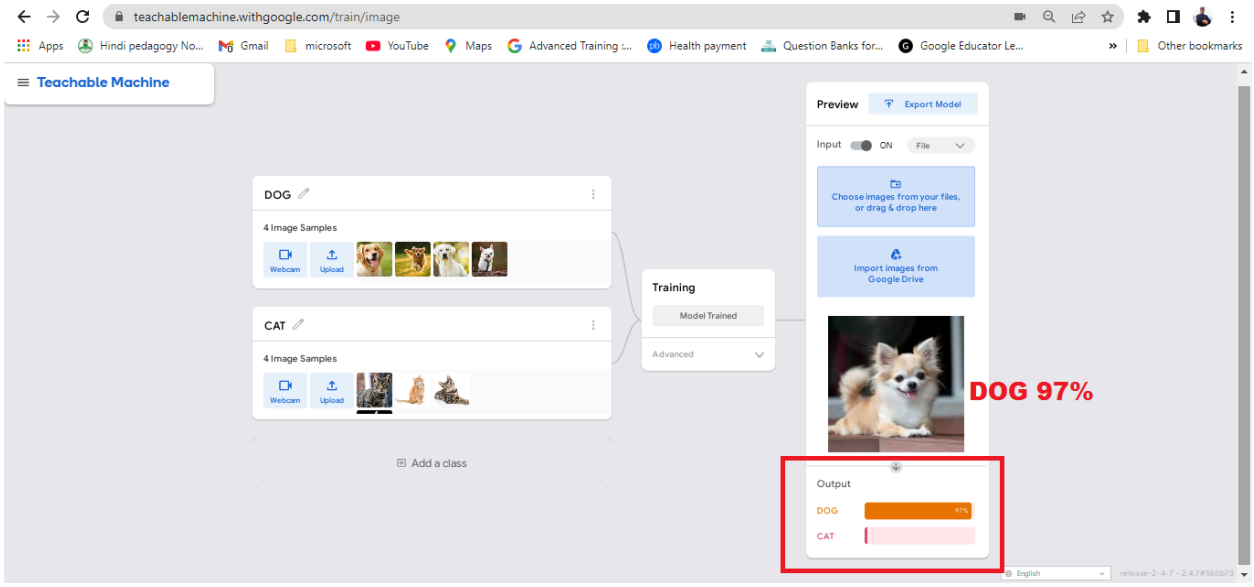
6. **Add Data:**
    - Use your webcam or upload files to provide training data for each class.
    - Example: For the "Cat" class, upload or capture multiple cat images.
    - Include images or data from various angles, lighting, or environments for better accuracy.

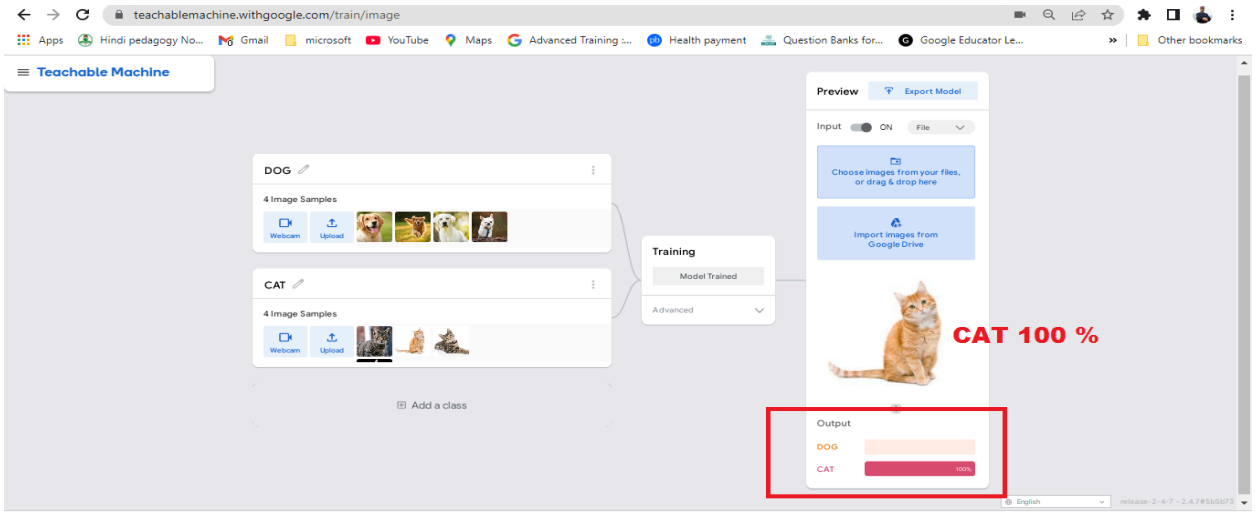


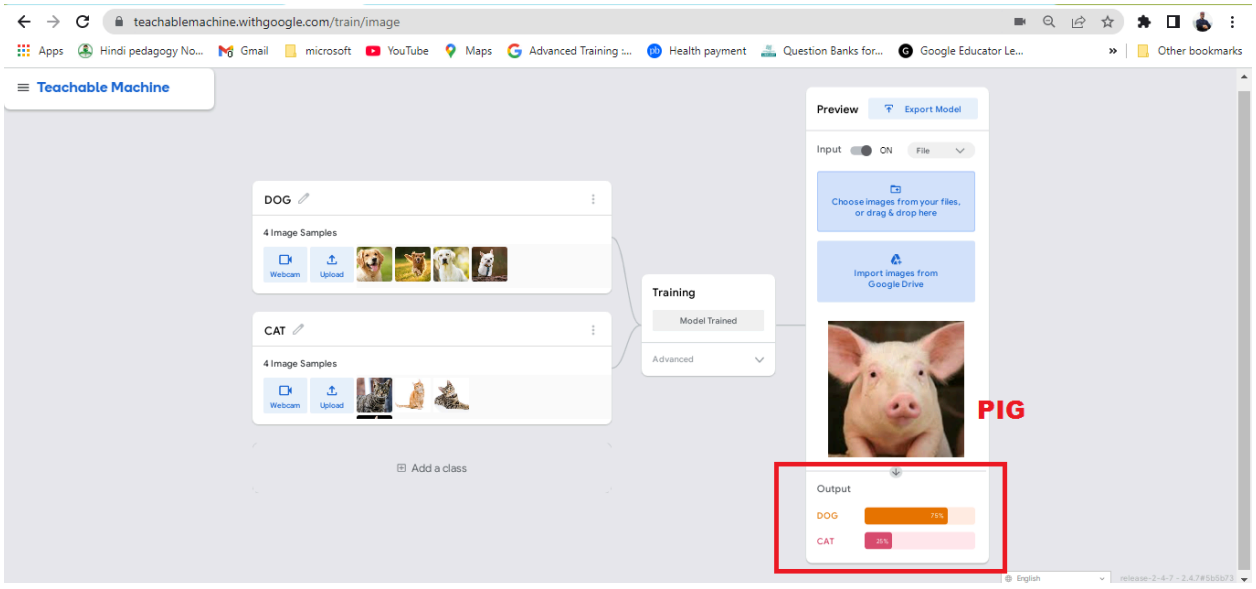
7. **Train the AI:**
    - Click **“Train Model”** to let the Teachable Machine process and learn from the uploaded data.
    - Wait for the training process to complete.



8. **Test the Model:**
    - Test your model in real-time by uploading an image or using the webcam/audio.
    - Check if the AI correctly identifies the class.







9. **Export the Model:**
    - If the model performs well, click **"Export Model"** to save it.
        - Choose an export option (e.g., TensorFlow, TF Lite, or in-browser link).
        - You can integrate it into apps, websites, or other projects.
10. **Iterate (Optional):**
    - If the accuracy isn't satisfactory, add more data or refine existing data for better results.
    - Retrain the model as needed.

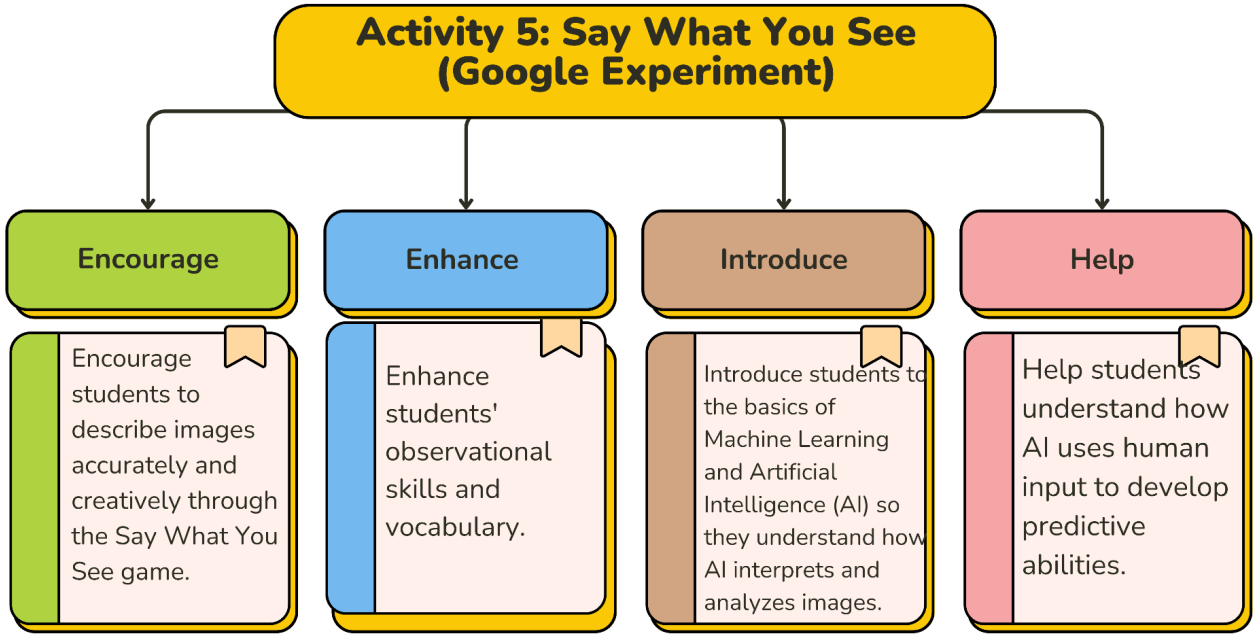
Activity 5: Say What You See (Google Experiment)

Say What You See is a fun, interactive game designed to improve students' observational skills and vocabulary, while teaching them **how AI works.** The

goal is for students to accurately and creatively describe the images provided, then see how well their description matches the AI's identification.

Objectives:

1. Encourage students to describe images accurately and creatively through the *Say What You See* game.
2. Enhance students' observational skills and vocabulary.
3. Introduce students to the basics of Machine Learning and Artificial Intelligence (AI) so they understand how AI interprets and analyzes images.
4. Help students understand how AI uses human input to develop predictive abilities.



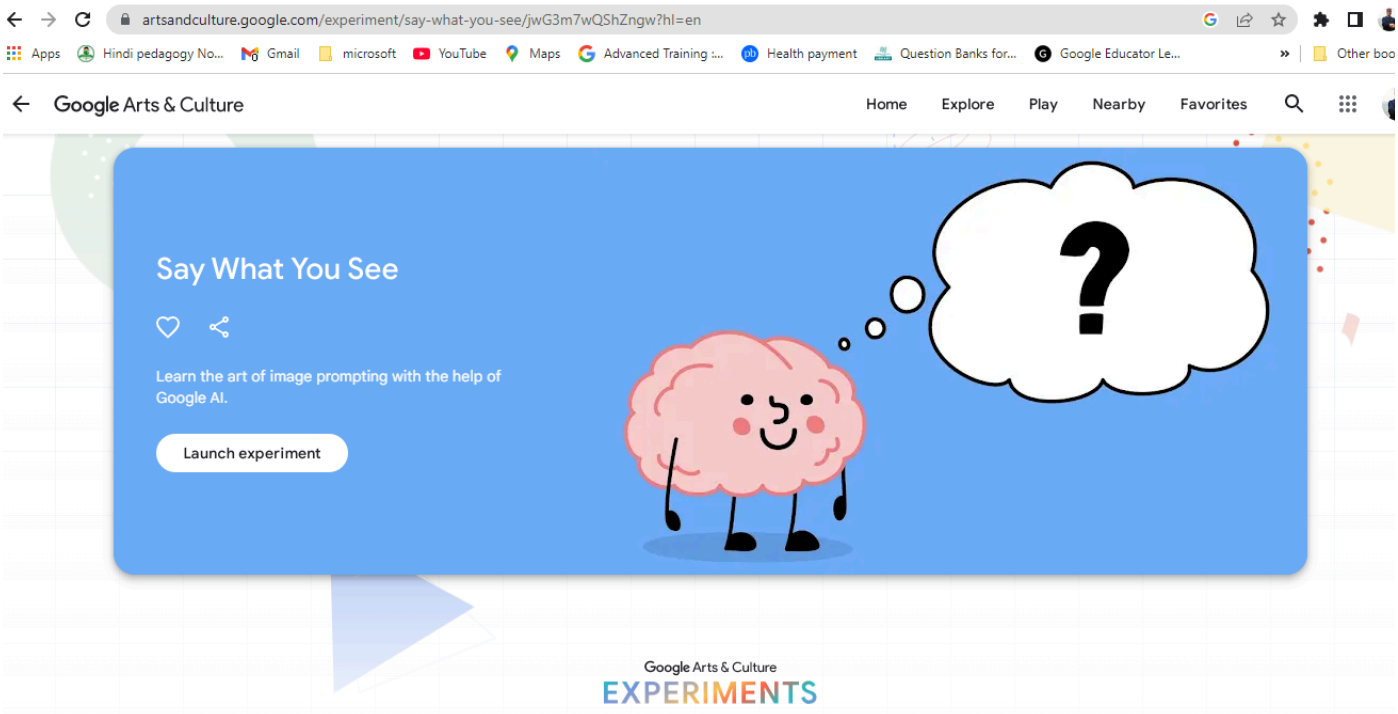
Instructions for Teachers

Introduce the Concept:

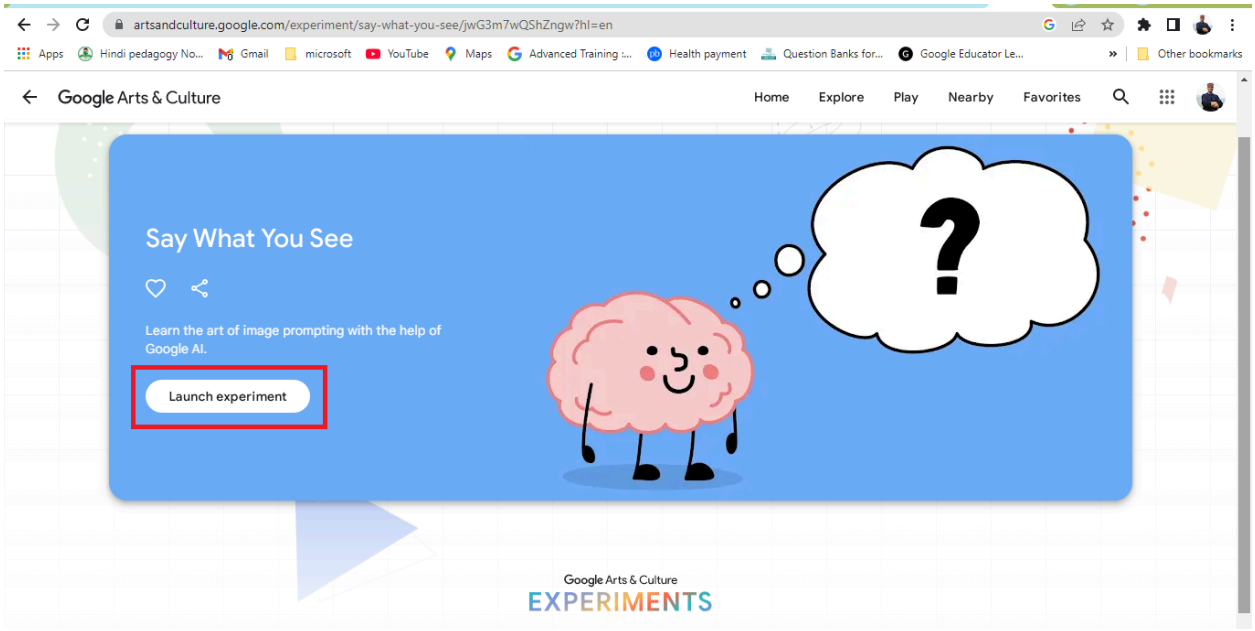
1. Give a brief explanation of Artificial Intelligence (AI) and Machine Learning.
2. Explain how AI analyzes and interprets images and how the goal of the game is to see how AI learns from their descriptions.

Starting the Game:

1. Guide students to access the *Say What You See* game on Google Arts & Culture.



2. Show them how to begin by clicking on the *Launch* button, then demonstrate how to observe and describe the images in detail.



Active Participation:

1. Encourage students to use their laptops or computers to describe what they see in the images accurately.

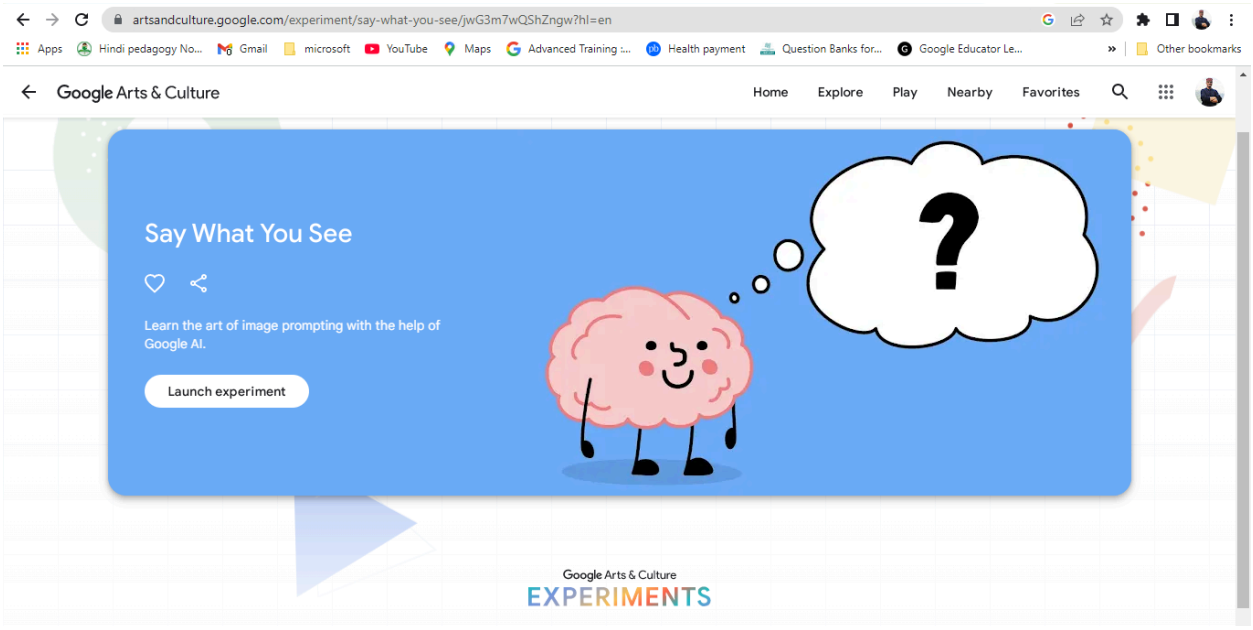
2. Motivate them to be as specific and creative as possible, so their descriptions align well with the AI's understanding.

Discussion:

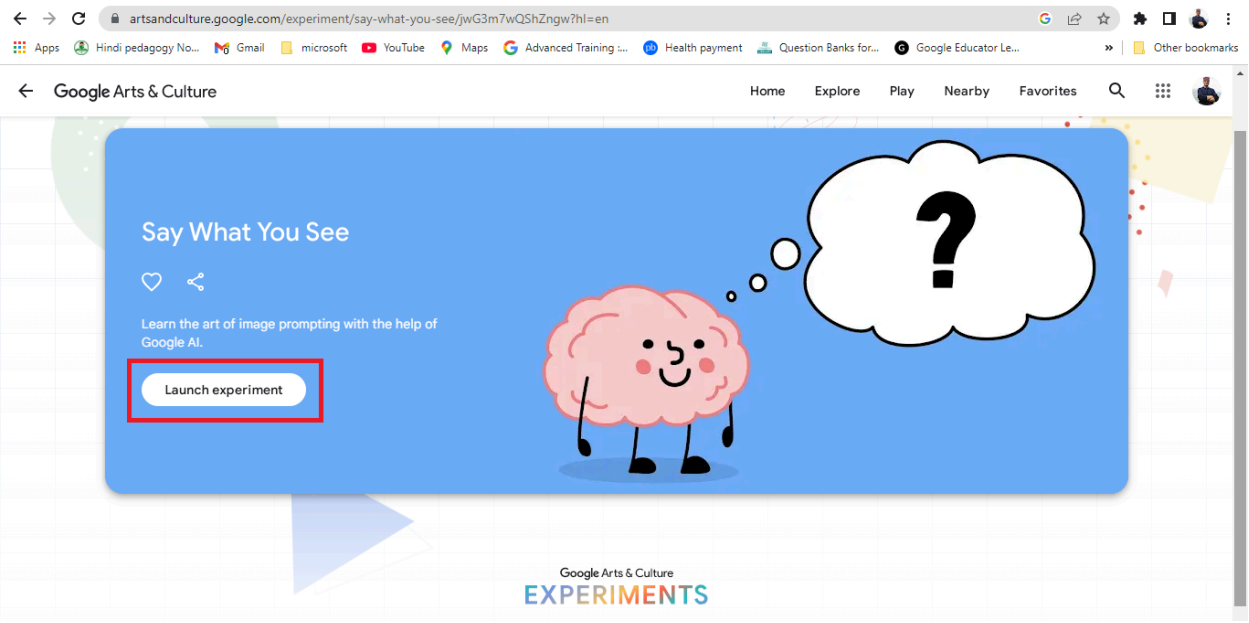
1. After the game, discuss with students how the AI responded to their descriptions.
2. Explain how AI learns and predicts images based on datasets and algorithms and that this ability is constantly improving with more data and learning experiences.

How to Play:

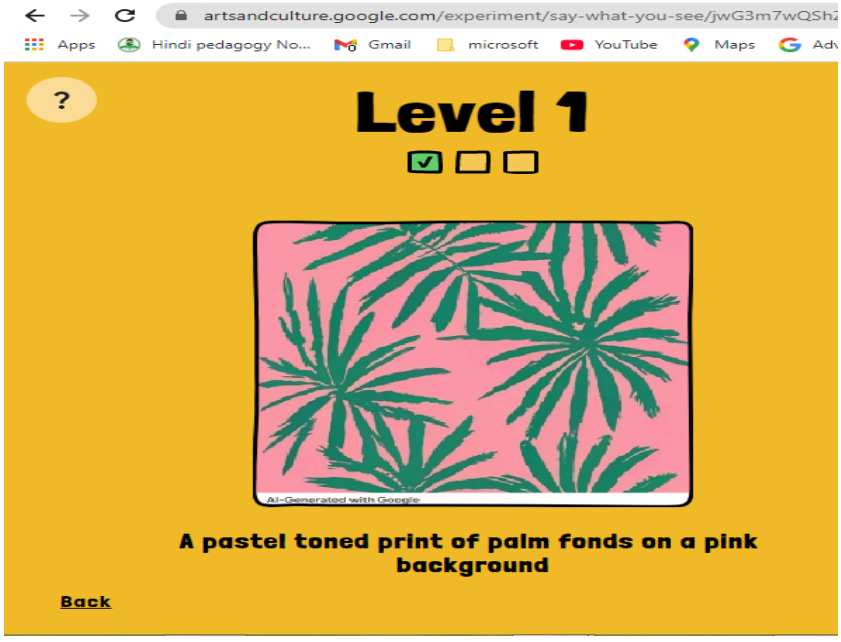
1. **Visit the Website:** Access the game through Google Arts & Culture or directly on the *Say What You See* website.



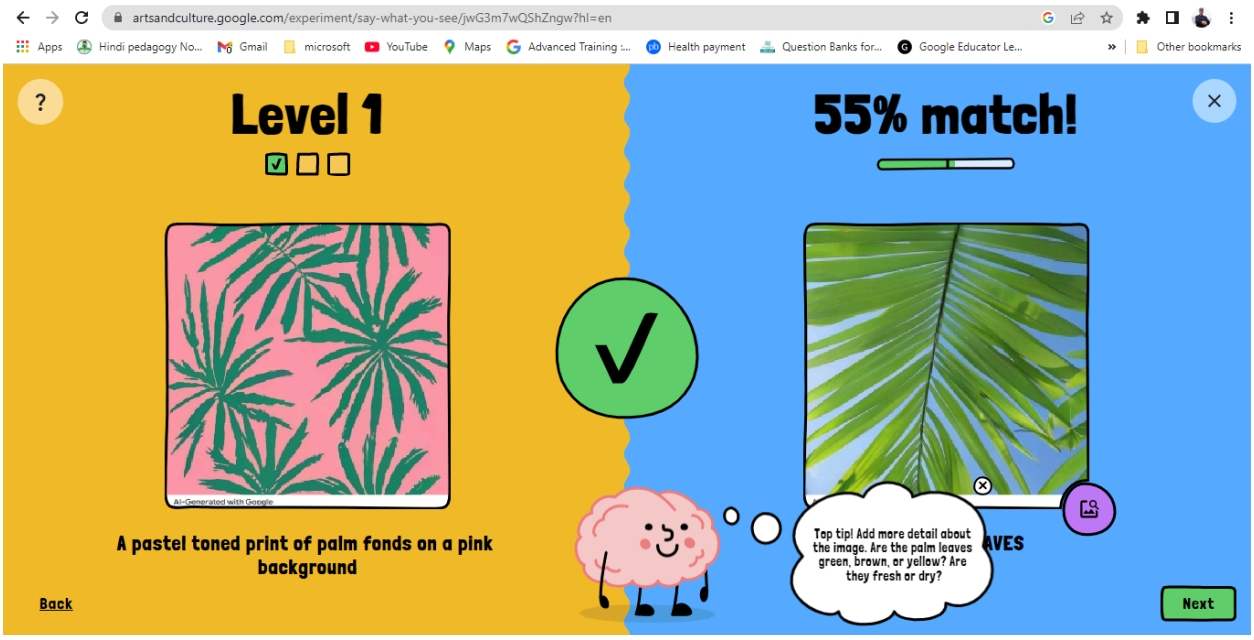
2. **Start the Game:** Click the *Launch* button to begin.



3. **Observe the Image Carefully:** An AI-generated image will be displayed.



4. **Describe It:** Give a detailed and accurate description of the image.I describe the image as palm tree leaves and the result is …



5. **Submit Your Description:** Click the *Submit* button to see how well your description matches the AI's interpretation.
6. **Advance Through Levels:** As you move on, you'll encounter new, more challenging images that require more specific and creative descriptions.

This game not only helps you understand how AI works but also provides a chance to improve your observation and vocabulary skills.

How It Helps Understand AI

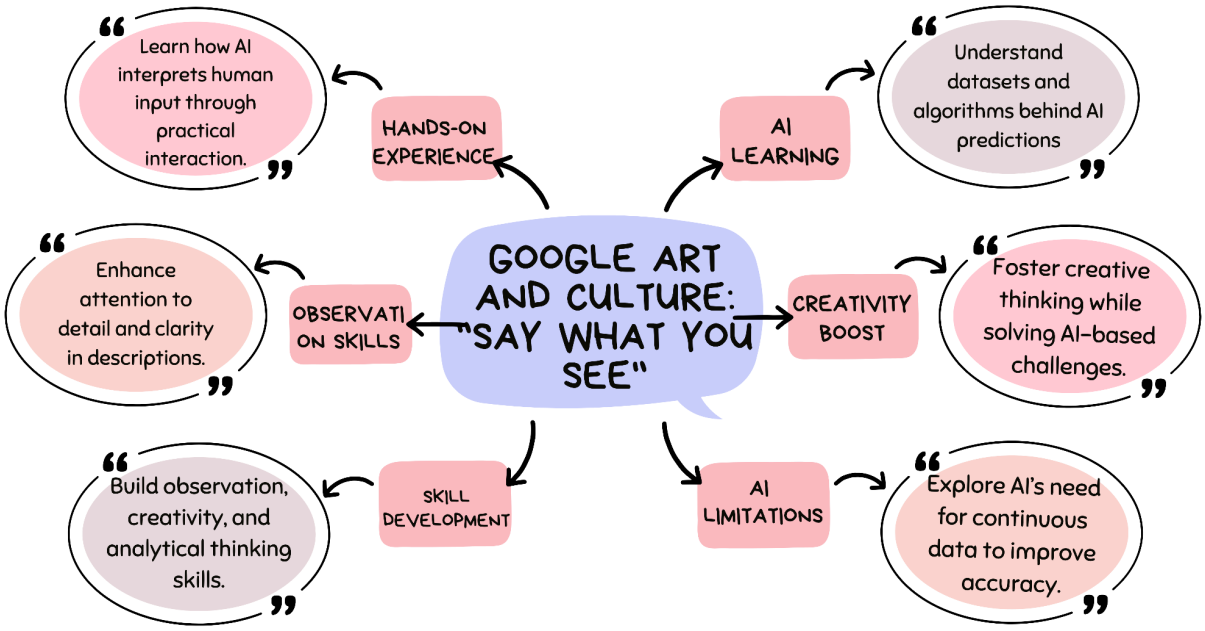
Practical Experience: This game gives students hands-on experience with AI. As they describe images and see how AI interprets them, they learn how AI understands and responds to human input.

Observation and Description Skills: It enhances students' ability to observe details and describe accurately, demonstrating the importance of clarity in communicating with AI.

Datasets and Prediction: The game illustrates how AI learns from datasets and algorithms to make predictions, helping students understand the basics of machine learning and AI.

Creativity and Problem-Solving: This game encourages students to think creatively and shows that AI relies on well-structured and clear descriptions to work accurately.

Understanding AI's Limitations: It also shows the limitations of AI and that it requires continuous data and learning to improve its accuracy. This helps students understand how AI refines itself over time.

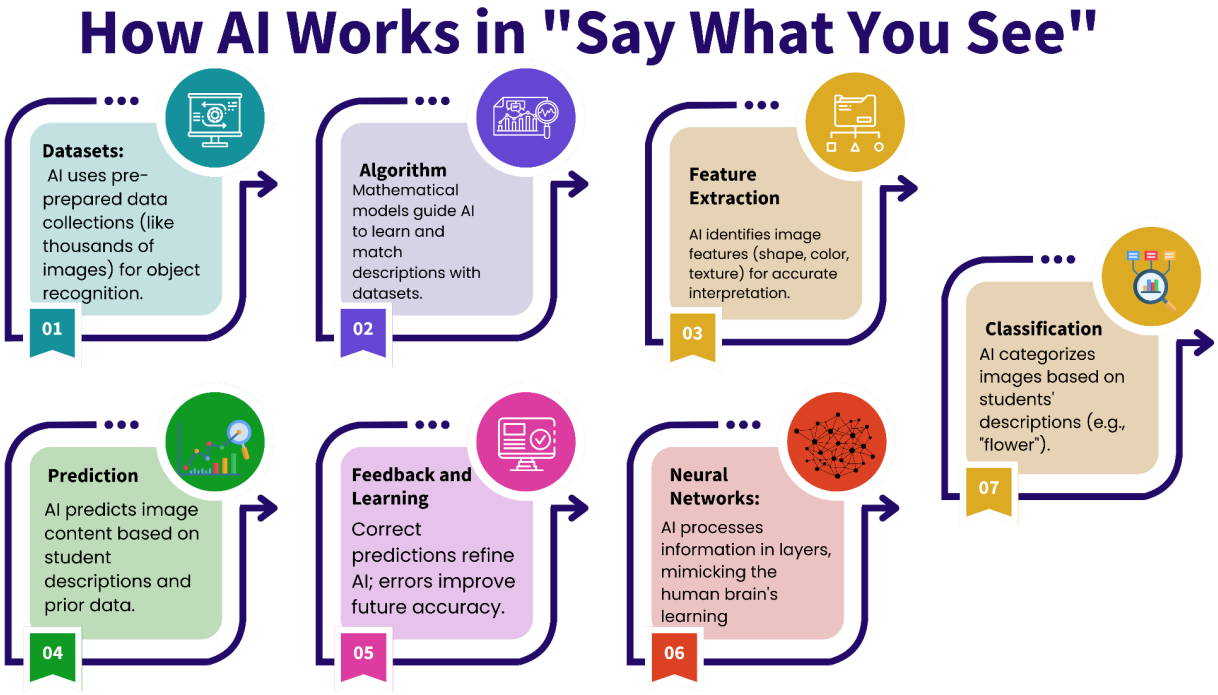


In this way, the game not only aids in understanding how AI works but also develops students' creativity, observation, and analytical thinking.

How AI Works in *Say What You See*

1. **Datasets:** AI relies on datasets, or collections of pre-prepared data. For example, thousands of images help AI recognize and classify objects, animals, people, and more. When students describe an image, AI compares their description to its dataset to find a match.
2. **Algorithm:** AI uses algorithms, which are mathematical models. These algorithms guide AI on what to learn from the data and how to use it. When students describe an image, the algorithm helps AI understand the description and match it with data in its dataset.
3. **Feature Extraction:** AI identifies features in images, like shape, color, pattern, and texture. This is called feature extraction, and it helps AI classify and interpret the elements in an image accurately.
4. **Prediction:** Based on the description, AI makes a prediction about what's in the image, relying on its existing knowledge and the input provided by students.

5. **Feedback and Learning:** If AI's prediction is correct, it uses this knowledge to refine its model. If the prediction is wrong, AI learns from the mistake to improve future accuracy.
6. **Neural Networks:** AI uses neural networks that work similarly to the human brain. These networks analyze information in layers, helping AI gain a deeper understanding of images.
7. **Classification:** AI's final step is to categorize an image based on students' descriptions. For example, if a student describes an image as a "flower," AI classifies it as such.



AI's capability comes from large-scale data, advanced algorithms, and machine learning models. It continuously learns from new data, improves from its errors, and tries to provide accurate responses based on input. This entire process allows it to analyze and identify images.

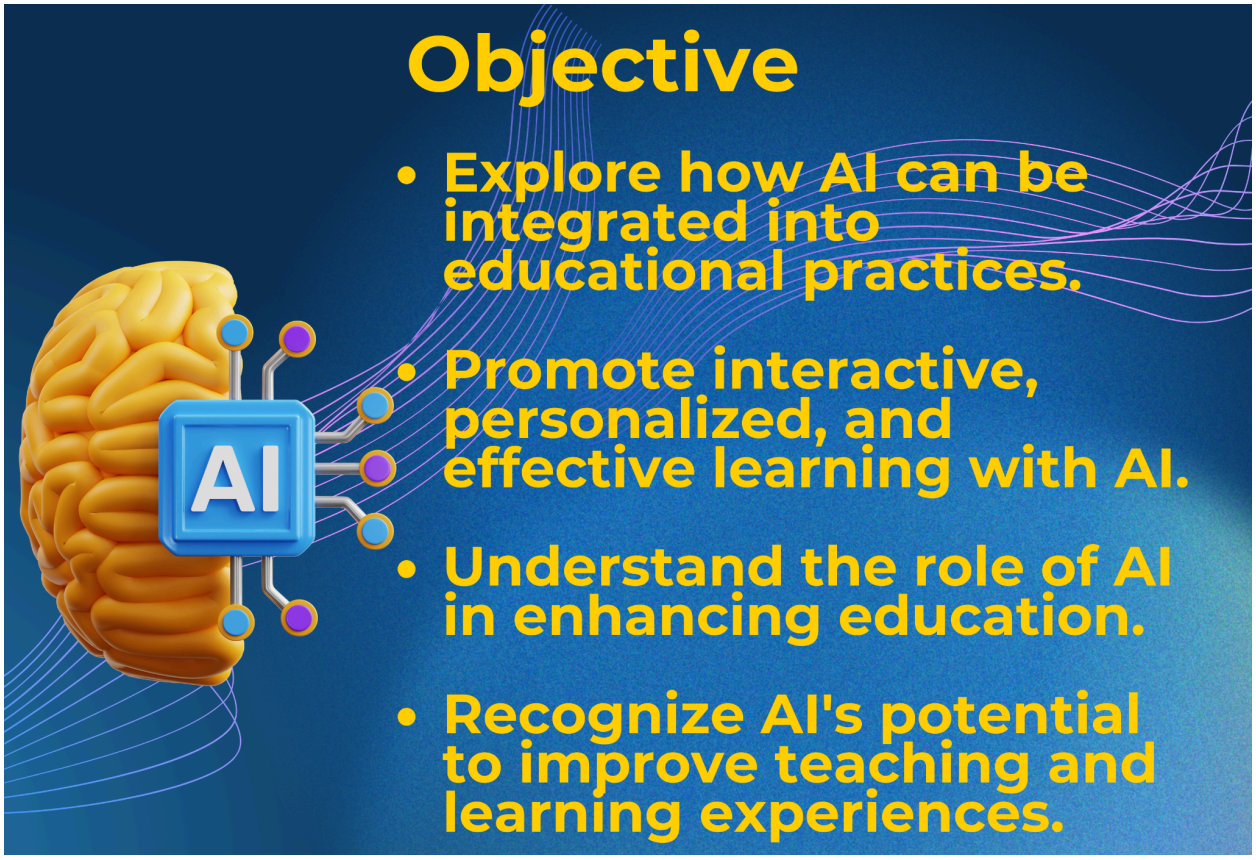
If you're curious about exploring the world of AI further and would like to dive into it through fun, interactive activities, visit Google's *Experiments with Google* page. This is an exciting platform where you can gain a deeper understanding of AI and participate in various educational activities.

Lesson 3: AI in Education

(Leveraging Artificial Intelligence for Effective Teaching)

Objective:

In this lesson, students and teachers will explore how Artificial Intelligence (AI) can be integrated into educational practices to promote interactive, personalized, and effective learning. By understanding the role of AI in education, learners will recognize its potential to enhance teaching and learning experiences.



Introduction:

Artificial Intelligence (AI) is not just a concept of the future; it is already changing the way we live, work, and learn. In education, AI provides powerful tools to personalize learning experiences, streamline administrative tasks, and make students more engaged, independent, and empowered. In this lesson, we will see how AI is transforming the educational landscape and how students and teachers can benefit from AI-powered tools.

Applications of AI in Education

1. **AI for Creating Teaching Materials**: AI can help create interactive quizzes, summaries, lesson plans, and even assist students in creating projects with tools like AI-generated images or AI-powered storytelling apps.

2. **AI-Powered Teaching Assistants**: AI-powered robots or virtual assistants can support teachers by reading lessons, answering student questions, and providing additional assistance. These AI tools make learning more engaging and interactive, thereby enhancing the overall classroom experience.

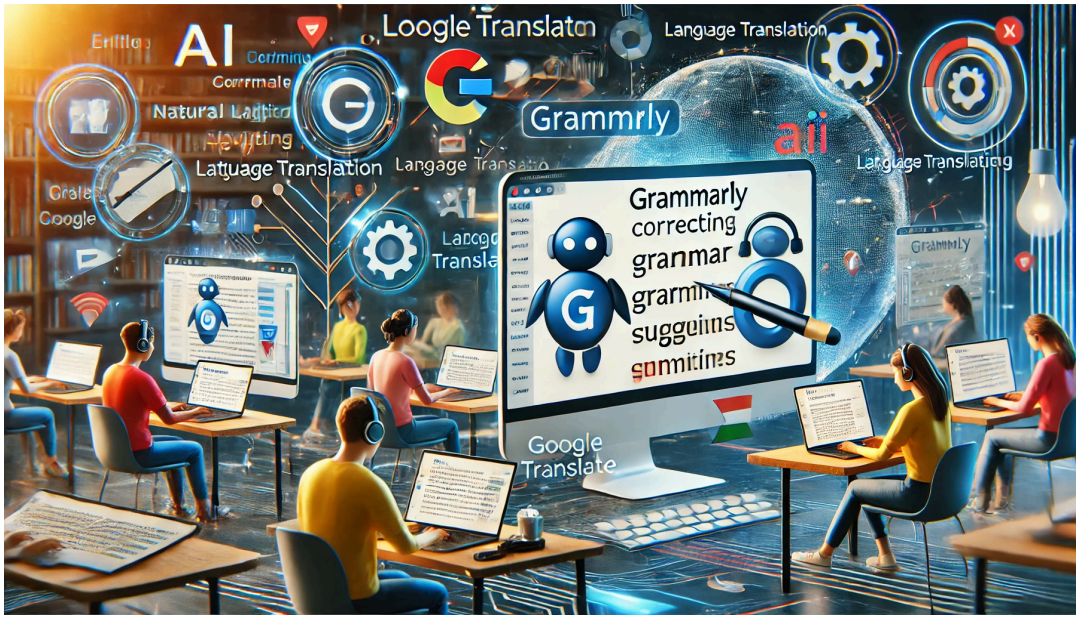
3. **Personalized Learning**: AI systems can analyze individual student data to create customized learning paths. By identifying areas where students excel or struggle, AI helps develop tailored learning experiences that address specific needs and knowledge gaps.

4. **AI-Driven Tutoring**: AI-based tutoring systems, like chatbots or intelligent tutoring platforms, provide instant support to students outside the classroom. These systems help with homework, clarify doubts, and offer real-time guidance, ensuring students receive assistance whenever needed.

5. **Automated Grading**: AI-powered grading systems, such as machine learning algorithms, replicate human grading patterns to accurately

assess student work. These systems help reduce grading bias and human error, ensuring fair evaluations. Optical Mark Recognition (OMR) is a common method used for automated grading, especially for objective-type questions.

6. **Natural Language Processing (NLP) in Writing**: NLP tools like Grammarly help students improve their writing by identifying grammatical errors, offering suggestions, and enhancing the overall quality of their documents. AI-based translation tools like Google Translate provide multilingual support, helping students overcome language barriers.



7. **Virtual Reality (VR) in Education**: VR provides immersive learning experiences, allowing students to interact with 3D environments. Through VR, teachers can create experiential learning opportunities, making complex topics more understandable and engaging.

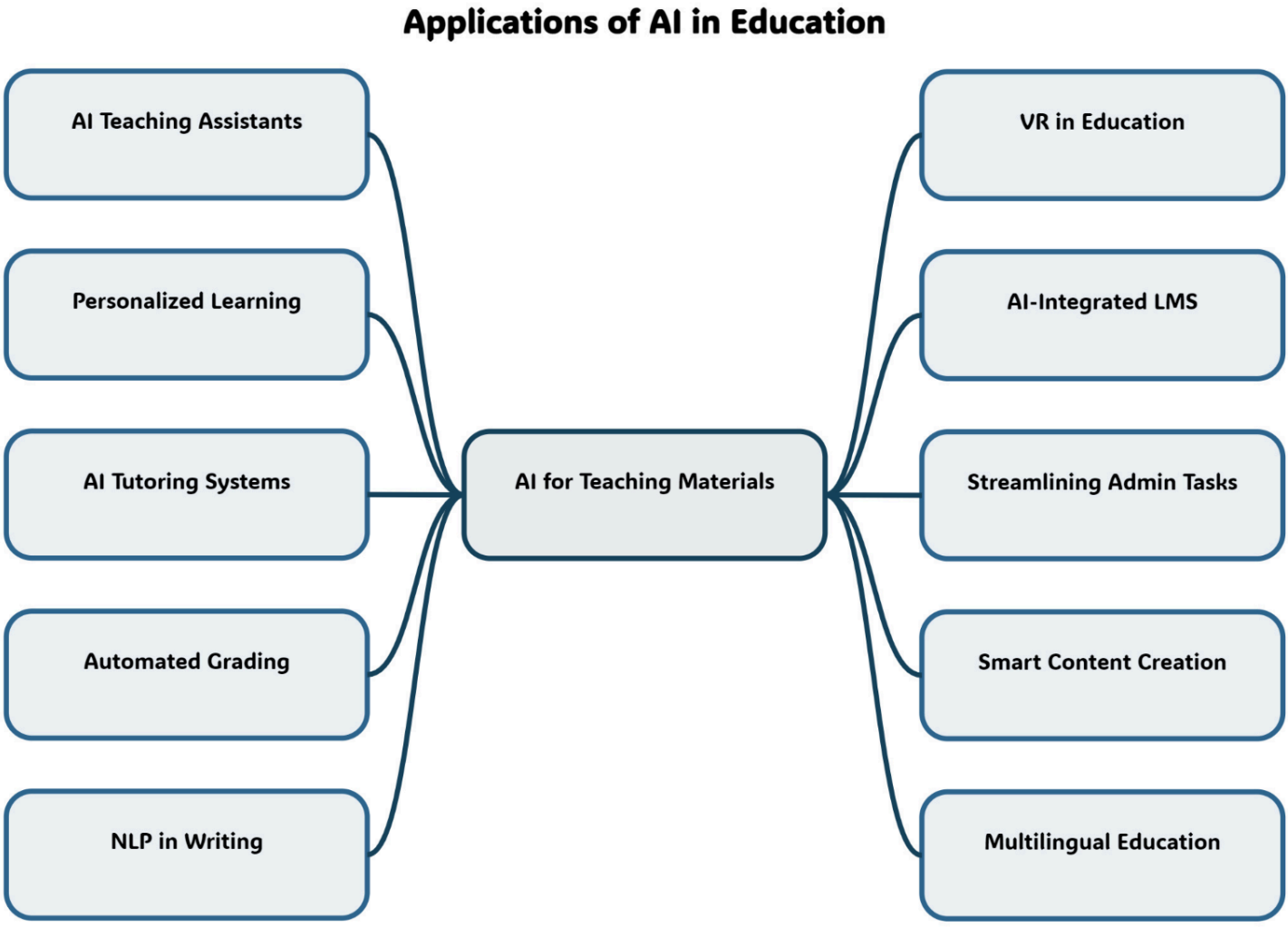
8. **Learning Management System (LMS)**: LMS is a centralized platform that organizes and manages online academic activities. Teachers can use LMS to assign coursework, track student progress, and communicate with students and parents. AI-integrated LMS systems provide intelligent digital tutors who assist students in resolving issues by offering personalized support. Teachers can monitor student progress, provide real-time feedback, and prepare performance reports, significantly reducing administrative time and improving classroom efficiency. Additionally, LMS tools help parents stay updated on their child's performance, allowing them to offer better support at home. By using AI within these systems, teachers can create customized content, and students can receive personalized assistance based on their learning patterns, making education more effective and efficient for everyone.

9. **Streamlining Administrative Tasks**: AI can automate administrative tasks such as scheduling classes, managing attendance, and generating reports. This reduces the manual workload for teachers and administrators, allowing them to focus on teaching and other essential tasks. AI also facilitates the digital sharing of student performance reports, contributing to environmental sustainability by reducing paper usage.

10. **Smart Content Creation**: AI tools enable the development of smart, up-to-date educational content. These tools can organize and present information interactively and comprehensibly, enhancing students' learning experiences.

11. **Multilingual Education**: In a multilingual country like India, AI-enabled NLP tools help break language barriers, allowing students to learn in their native languages. These tools enable quality education access for students from diverse linguistic backgrounds, ensuring broad knowledge sharing and inclusivity.

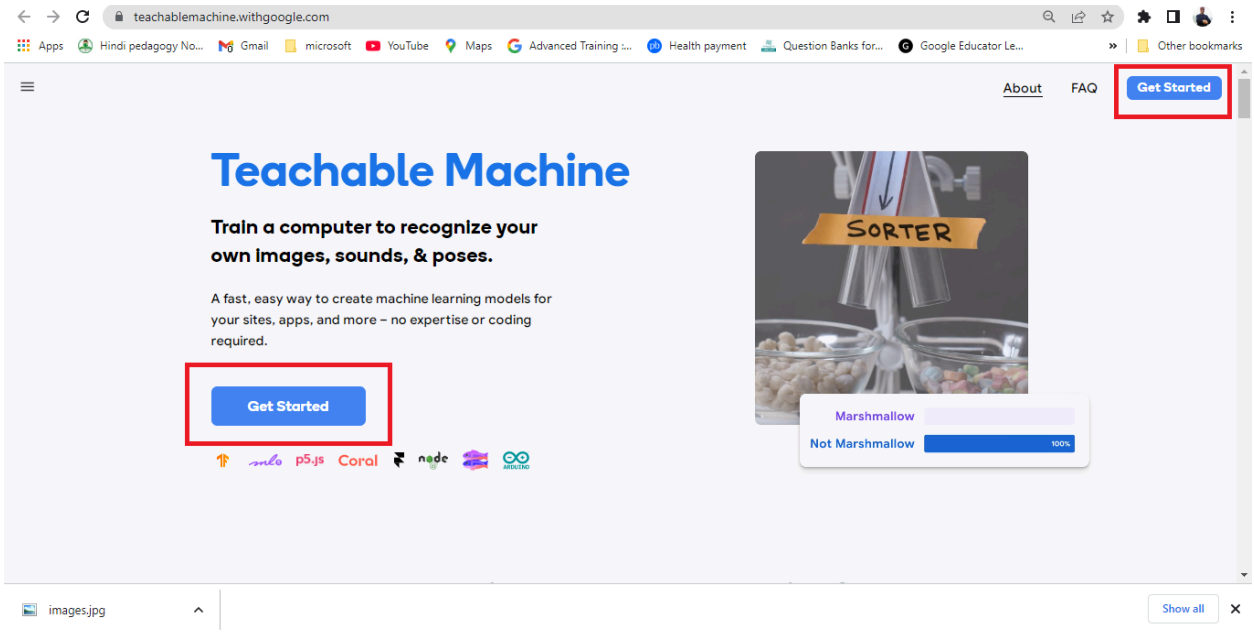
The integration of AI in education is creating smarter, more efficient learning environments that cater to the unique needs of both students and teachers. As AI continues to evolve, it will play an increasingly crucial role in shaping the future of education.



Now that you have developed a basic understanding of Artificial Intelligence (AI) and learned how it is giving new dimensions to the education sector, let's move on to some important **AI-based educational tools** that can make your classes more effective and engaging. These tools not only simplify the teaching process but also enhance students' learning capabilities.

1. Google Teachable Machine

Google Teachable Machine is an AI-based tool that allows teachers and students to understand machine learning principles without any coding knowledge. Using this tool, you can teach your students how machines recognize and learn new things. This tool is useful for experiments such as image, sound, and pose recognition.

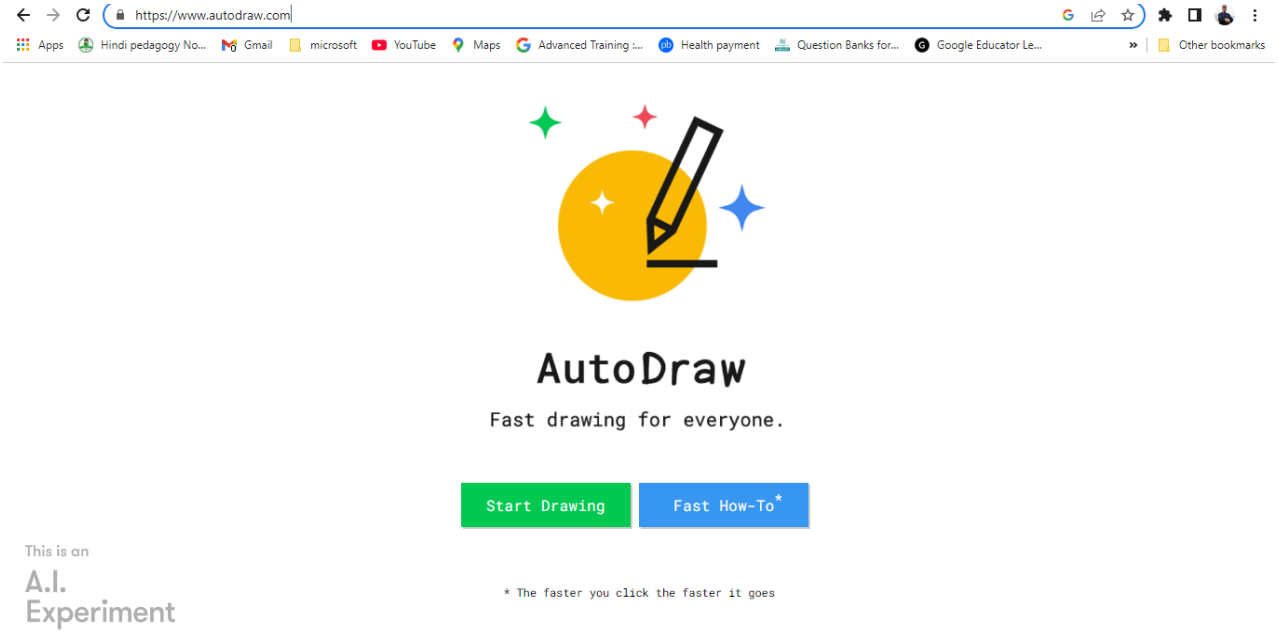


2. AutoDraw

AutoDraw is an AI-based tool that encourages students' art skills. It is a drawing tool that turns your artwork into a better and cleaner drawing. AutoDraw aims to understand your drawing and turn it into a correct outline.

How to Use:

- Ask students to draw any picture, then use the AutoDraw tool to improve it with AI.
  This tool helps improve students' drawing skills and teaches them how AI interprets and enhances their created shapes.

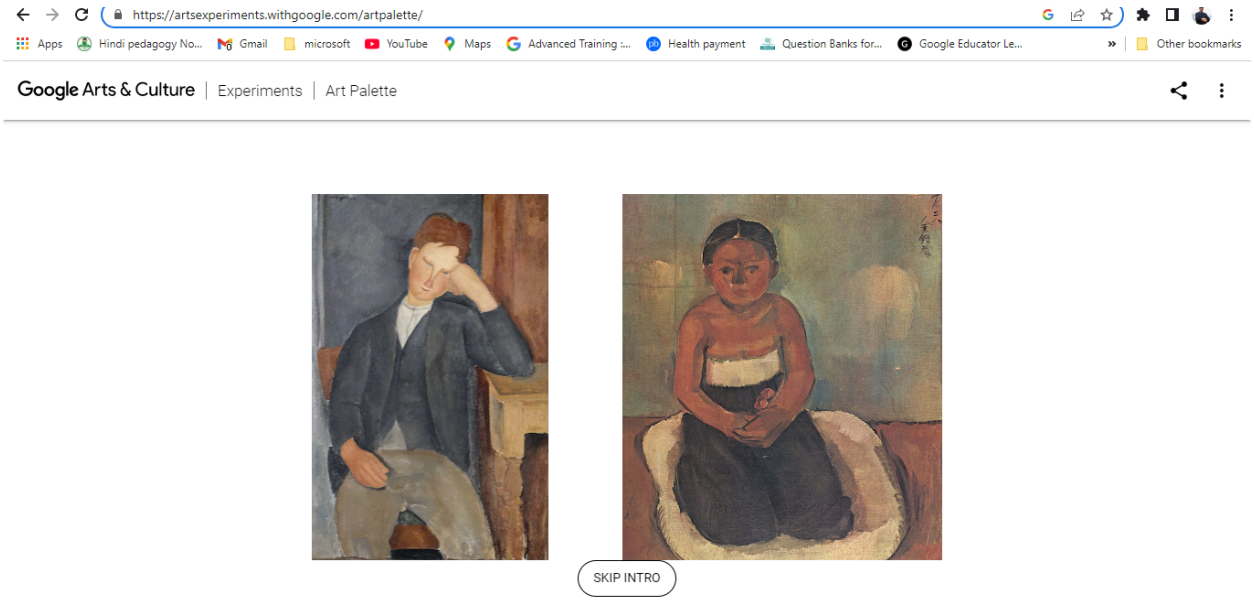


3. Art Palette

Art Palette, developed by Google, is an AI-based tool that works on color combinations. It is highly beneficial for art teachers as it helps in creating new artworks based on color combinations.

How to Use:

- Have students select their favorite colors.
- Art Palette shows various artworks and images related to these colors, helping students develop their understanding of color combinations and artistic comprehension.



4. Story Studio

Story Studio is an AI-powered tool that helps students create interactive stories using AI-generated images. This tool enhances their storytelling abilities and helps them understand content creation methods using AI.

How to Use:

- Ask students to draft a story outline.
- Present those stories interactively using AI-generated images.
  This tool fosters students' creativity and helps them understand how AI aids in content creation.

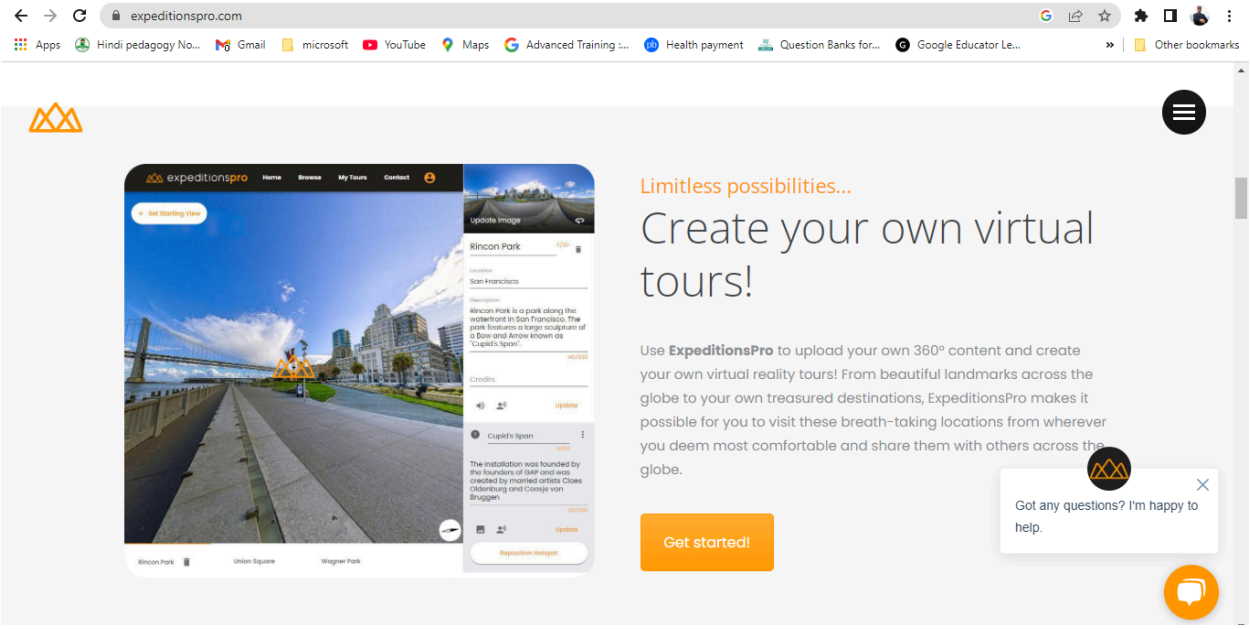
5. Expeditions Pro

Google Expeditions Pro is a tool that virtually takes you and your students to

various sites around the world. Using this tool, teachers can take students on virtual tours of places they are studying.

How to Use:

- Take your class on a virtual tour of historical sites, scientific labs, or any important place.
  This tool offers students real-world experiences and interactive learning opportunities.



6. Learning Management System (LMS)
LMS is a centralized platform that assists in digitally managing academic activities. LMS can be used to assign student tasks, track performance, communicate with parents and students, and prepare student progress reports.

How to Use:

- Organize the regular classroom curriculum digitally.
- Track students' progress with AI-powered tutors and provide appropriate feedback.
- Keep parents informed of students' performance and provide suggestions based on AI-generated analyses.

With AI, a learning environment is created where teaching and learning become more effective and personalized.

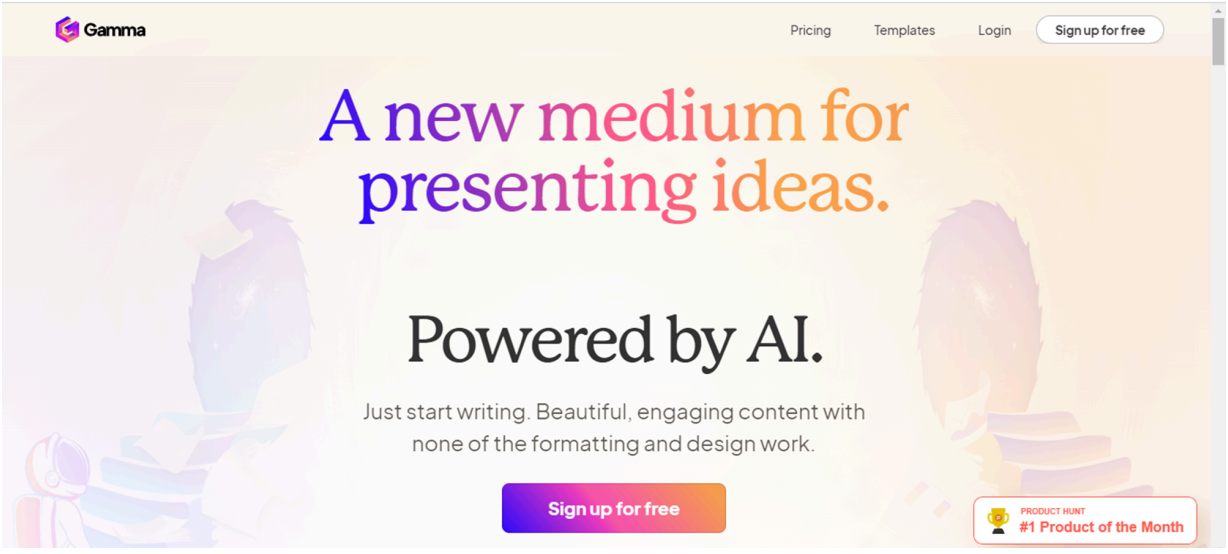
Now that you have learned about some common AI tools used in education, let's explore the different categories of AI tools available and their specific applications in educational settings. These tools can improve your teaching methods, streamline administrative tasks, and enhance students' learning experiences.

Activity No. 6

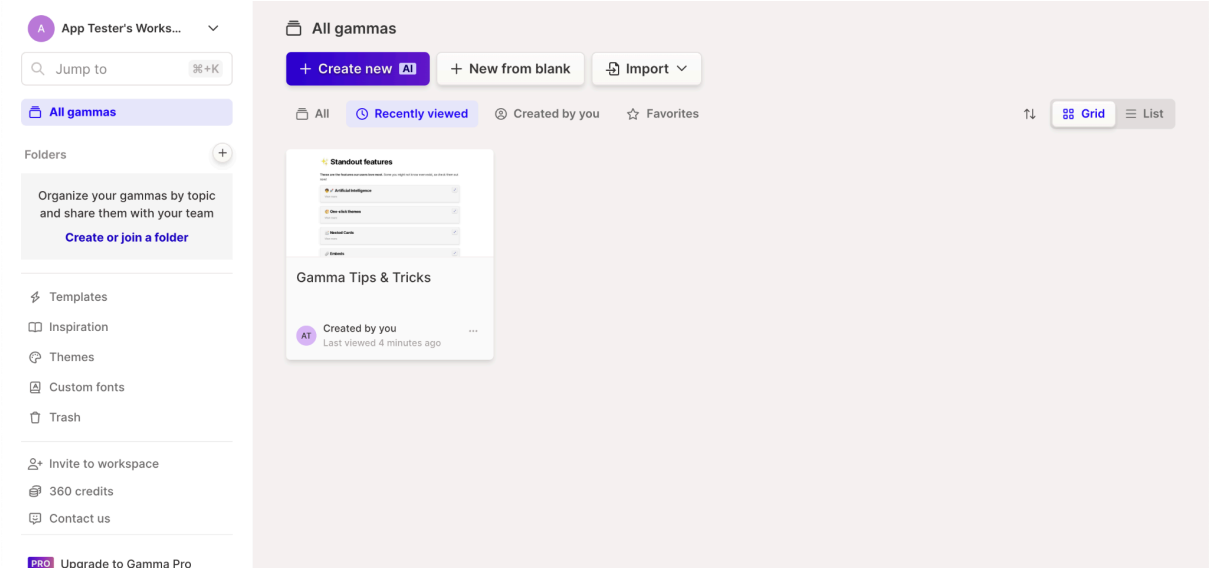
1. Presentation Tools: Presentation tools equipped with AI features can change the way you create and deliver lessons. There are many presentation tools in vogue at the moment, you have to select them as per your convenience and requirement. Here you will get information about many types of presentation tools. It is being explained in brief. And we will discuss one presentation tools in detail.

AI range AI range : **AI range**is an AI presentation app that can create presentations, documents, and webpages. It can help users create slide decks and websites with a short prompt, and you can even upload a file or paste content to give the AI additional background about your presentation. Let us know how we can create our attractive presentation on Gamma AI, step by step is given here, you can create a very beautiful presentation by following them.

1. https://gamma.app/ Click on the link you will reach the web page.

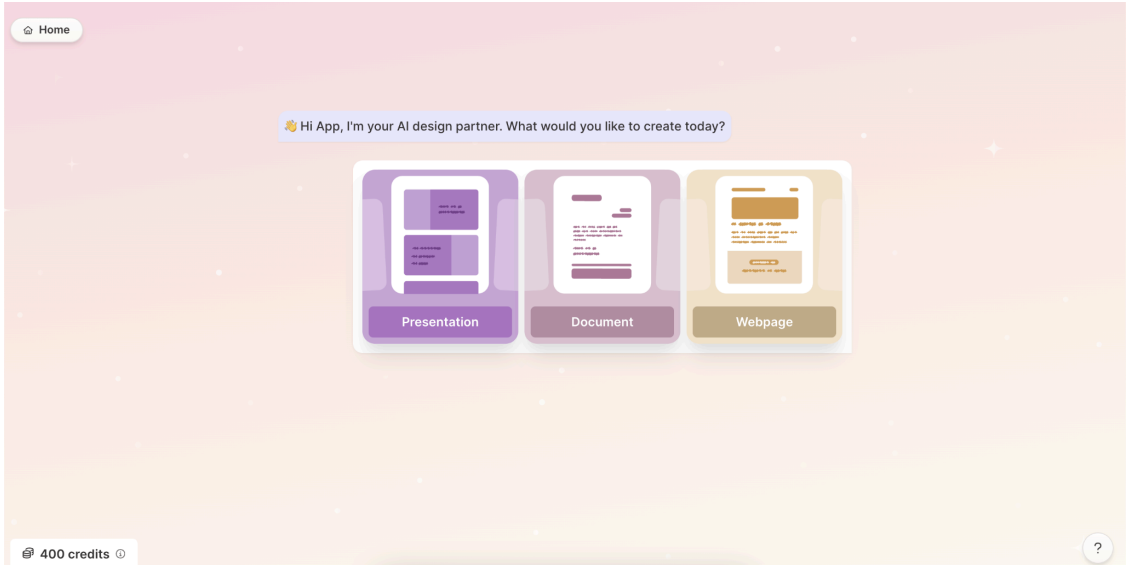


2. Sign up, create an account and log in to the workspace, you will see an interface like this

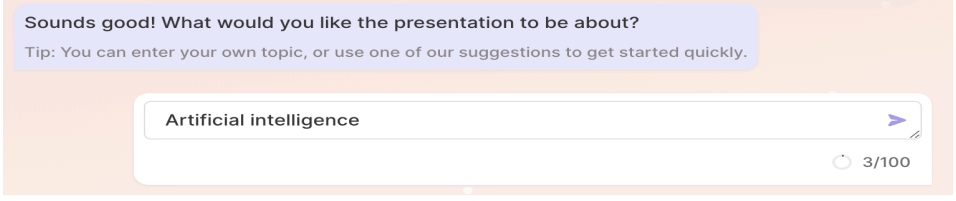


3 - Click on 'Create New' option

An AI assistant will appear to guide you.

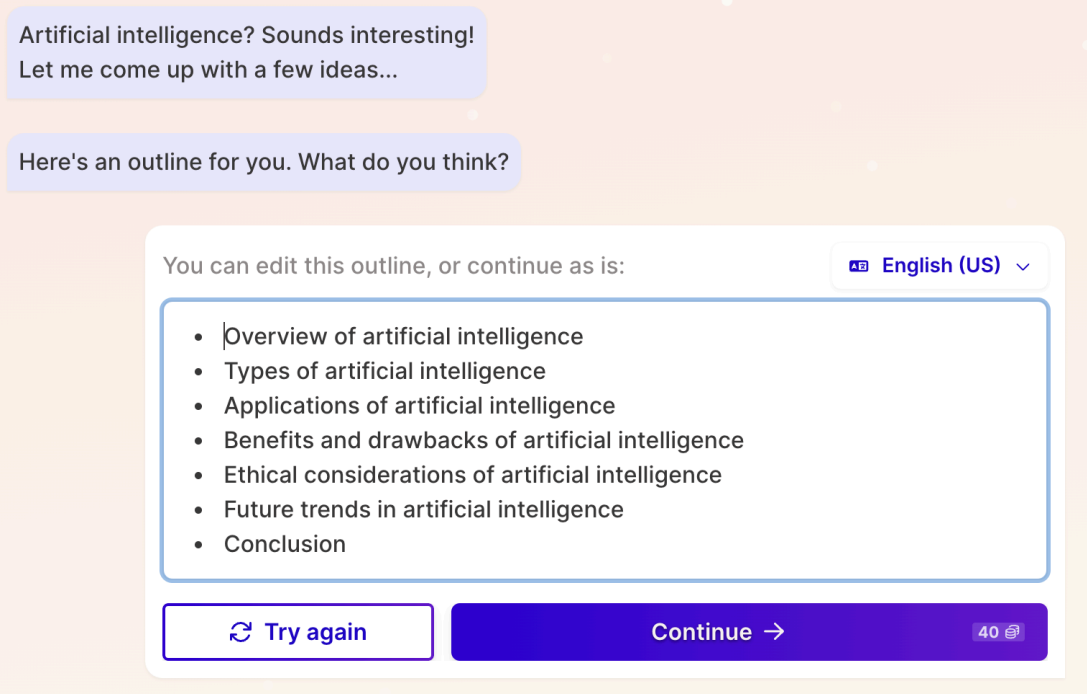


4.Tell AI what you want to make your presentation about (Prompt) We told Gamma that we want to make a presentation about AI.

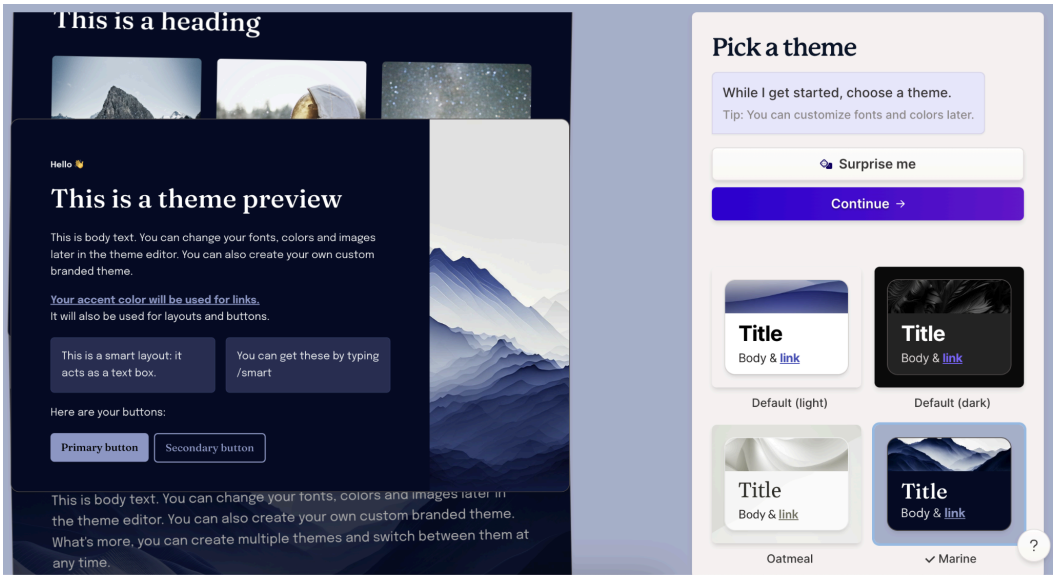


5.Fine tune the content outline generated by AI

Gamma will create a content outline. You can change it any way you want.

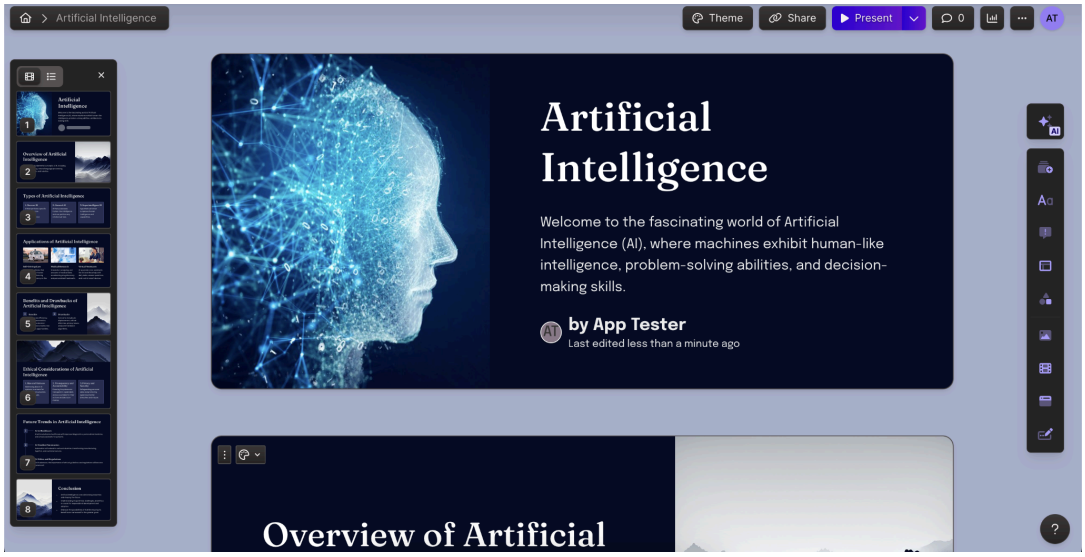


6.Choose a theme We chose the 'marine' theme.



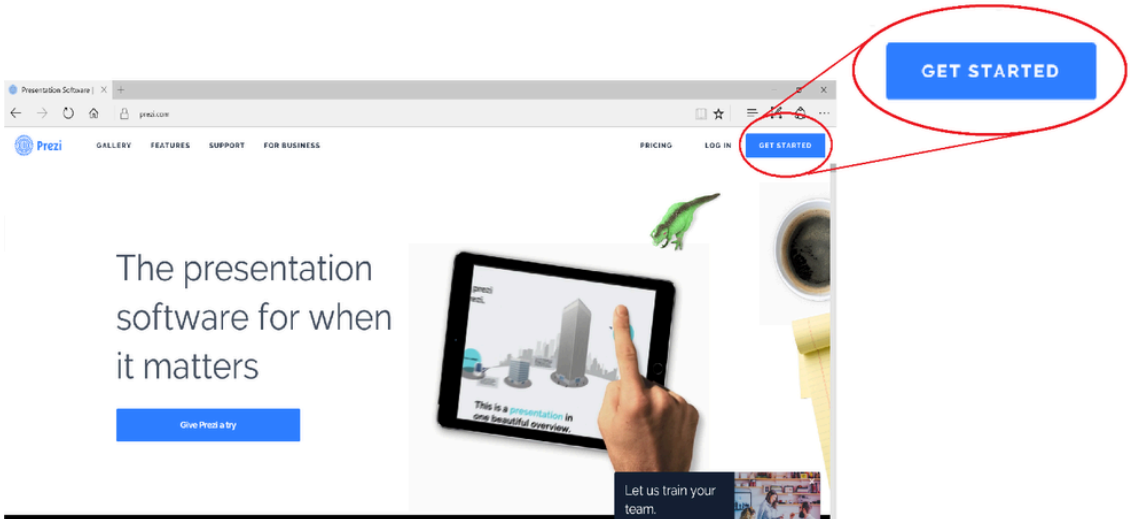
7.Make final edits and present!

Gamma's AI engine will create a presentation deck for you. Now you can make any manual edits. When you're done, simply click 'present'.



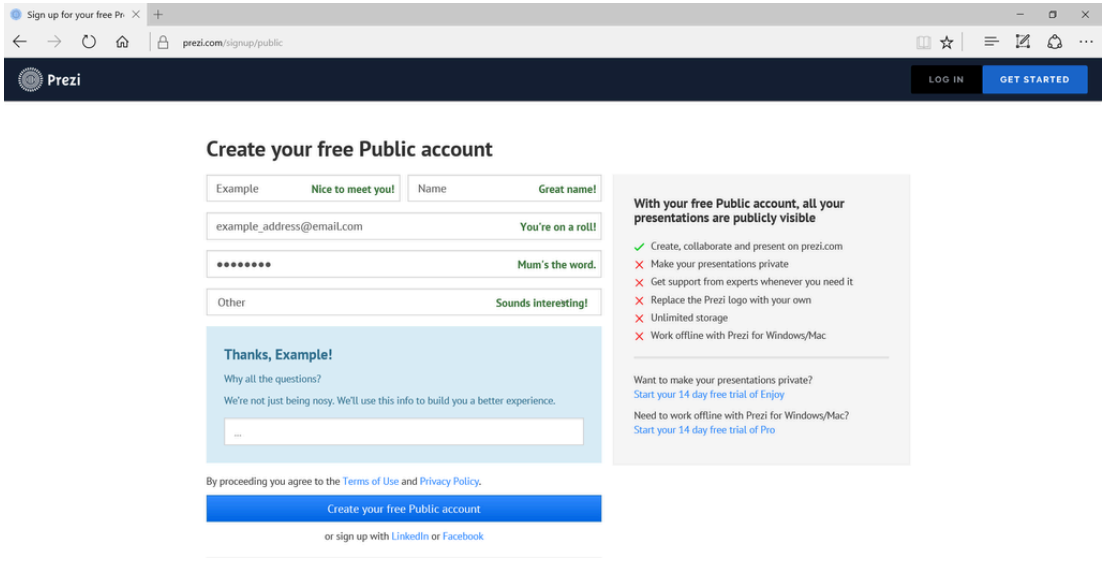
Prezi Prezi AI :Prezi provides a dynamic, zoomable canvas for presentations, letting you create engaging narratives. Its AI features suggest layouts and designs to suit your content. Let us know step by step how you will create a presentation with the help of Prezi, you can create an attractive presentation by following the following steps.

1.https://prezi.com/features/ai/ Click on the link you will reach the web page. Click on the blue “get started” button on the upper right hand side of the website.

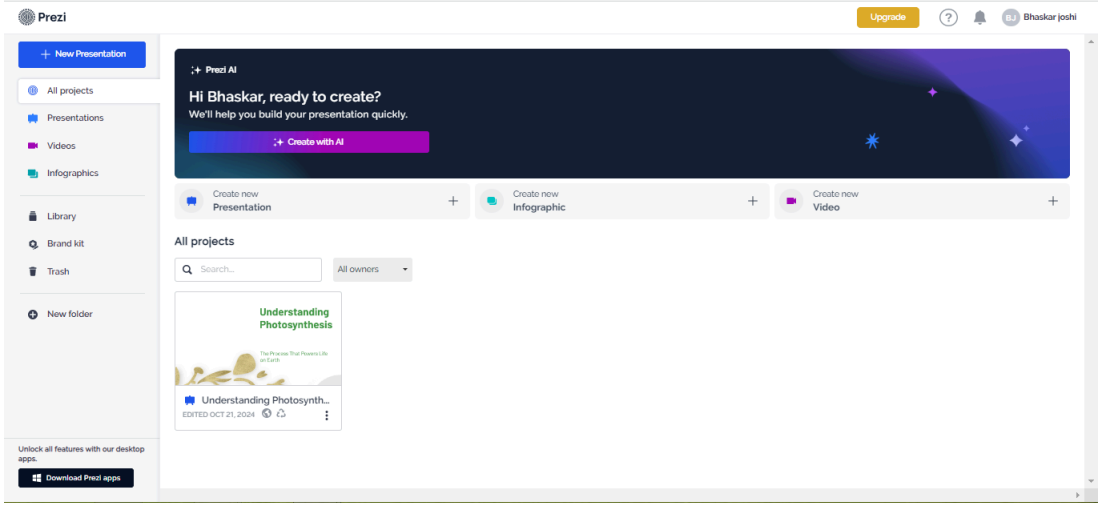


2.Once you click "get started", you will be redirected to a page that lists different pricing options for those who want to get additional features. Want to pay a monthly fee for; **Simply click "Continue Free" on the right column of your screen to create a free account.** To create a new Prezi account the website will ask you: first name; last name; e-mail

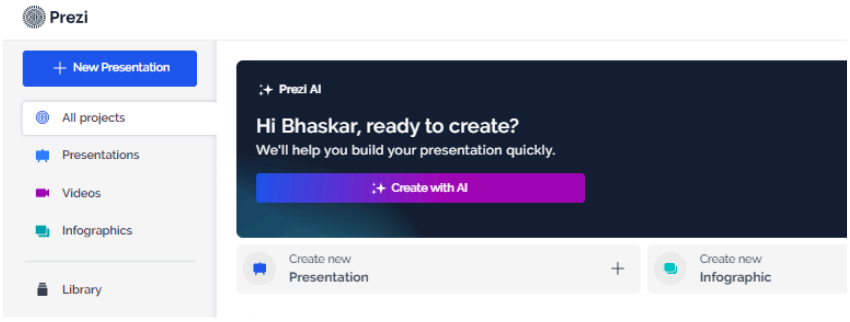
address; Password; And which of their listed career affiliations best describes you (if none of their listed affiliations apply to you, simply click "Other"). Once you've entered all your information, simply click the "Create your free Public account" button at the bottom of the page.



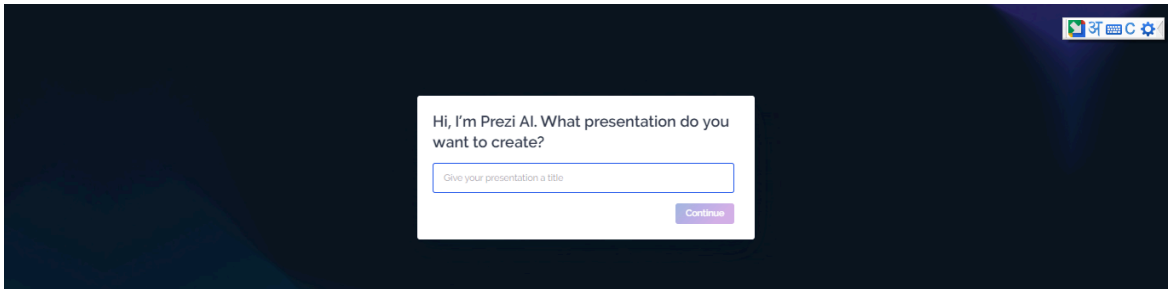
3.After logging in, you'll see a welcome screen with a small floating overview of some of Prezi's features; Click “Get Started” on the first screen and then click the floating arrow button on the right repeatedly until the “Start Creating” button appears; Once you click on it, the welcome prompt disappears. You will then be redirected to a short interactive tutorial; For the purposes of this demonstration, exit out of that tab, and once you do, you'll be brought to the Prezi dashboard.



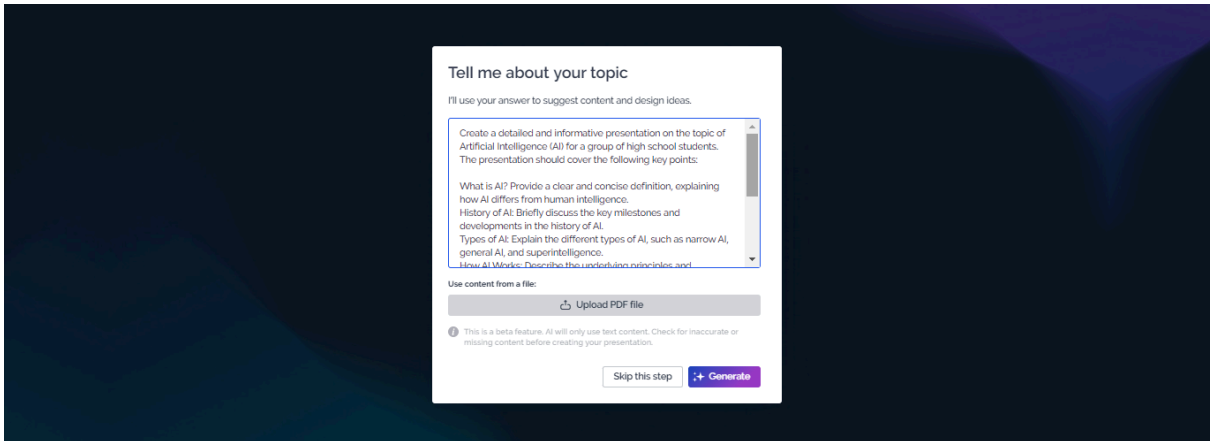
4.To reach the dashboard, you will have to click on Create with AI.



5. Write the name of the topic on which you want to make a presentation, that is, you will have to give a heading to your presentation.



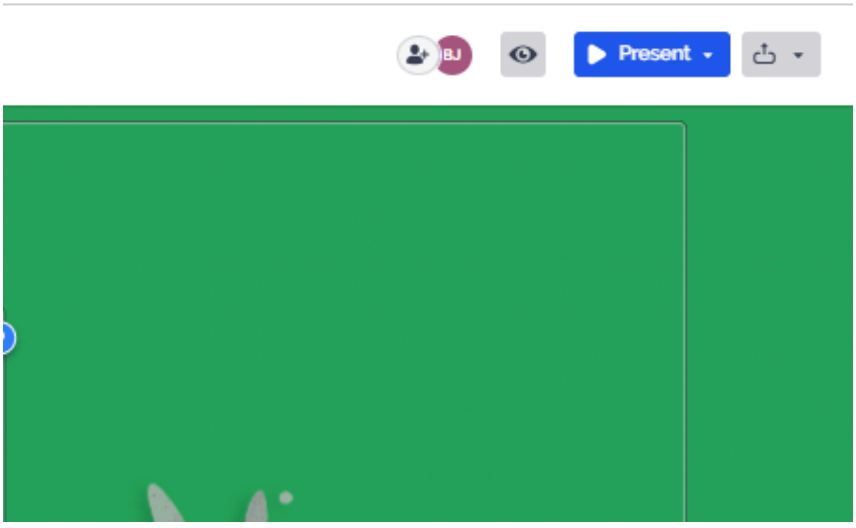
6. Here we have taken the topic of artificial intelligence as an example. To give a topic to the presentation, what architecture do you want in the presentation, how many slides do you want, for what level you want to make this presentation, you should write prezi about it. This step will make your presentation attractive and informative.



7. Click on the Generate button. Prezi's AI engine will create a unique, attractive and informative presentation on the topic of Artificial Intelligence.

8.You can customize your presentation by clicking go to editor on the right side of the screen,

9.Present your presentation by clicking on the Present button, or share the link of this presentation with your students by clicking on the Share button or export it as a PDF or use other options as per your wish and need. Can.



Apart from this, there are many AI presentation tools which are in trend at present and are being used a lot. Here are some other tools which you can search in your browser as per your convenience and time and try to get experience from them.

- **Beautiful.ai: AI-No**With dynamic templates and smart formatting, this tool helps you focus on your message while it takes care of the visual aspects of your slides. https://www.beautiful.ai/
- **AI Mentee Builder AI Builder Minds** : AI Menti Builder is designed to help you create attractive and professional presentations with a single click of a button. Simply enter a prompt and the tool will do the

rest, transforming your presentation ideas into beautifully crafted slides. https://www.mentimeter.com/features/ai-builder

- **SlidesAI.io:** AI-powered tool that turns any text into attractive slides, saving you hours of time and effort. Choose from a variety of presentations and colors https://www.slidesai.io/
- **Slidesgo AI :** SlidesGo AI is a free tool that uses artificial intelligence (AI) to create presentations https://slidesgo.com/
- **Volume AI Volume AI** is a presentation tool that leverages artificial intelligence to help users create stunning and engaging presentations. It offers a variety of features https://tome.app/lp/ai-presentations
- VoiceThread: VoiceThread is a versatile online platform that allows users to create multimedia presentations and collaborate with others. It combines different media types, such as images, videos, documents, and audio recordings, into a single thread. Users can then add comments, questions or annotations directly to the media elements. https://voicethread.com/

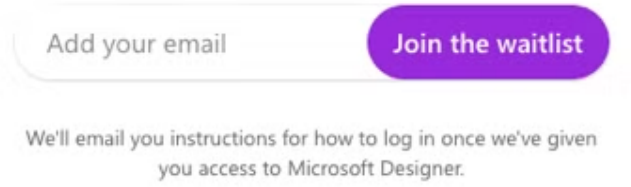
Activity No. 7

2. Graphic Design Tools Graphic Design Tools

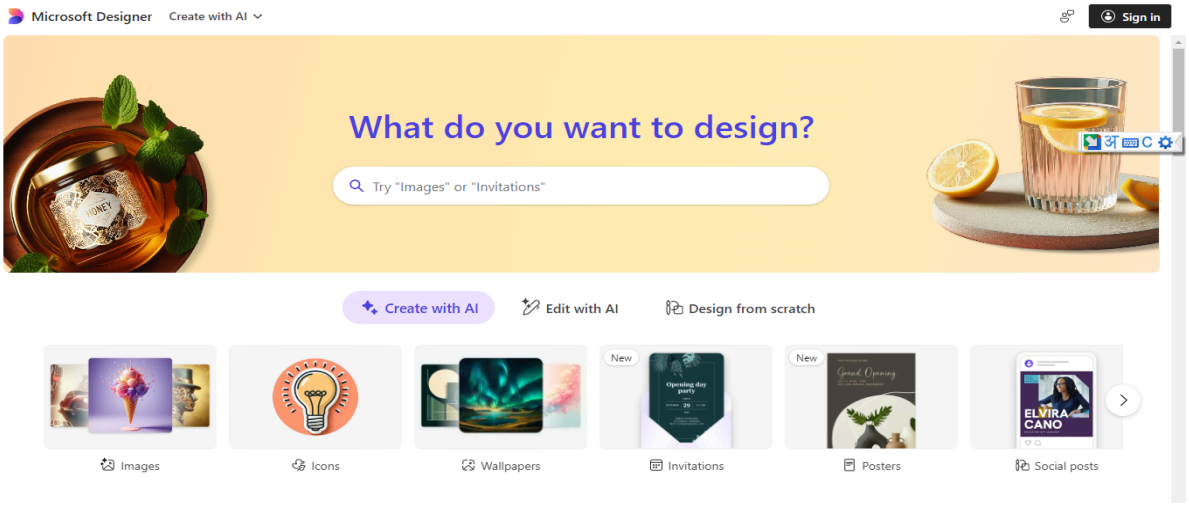
These AI tools simplify the graphic design process, making it accessible even to people who have no design experience.

Microsoft Designer:Microsoft Designer is an AI-powered app that helps users create graphics, edit images, and create designs with text and imagery. It can be used to create professional-quality designs for social media, invitations, and digital postcards, even if you have little or no design experience. https://designer.microsoft.com/ Microsoft Designer is a great tool that lets you create images from text. Let us know how:

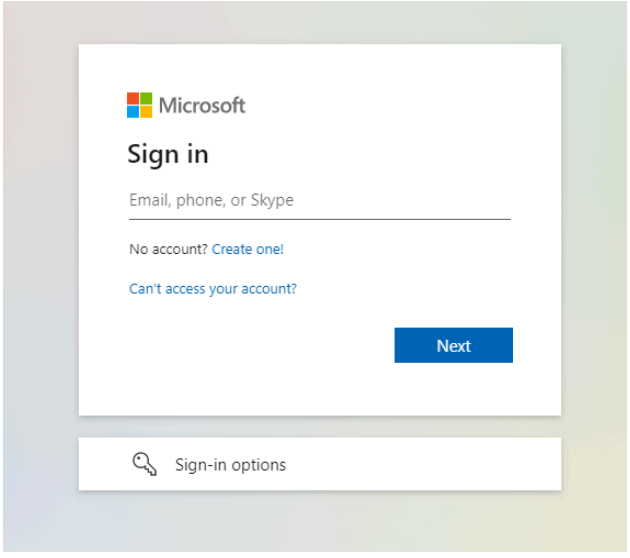
Stunning designs in a flash with Microsoft Designer



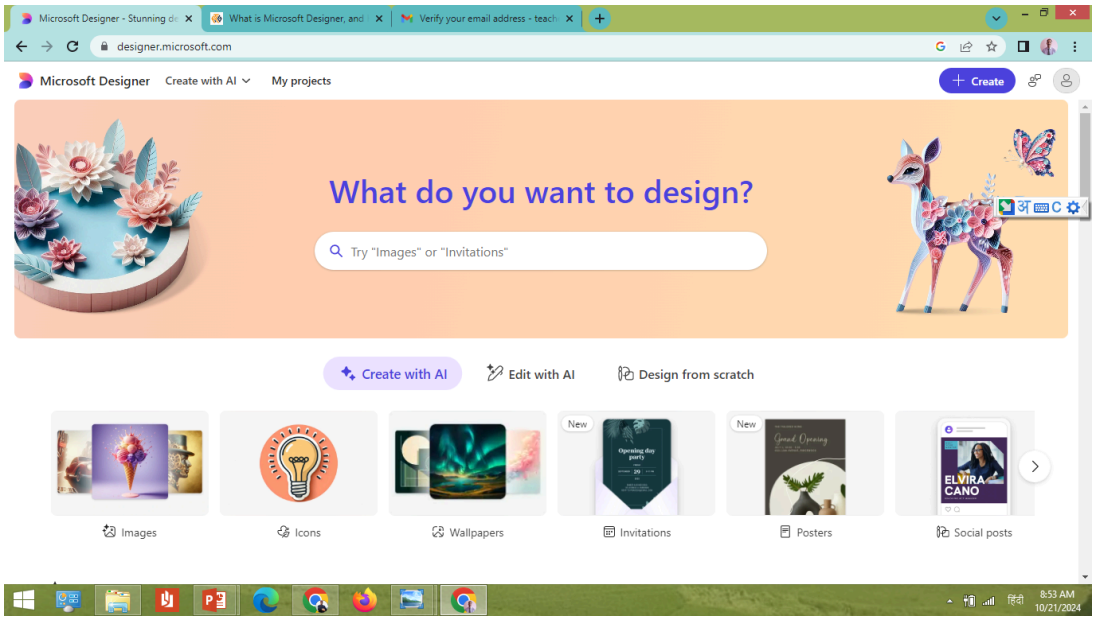
1.https://designer.microsoft.com/ Click on and open the Microsoft Designer application on your computer.



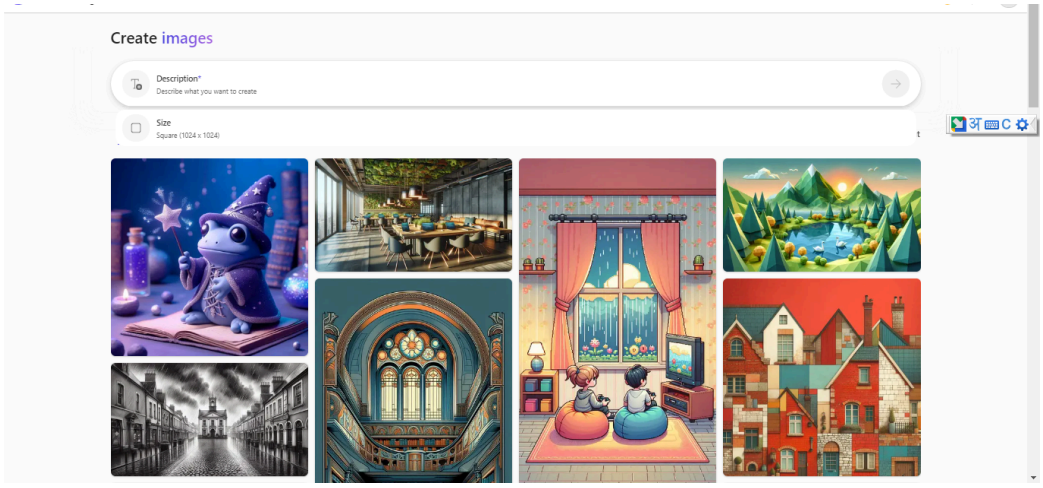
2.Complete the sign in process and log in to your account.



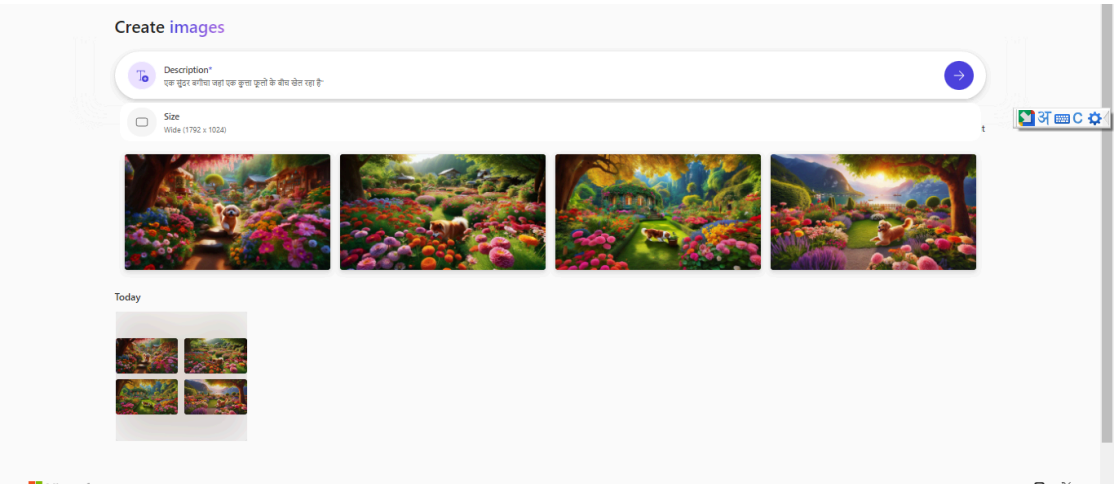
1. After logging in, you will reach the dashboard of Microsoft Designer. Here click on Create or create with AI and click on whatever you want to create. Here we will create an image.



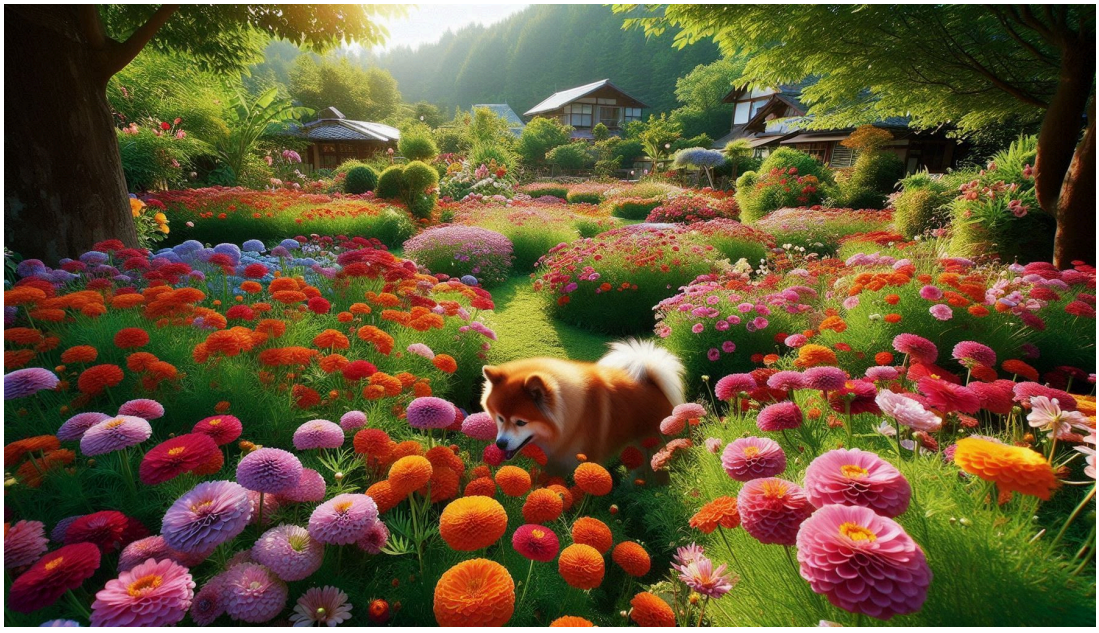
2. Click on Image option, at description, type a detailed description about the image you want to create (prompt). **Example:** Select "a beautiful garden where a dog is playing among the flowers" or "a spaceship landing on the moon" and the size of your image, and click the go arrow.



5.The designer will generate multiple image options based on your text.



6.Select the image you like the most from the generated images. You can also further customize the image, such as changing the color, size, and style.



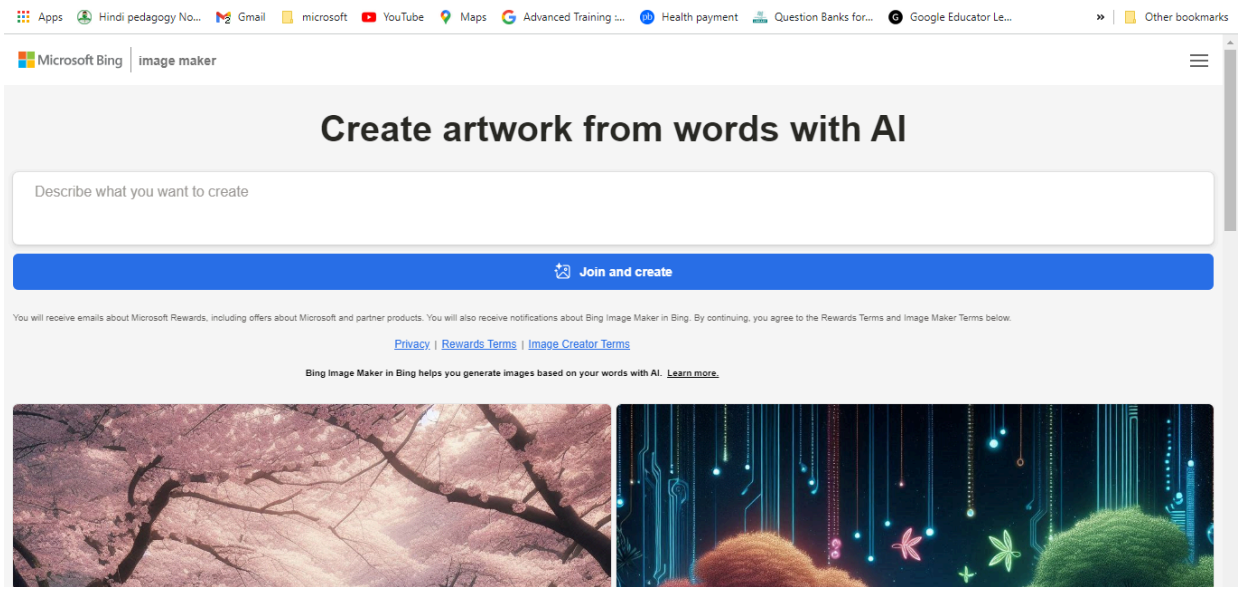
7.Once you are satisfied with your image, you can download it or directly share it on social media.

Some additional tips:

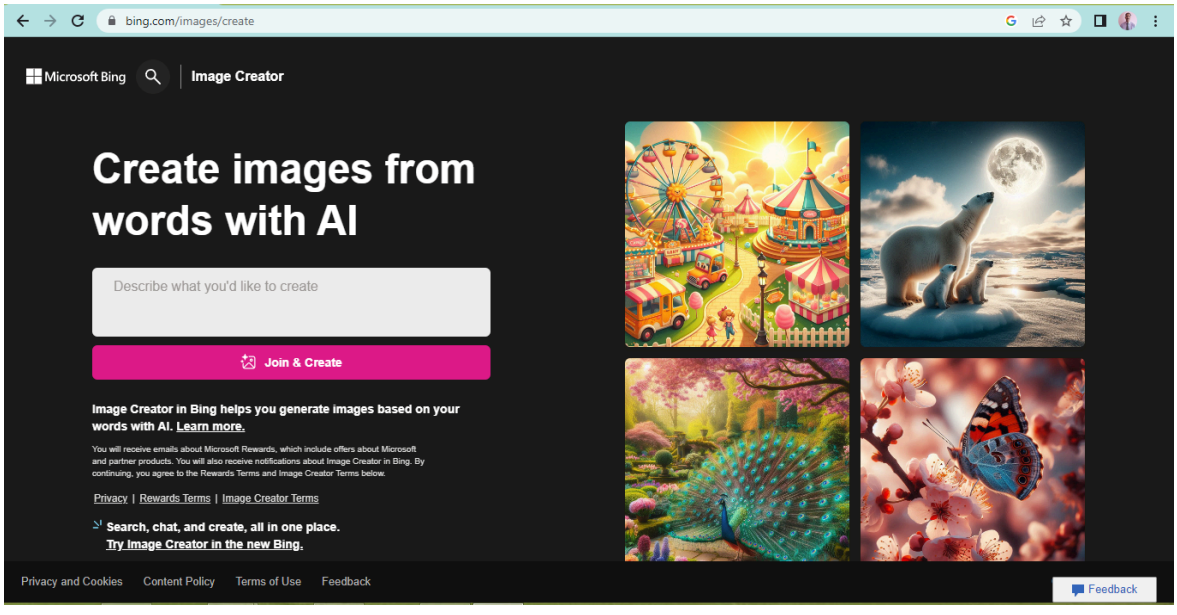
- **The more detailed the description, the better the image:** You can add more details to your image, such as "a sunny day", "an old town", or "a magical forest".
- **Try different styles:** The designer allows you to select different art styles, such as cartoon, photorealistic, or painting.
- **Edit Image:** You can crop your image, resize it, and even apply filters.

Microsoft Bing Image Creator Microsoft Bing Image Creator: Microsoft Bing Image Creator is an AI-powered tool designed to create images from text prompts. Leveraging advanced AI algorithms, it enables users to create unique visuals based on their details. This tool is especially useful for teachers, students, and creatives who want to enhance their projects with custom graphics. Let us know how to use it:

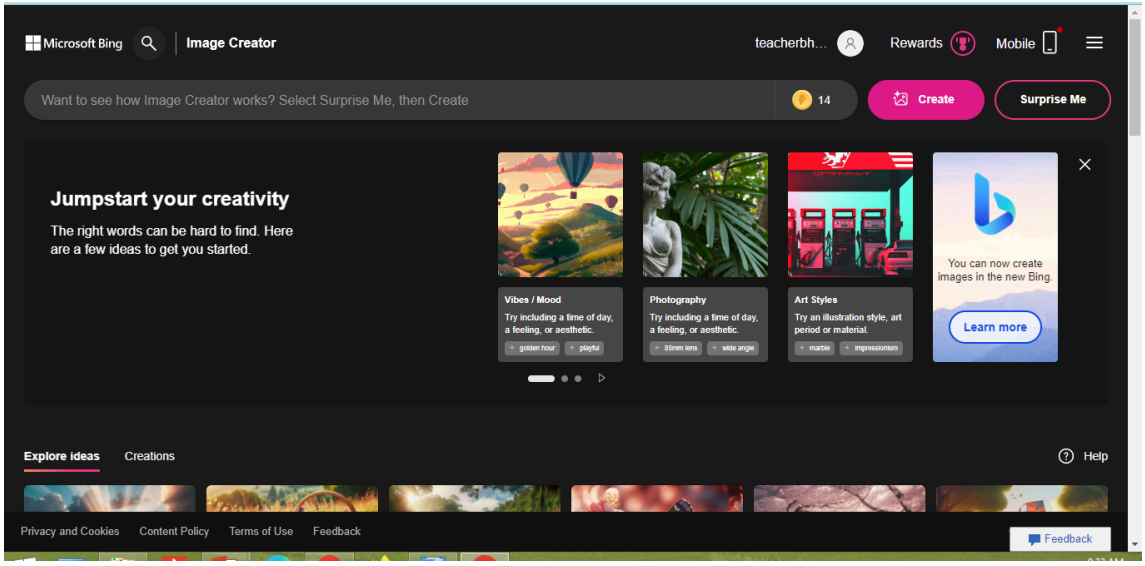
1. Open Bing search engine:Go to bing.com in your browser. https://www.bing.com/images/create



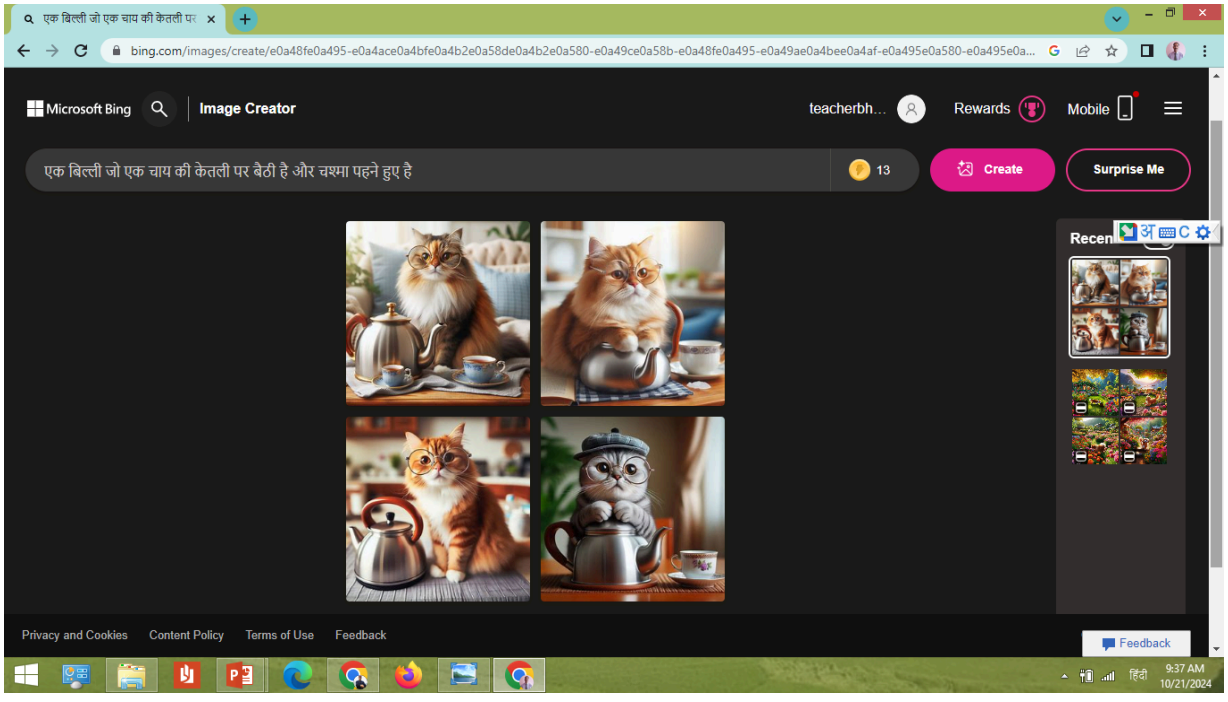
2. Click on Join and create and complete the login process by creating an account.



3. After logging in you will get such interface

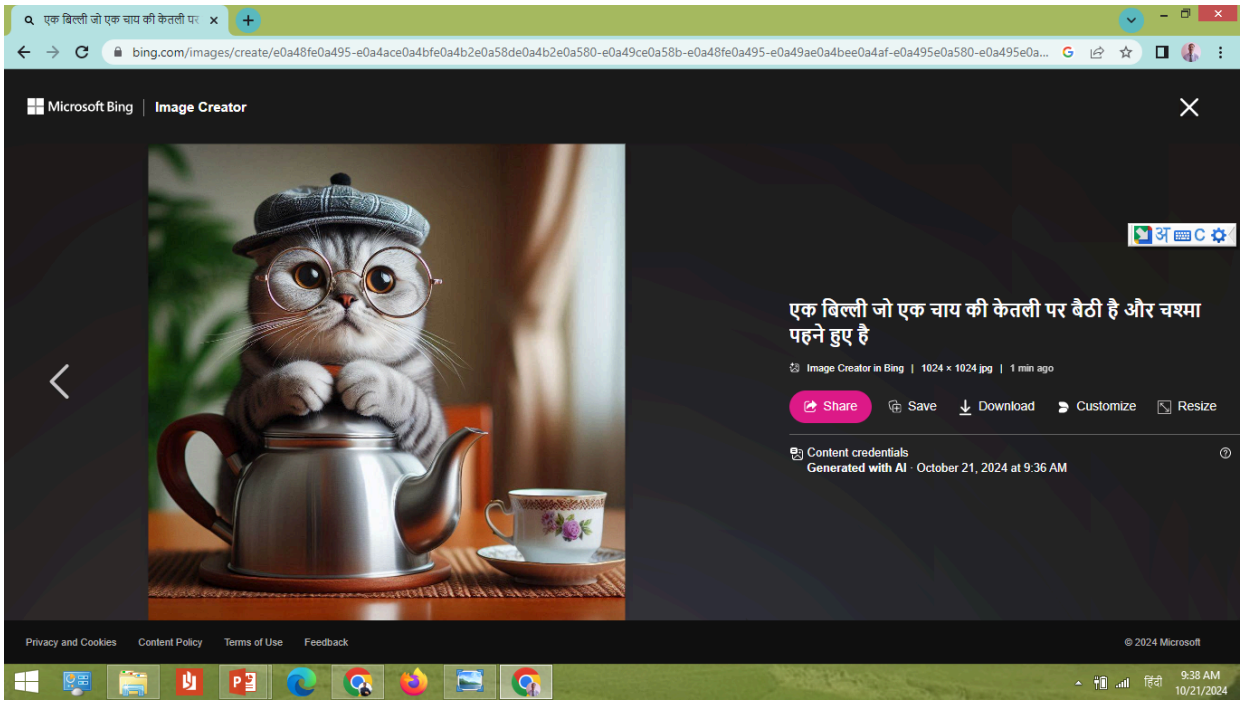


4.In the Image Creator tool, you will find a text box. In this you write a detailed description about your image. **Example:** "A cat sitting on a tea kettle and wearing glasses," or "A robot painting a painting in a museum." And then click on Create button, the tool will generate multiple image options based on your details.



5. Choose the image you like best from the generated images. You can download the images of your choice to your computer. Bing Image Creator

lets you further customize your images, such as changing the color, size, and style before downloading.



Some additional tips:

- **The more detailed the description, the better the image:** You can add more details to your image, such as "a sunny day", "an old town", or "a magical forest".
- **Try different styles:** Image Creator allows you to select different art styles, such as cartoon, photorealistic, or painting.
- **Use different words for more results:** You can get different results by using different words or phrases.

Apart from this, there are many AI image/graphic creator tools which are in trend at present and are being used a lot. Here are some other tools which you can search in your browser as per your convenience and time and try to get experience from them. Do it.

- **Leonardo AI Leonardo.ai :** Leonardo.ai is a free image creation tool that uses generative AI to create images on demand. Users can enter text and image prompts to create multiple images at once.https://leonadoai.com/
- **Canva: Canva Design Templates** And uses AI to provide suggestions, making it easier to create engaging graphics for educational content. https://www.canva.com/

- **DALL-E 2 /3 by OpenAI :** This AI tool generates images from text prompts, allowing teachers to create unique visuals for lessons and presentations. https://openart.ai/
- **DeepArt:** Transform photos into artistic images using a variety of styles, allowing you to create engaging content for your classroom. https://creativitywith.ai/deepartio/

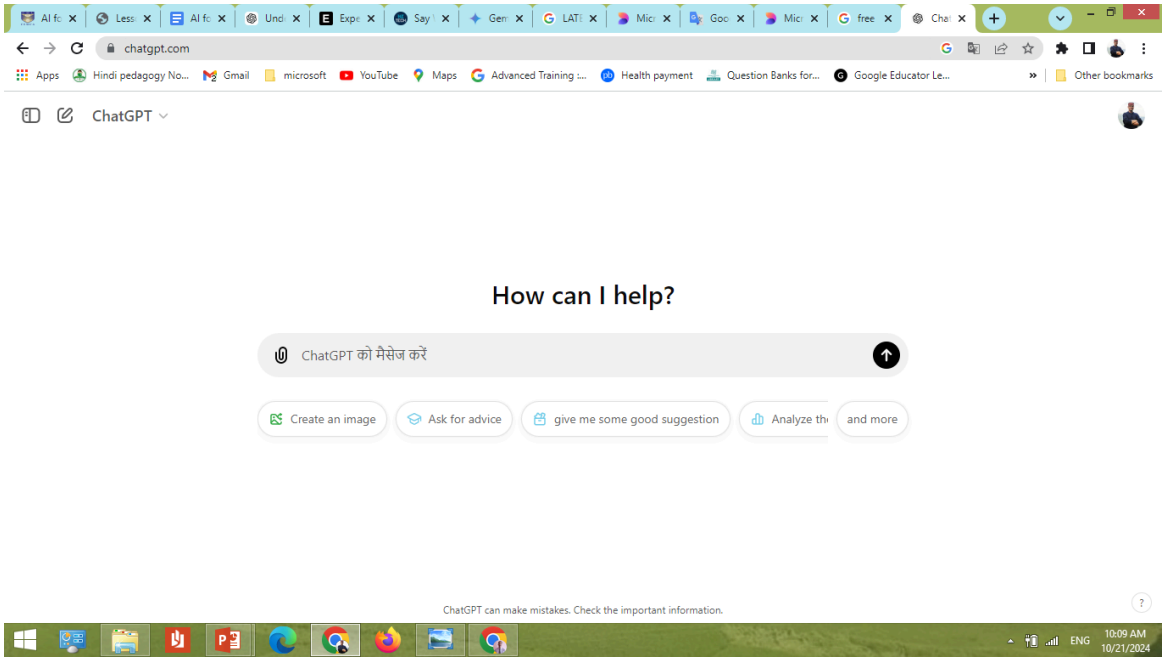
Activity No. 8

3. Writing and Content Creation Tools

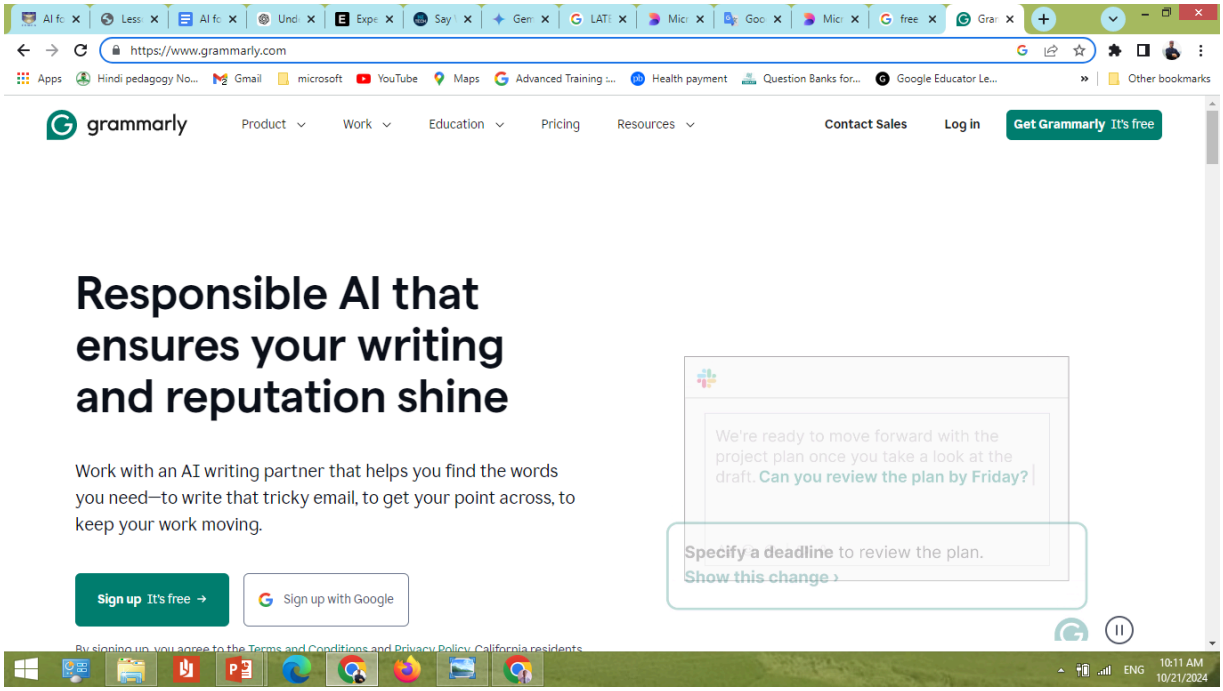
AI-powered writing tools can enhance your writing quality and streamline content creation.

ChatGPT as a writing and content creation tool: ChatGPT is an advanced AI tool that aids writing and content creation by generating coherent, relevant text based on user prompts. It can help in essays, reports, creative writing and even brainstorming ideas. With its ability to understand context, it boosts productivity by giving suggestions, refining language and ensuring clarity in communication. Additionally, ChatGPT can also produce a wide range of writing styles, making it an excellent resource for both students and professionals.

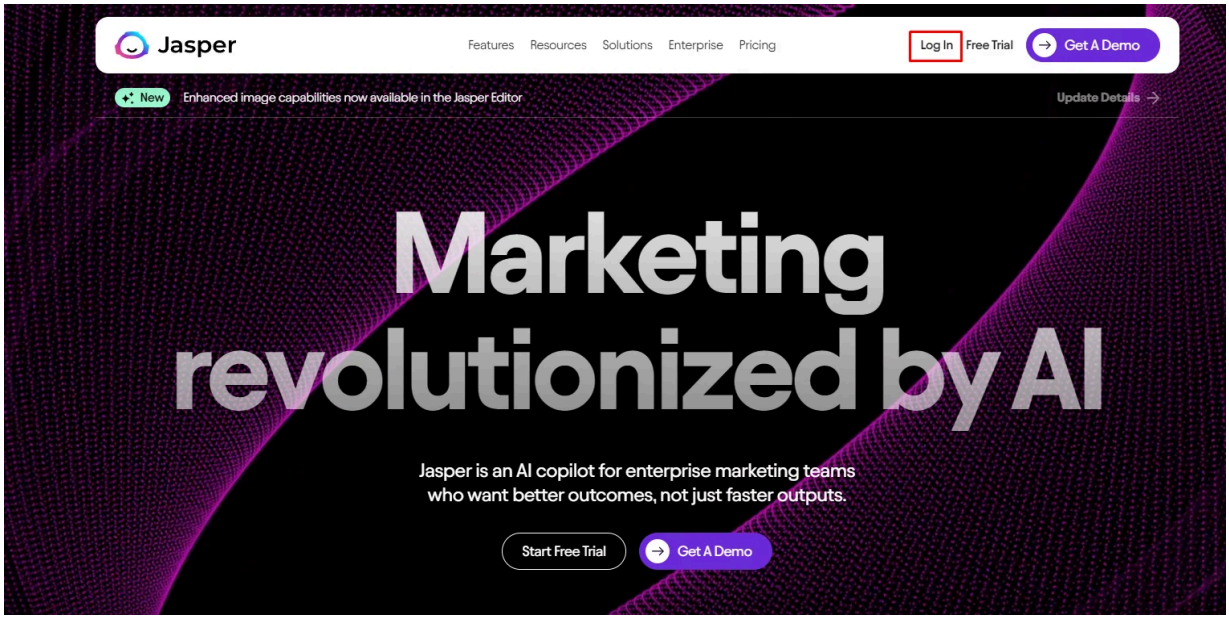
https://chatgpt.com/



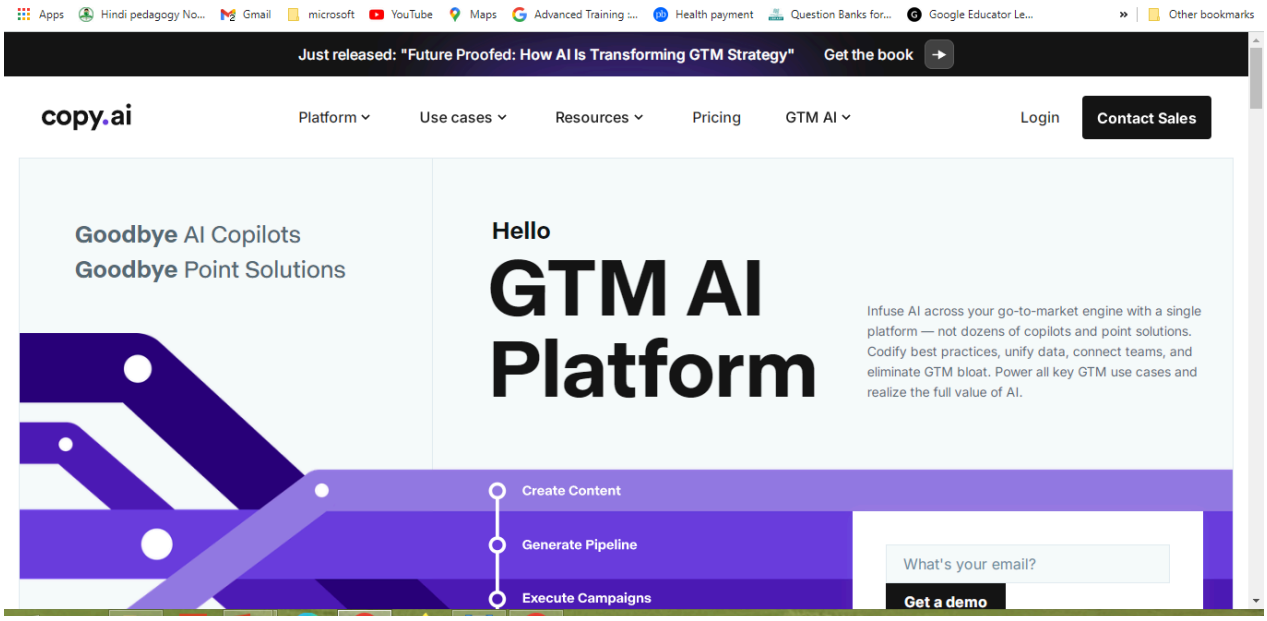
Grammarly: This tool provides grammar, punctuation, and style suggestions in real-time, helping teachers create error-free documents. https://www.grammarly.com/



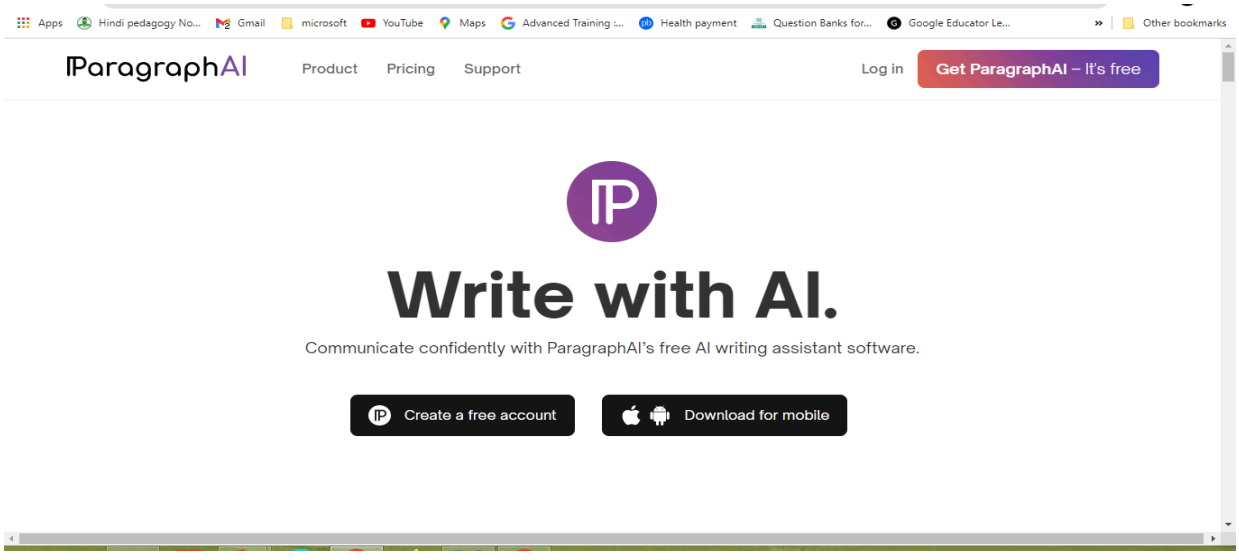
Jasper: An AI content generator that helps create a variety of written content, including blog posts, lesson plans, and marketing materials.https://www.jasper.ai/



Copy.ai: This AI tool generates marketing materials and educational materials quickly, so you can focus on teaching instead of writing. https://www.copy.ai/



ParagraphAI ParagraphAI: ParagraphAI is an AI writing assistant that uses GPT technology to help users write, edit, and proofread text: https://www.paragraphai.com/



Activity No. 9

4. Learning Management Systems (LMS) Learning Management Systems (LMS) (For information only)

AI-enhanced LMS streamlines course management and personalizes learning experiences.

Moodle **Moodle:** This open-source platform uses AI to create personalized learning experiences and analyze student performance metrics.
https://moodle.com/

Canvas: This LMS provides analytics and insights about student engagement and performance, helping teachers tailor their teaching methods accordingly.
https://www.instructure.com/canvas

Activity number 10

5. Quiz and Assessment Tools

AI tools for quizzes and assessments make evaluating student performance more efficient.

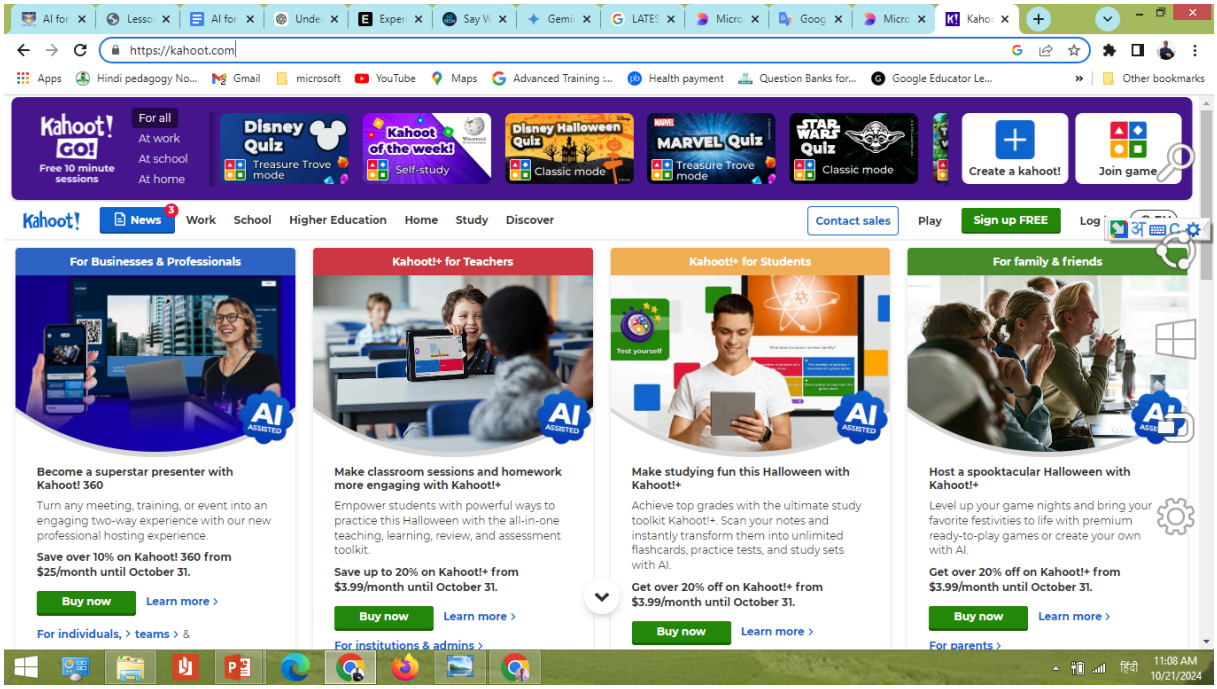
Kahoot! Kahoot!: Kahoot! Kahoot! is a popular online game-based learning platform that helps users create quizzes and polls. It is often used in educational settings, such as schools and universities, but can also be used for entertainment or professional purposes. https://kahoot.com/

Here's the step-by-step guide on how to create your own quiz on Kahoot:-

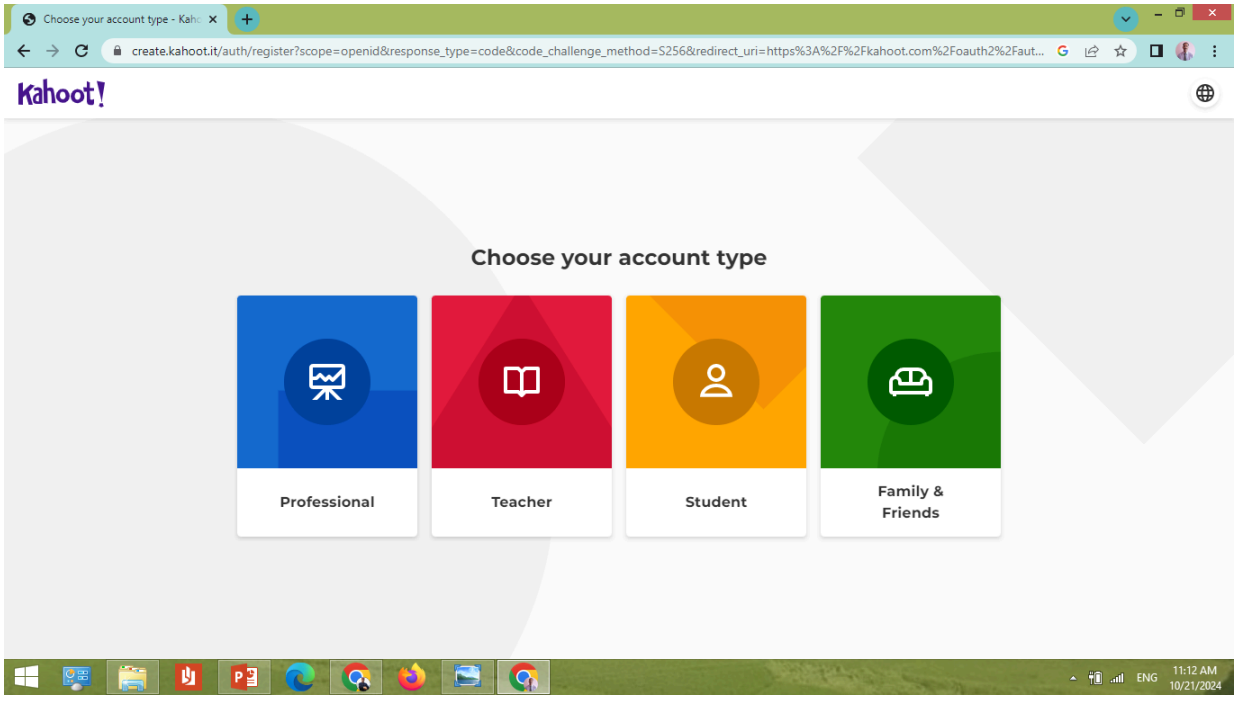
1. Create Kahoot account:

- Visit Kahoot's website:https://kahoot.com/

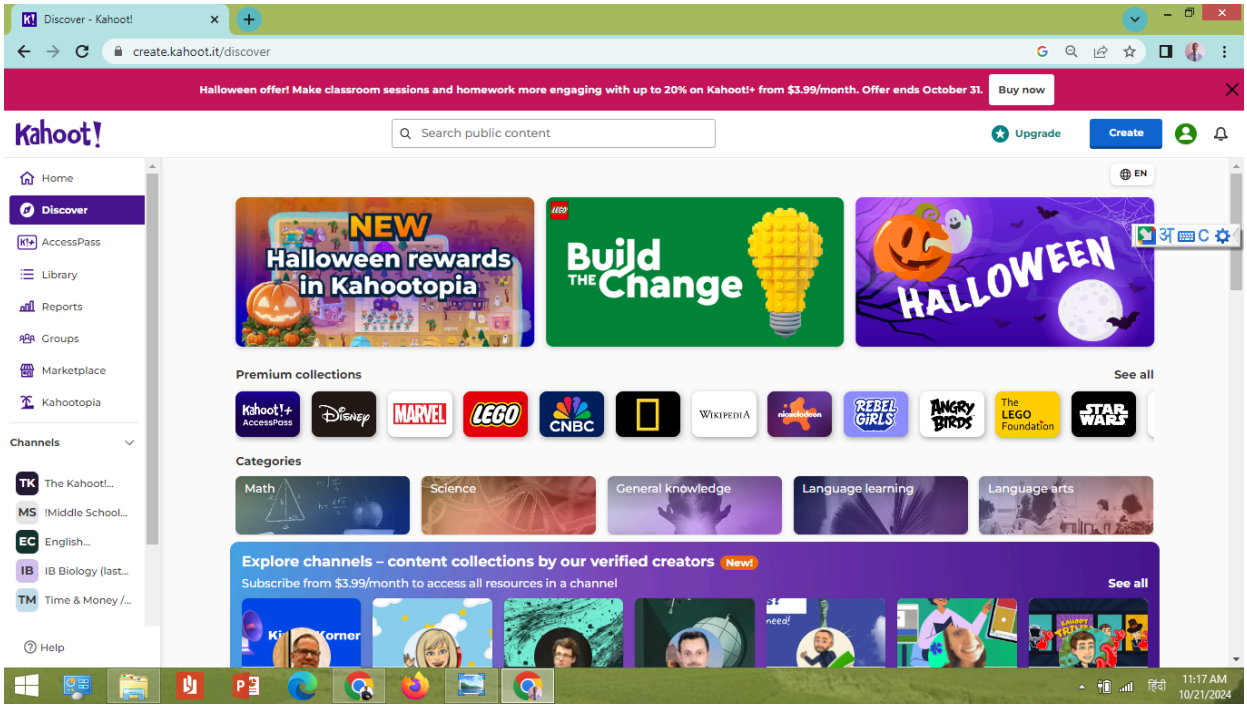
- Click the "Sign Up" button and create a free account.



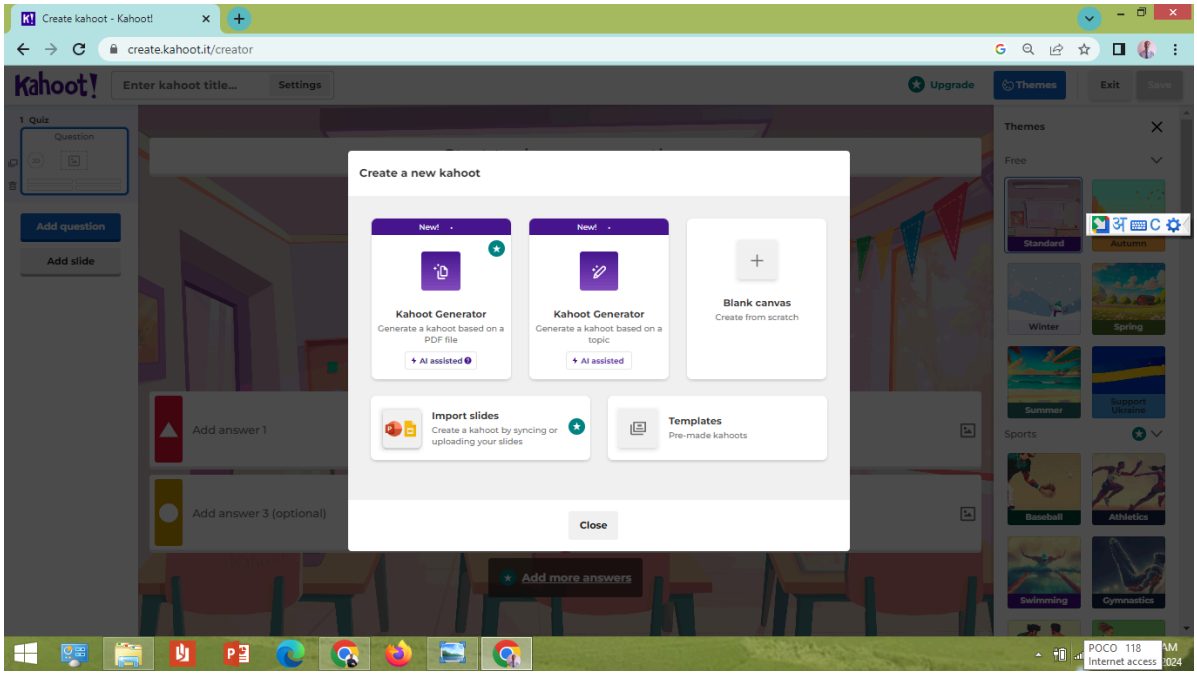
2. After logging in, you will see such an interface, you can click on the teacher option or any other option as per requirement, fill the other required information.



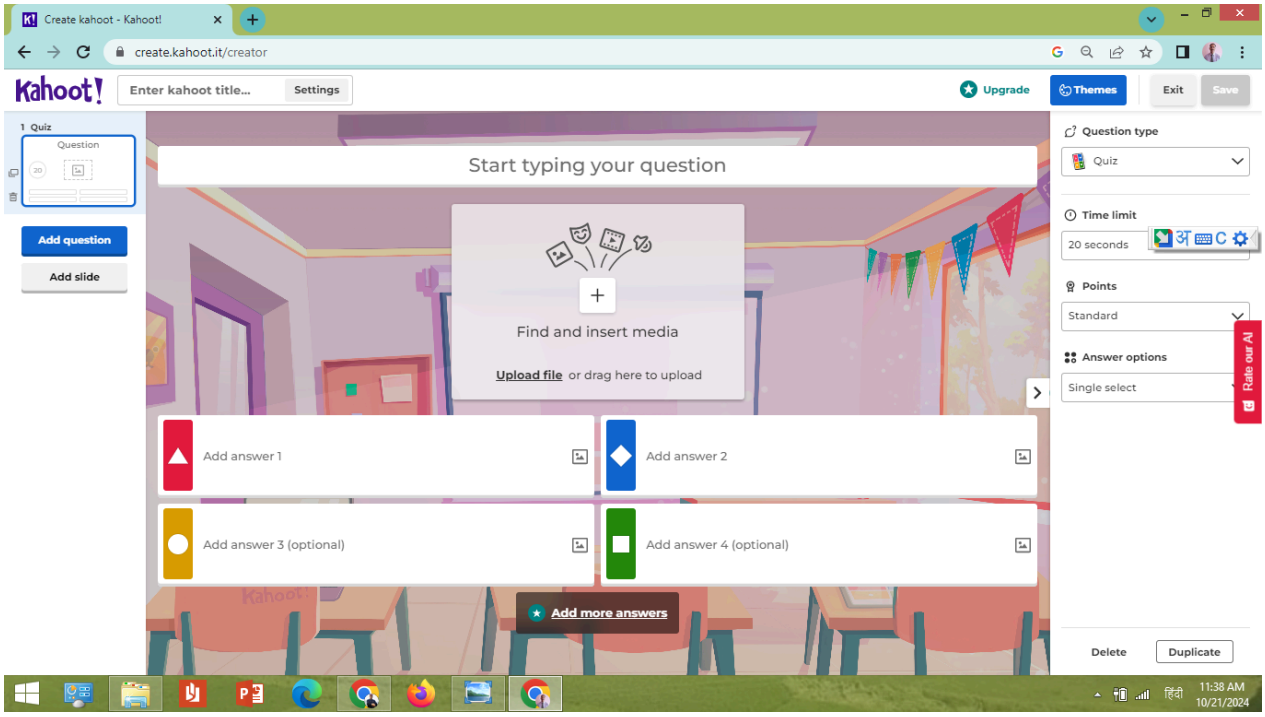
3. You will reach the Kahoot dashboard, click on the Create button on the left side of your dashboard, select the first option out of the three options



4.On your dashboard, click on the "Create New Quiz" button. Select the blank canvas option to create a quiz. Enter a title and description of your quiz.



5. Add Question: Click on “Add Question” button. ,Type the text of your question. Choose the correct answer and incorrect option for the question. You can also add an image for each question.

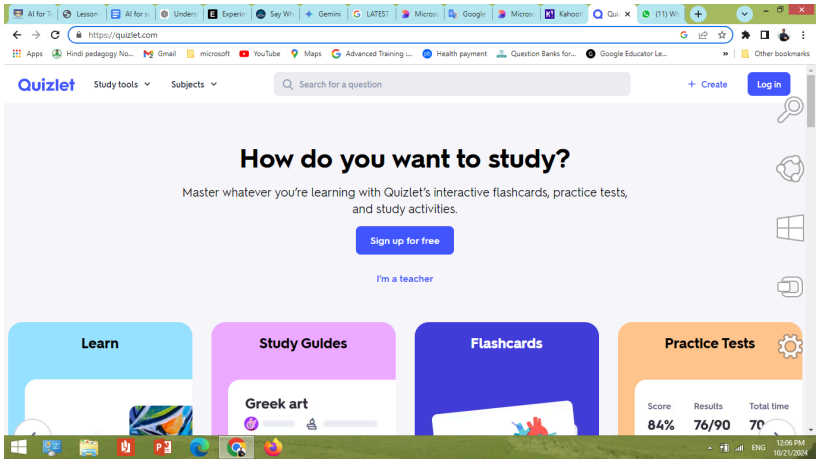


6. Set up the quiz:Set a time limit for the quiz. Select the type of quiz (e.g., Classic, Team Mode, or Answers). Set a passcode for the quiz.

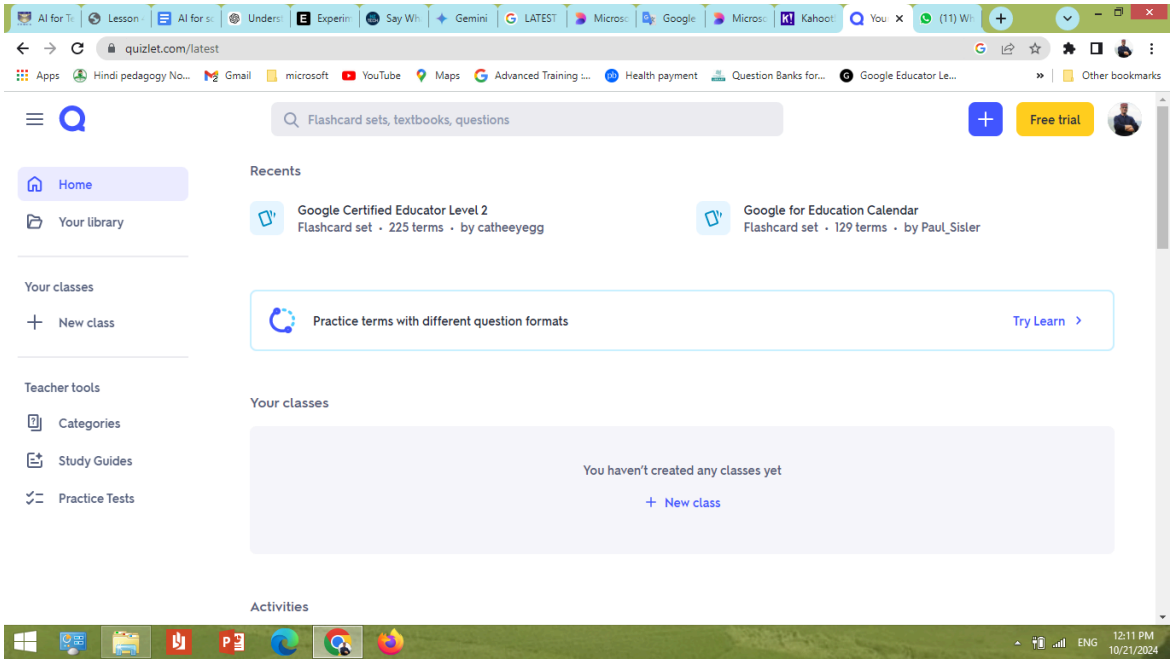
7. Save and share quizzes:Save your quiz. Use the passcode or link to share the quiz. Now you can play your quiz with your friends or students! [click to play]

Quizlet Quizlet: An interactive learning tool that uses AI to create customized study sets and quizzes based on individual performance. Let's know how to create a quiz on Quizlet You can create an engaging quiz on the Quizlet app by following the steps given below [https://quizlet.com/in]

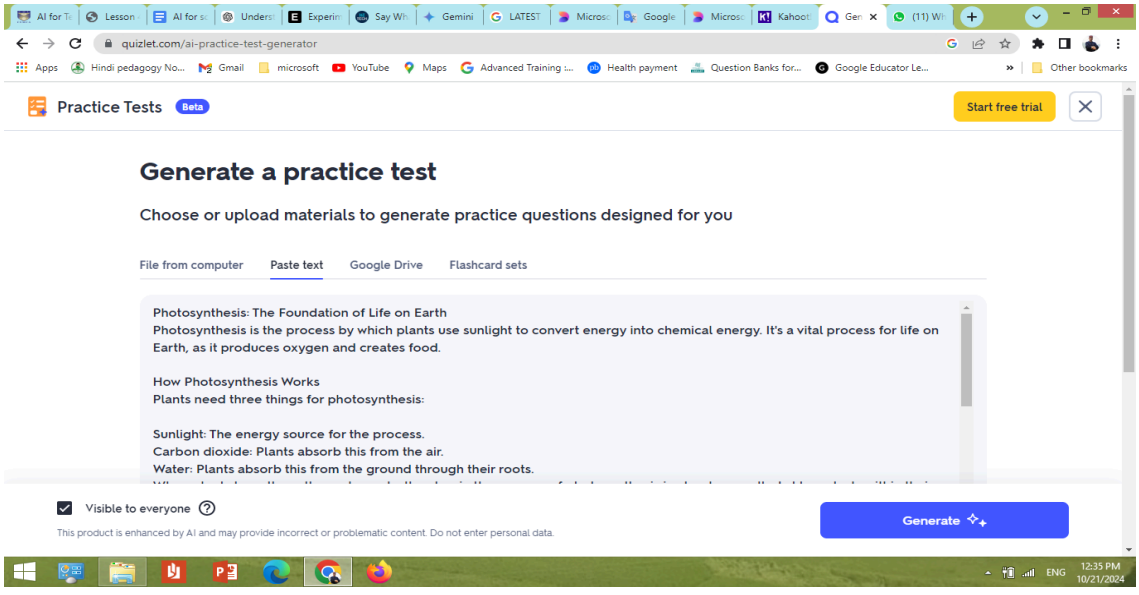
1. Create a Quizlet Account: Visit Quizlet's website: [https://quizlet.com/] Click the "Sign Up" button and create a free account.



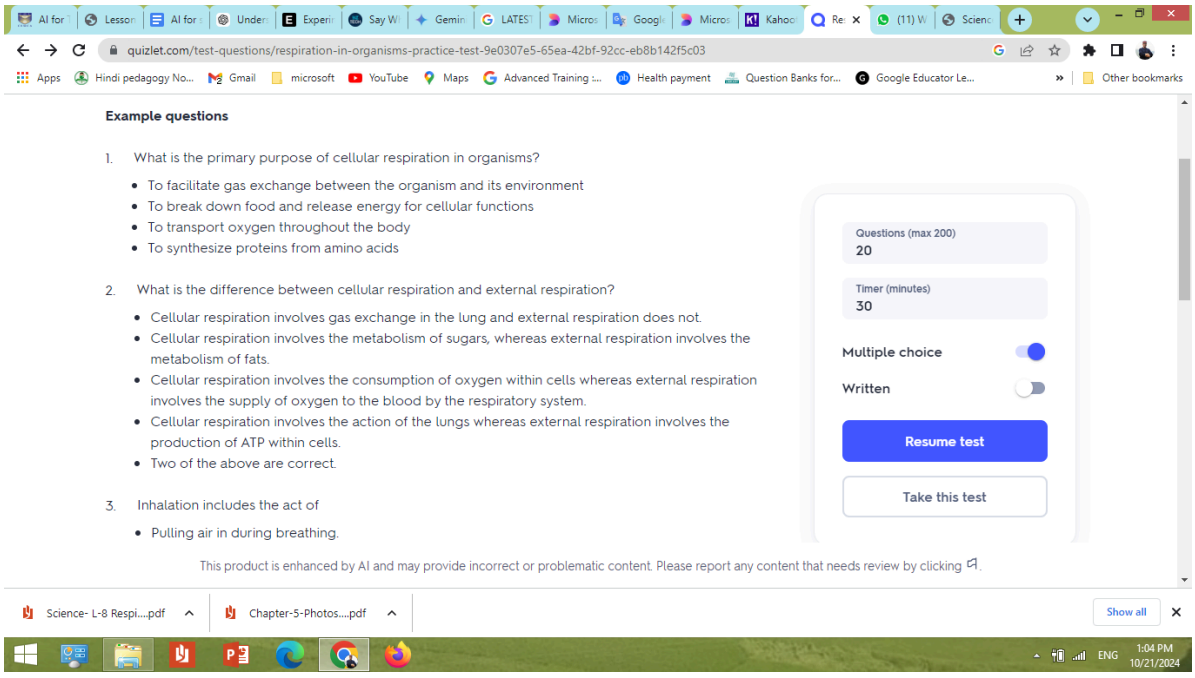
2. After logging into your account, you You will come to your dashboard, click on Create button on the right side of the screen, click on Practice Test option from the given options.



3.Select any option from File from computer, Paste text, Google Drive, Flashcard sets options, here we are using text option, to use this option you have to select the type of quiz from that topic. Related text will have to be written in the text box. If you want, you can also paste the text here using Chat GPT in detail about your topic. We have taken the topic of photosynthesis as an example.

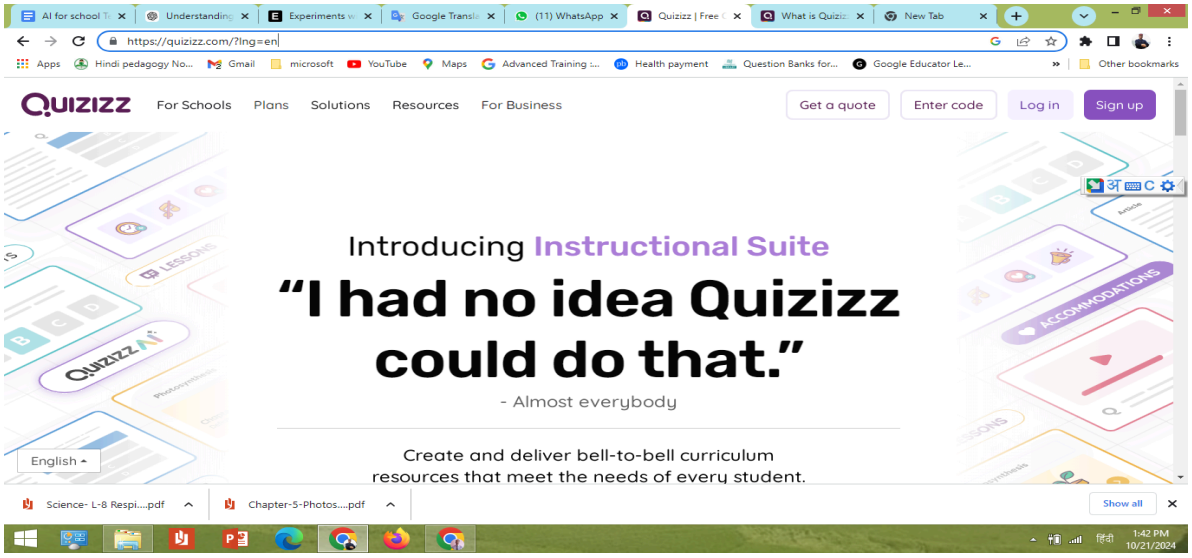


4.Click on GENERATE and the quiz is ready for you, you can share it with students with the help of Take this test.

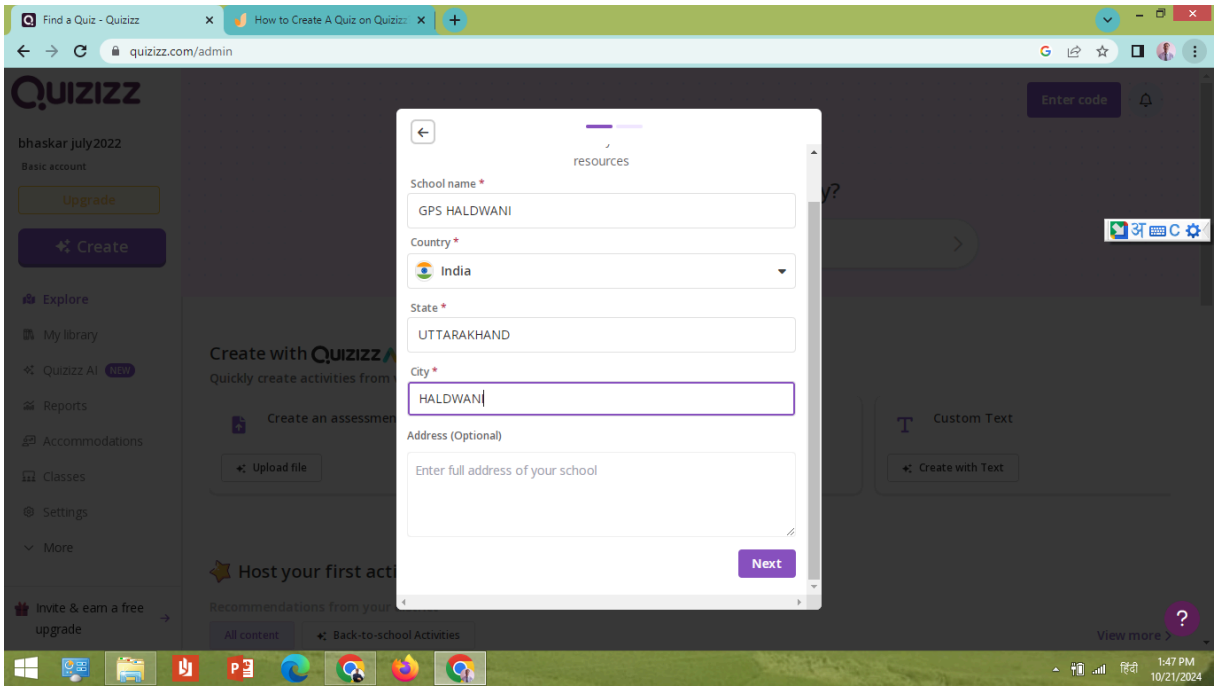


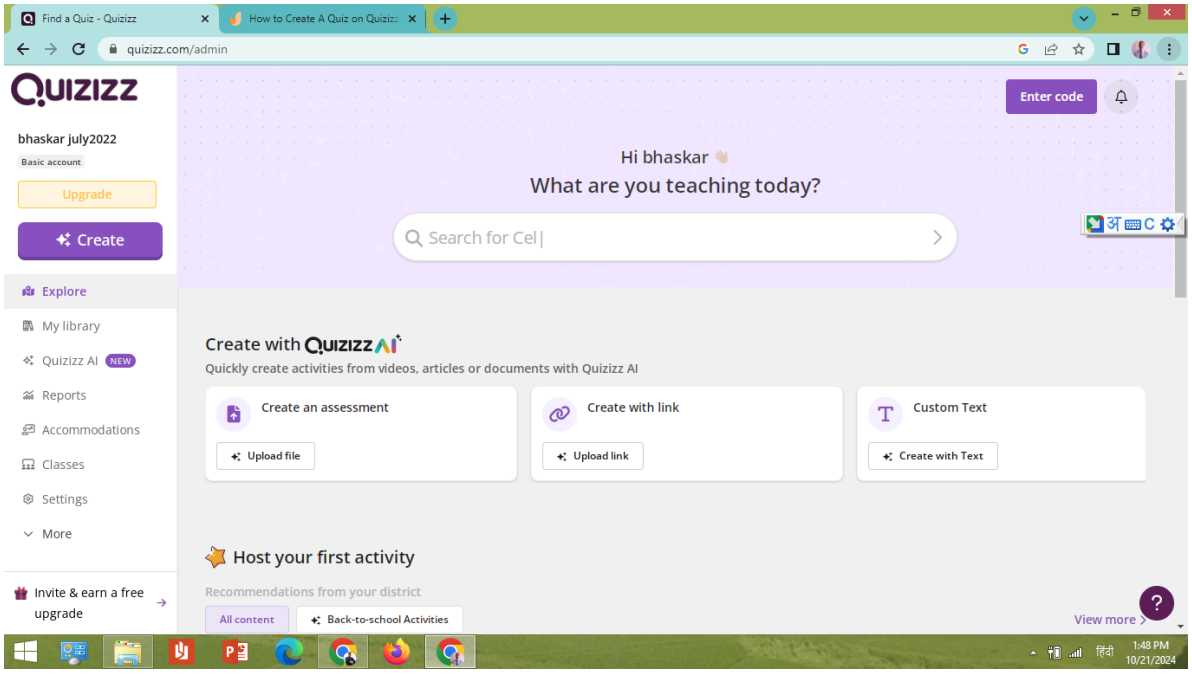
Quizizz Quizzes: **Quizizz** is a learning platform that offers many tools to make the classroom fun, engaging and interactive! As a teacher, you can create gamified assessments/quizzes and lessons, conduct formative assessments, host live activities or assign them as homework, view detailed performance reports, and much more Can do something! https://quizizz.com/?lng=en Let us know that **Quizizz** But how can a quiz be constructed?

1.https://quizizz.com/? click on Quizizz web page will open

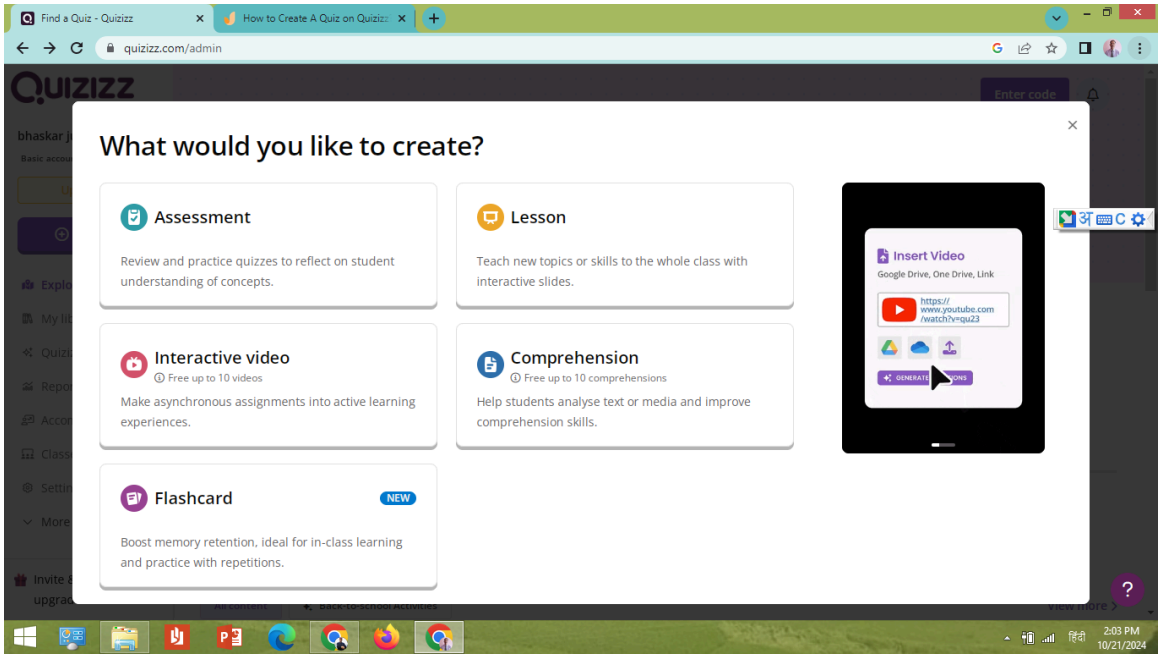


2. Click on the Login button, create a new account or log in with your social media account, update the information asked, you will reach the dashboard.

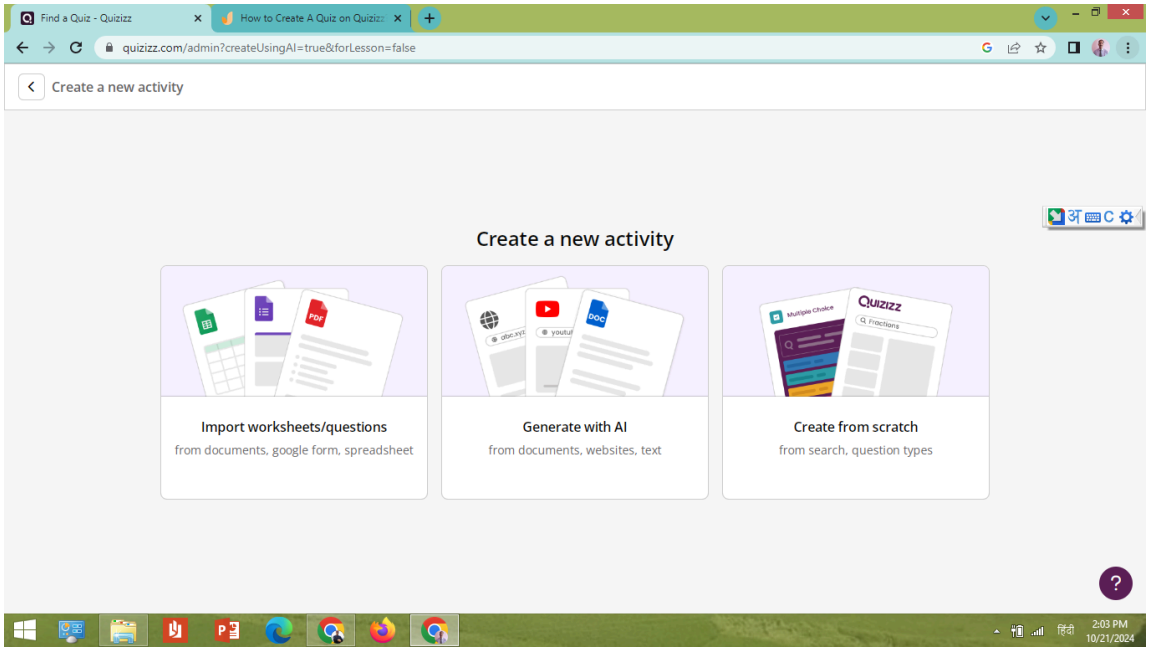




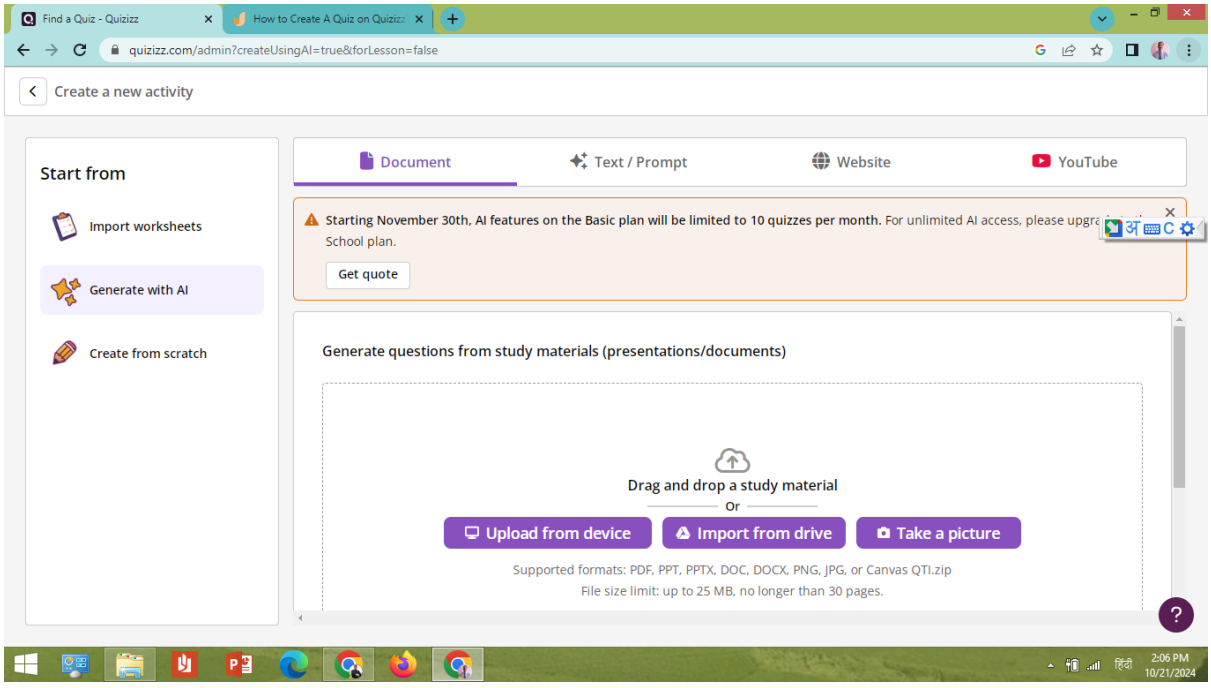
3.Tap on “Create” button. near you Assessment ,Lesson ,Interactive video, Comprehension ,Flashcard Options will come like this because we are creating a quiz here so we will click on the assessment option.



4. Click on Generate with AI

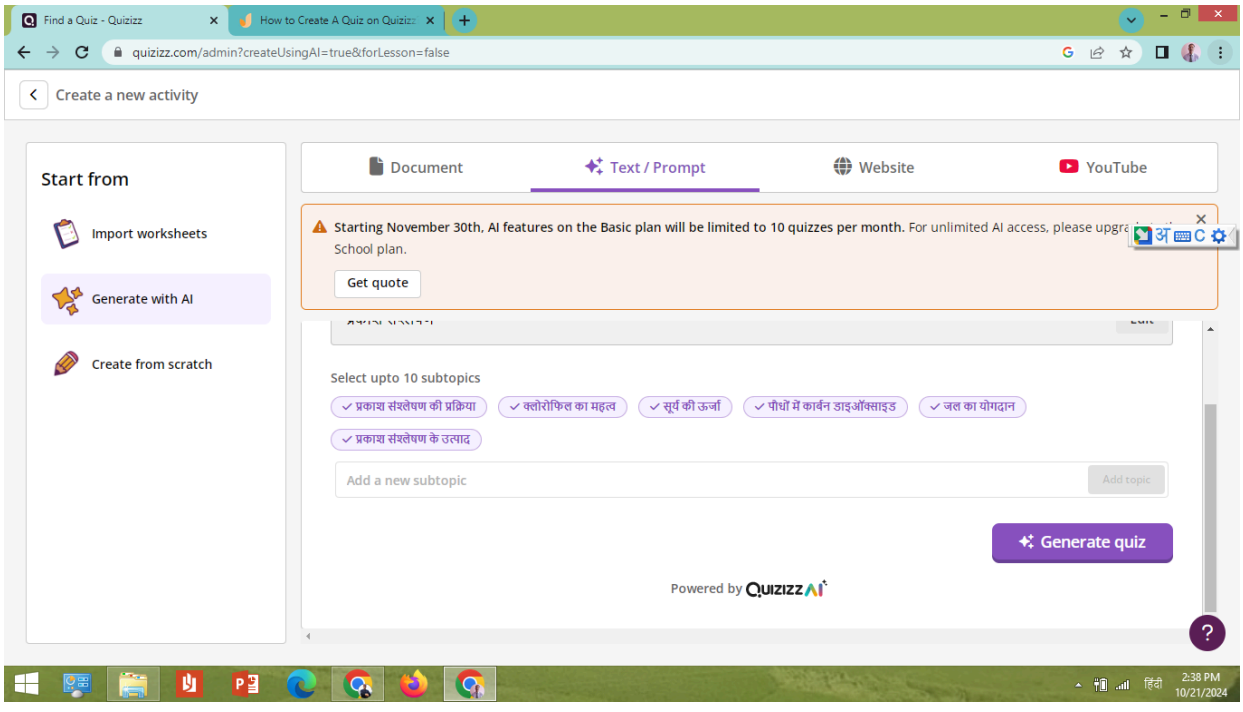


5.You will have options like Document, Tax Prompt, Website and YouTube displayed. You can create your quiz using any of these options, we will create our quiz here by taking text prompt.

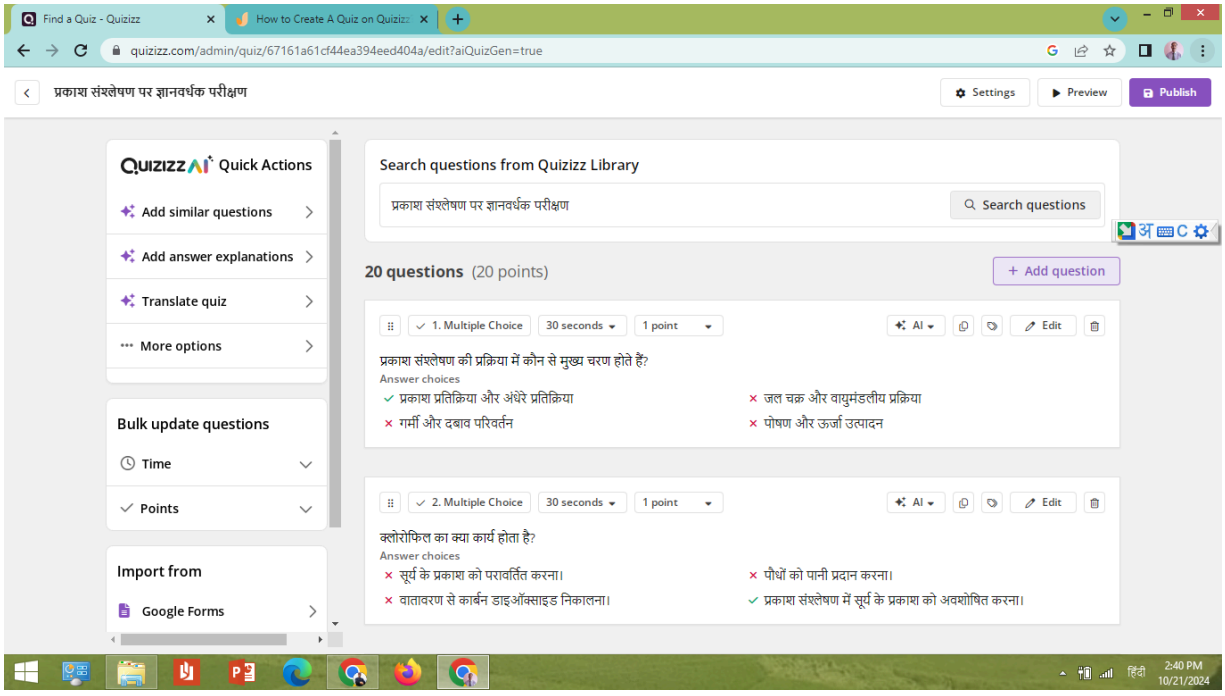


6.Click on Text/Prompt, in the text box write the topic on which you want to create a quiz for the learners. Here we are taking the topic of Photosynthesis, select the language, number of questions and topic for the quiz.

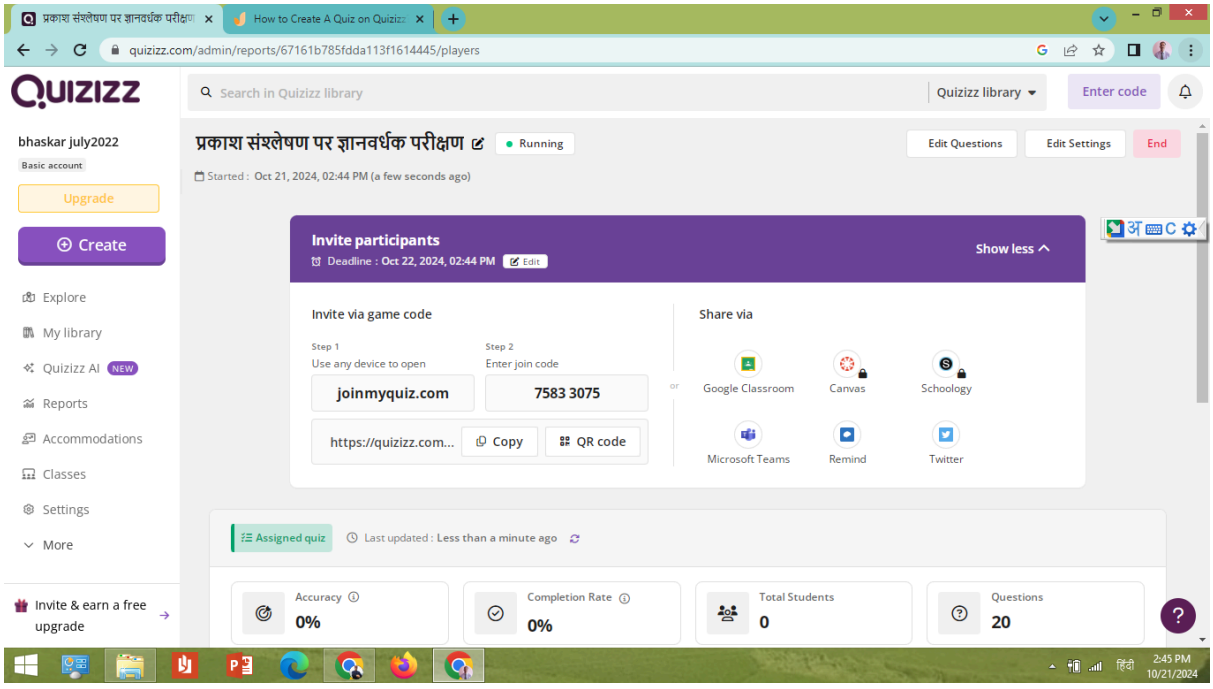
7.Click on Generate Quiz tab



8. Once the quiz is ready, click on the Publish button on the right side of the screen



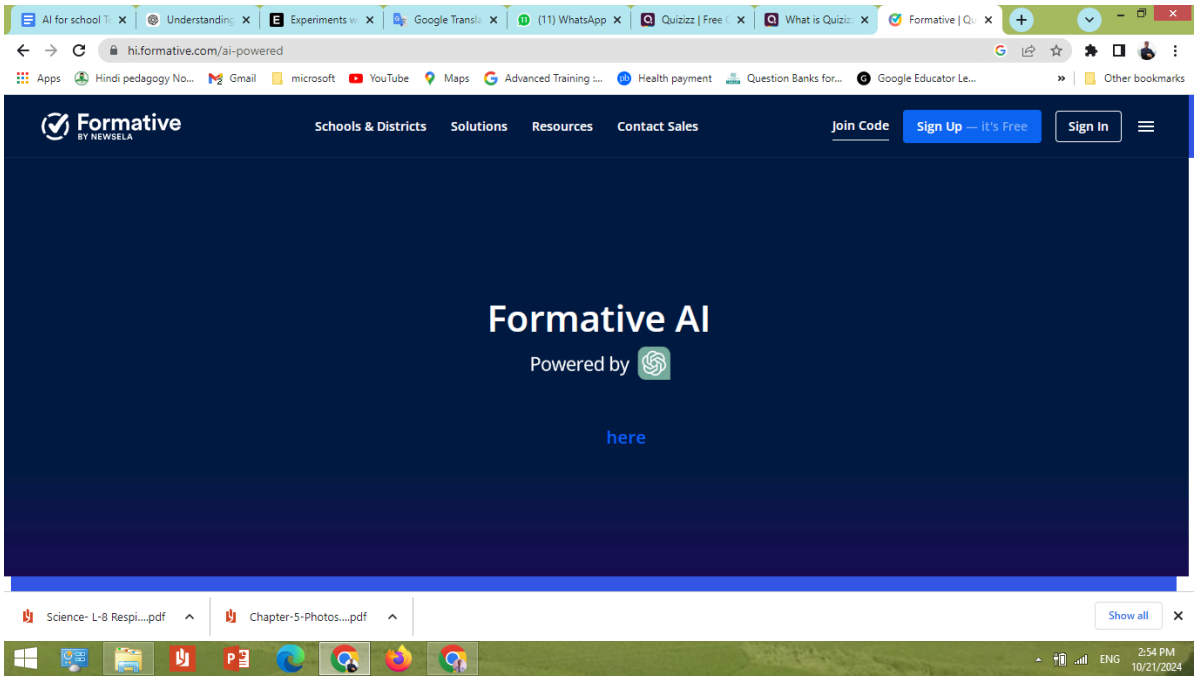
9.Click on Assign button and share the quiz with students via link / QR CODE / or PIN number



[Click here to participate in the quiz]

Apart from these AI quiz making tools, there are many other AI tools with which you can evaluate your students. Here are some other tools that you should check out in your browser.

- **formative**: Formative AI is a tool that uses artificial intelligence (AI) to help teachers create assignments and assessments, and improve the teaching and learning experience. https://hi.formative.com/ai-powered



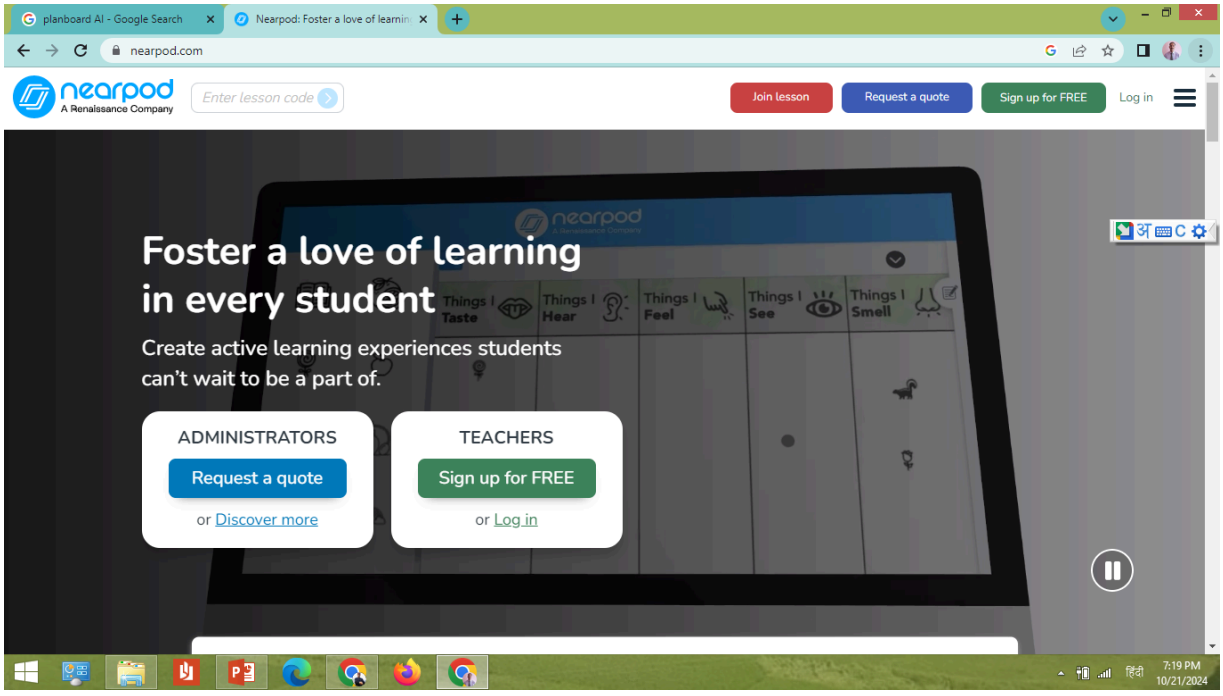
Activity No. 11

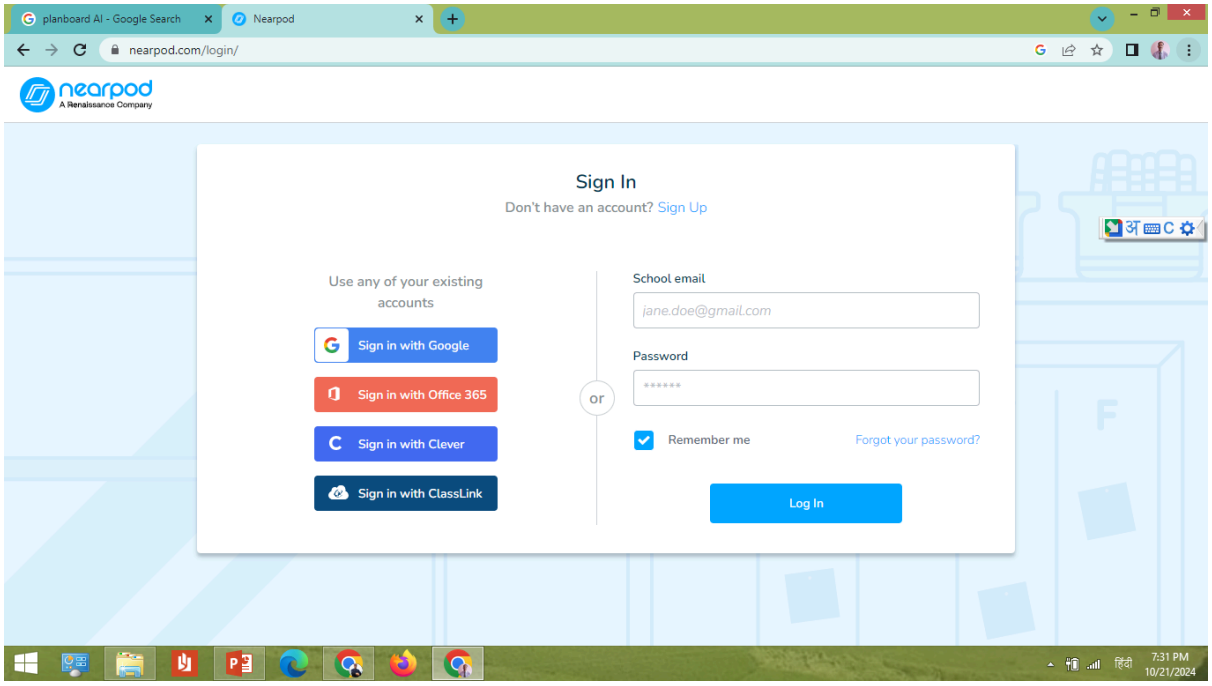
6. Lesson Plan Making Tools

AI tools for lesson planning help teachers create more organized, efficient, and engaging lesson plans, thereby improving education.

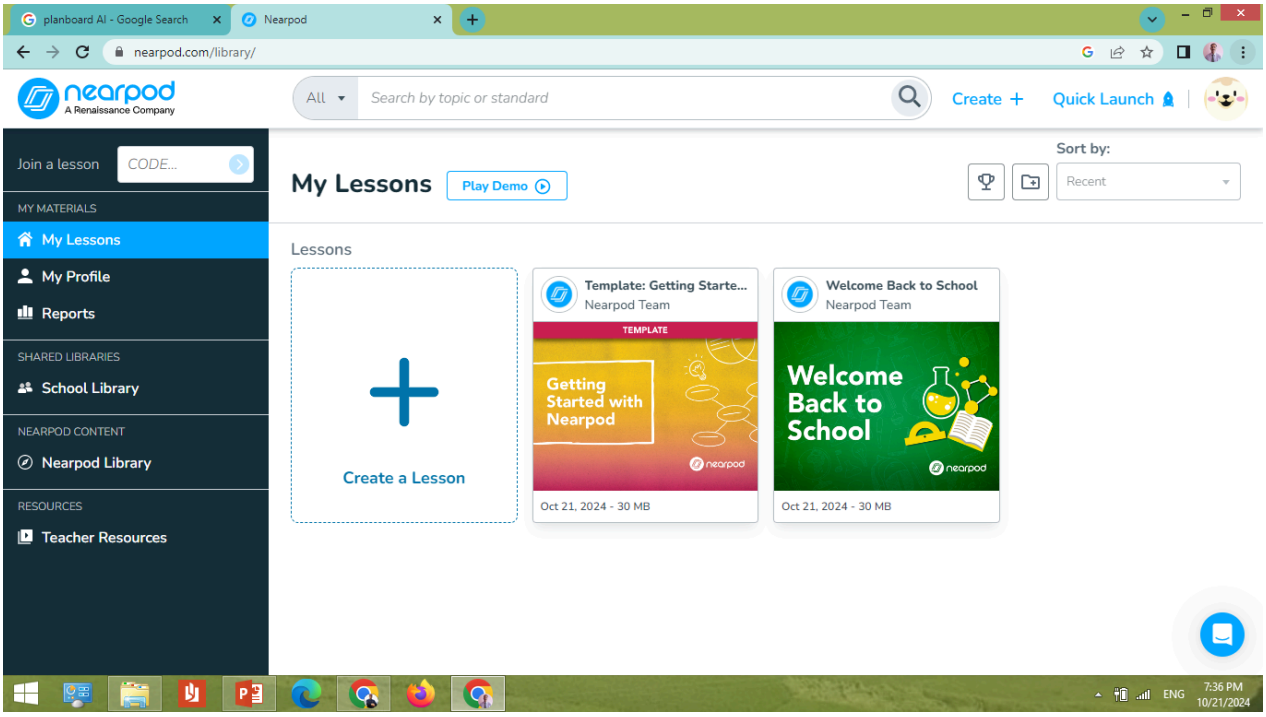
Nearpod: Nearpod is a website and app-based digital tool that lets teachers create slide-based learning resources that are interactive for students and helps them learn. Nearpod is designed to make learning more engaging and fun. Also uses gamification. It's also designed to work well with many pre-existing tools like Google Slides, Microsoft PowerPoint, and YouTube. Teachers can import media to easily create lessons using resources they already have. https://nearpod.com/ Let us know how we can create an attractive lesson plan using Nearpod, follow the steps given below.

1. https://nearpod.com/ Click on or type in your address bar Nearpod web page will open, click on Log In button on the web page Create your account or log in with your social media account





2. After logging in you **Once you're on the Nearpod dashboard, click on Create a Lesson and then click on Create Lesson from Scratch.**


planboard AI - Google Search
Nearpod
nearpod.com/library/
nearpod
A Renaissance Company
All
Search by topic or standard
Create +
Quick Launch
Join a lesson
CODE...
MY MATERIALS
My Lessons
My Profile
Reports
SHARED LIBRARIES
School Library
NEARPOD CONTENT
Nearpod Library
RESOURCES
Teacher Resources
My Lessons
Play Demo
Sort by:
Recent
Lessons
Create a Lesson
Template: Getting Starte...
Nearpod Team
TEMPLATE
Getting Started with Nearpod
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Nearpod Team
Welcome Back to School
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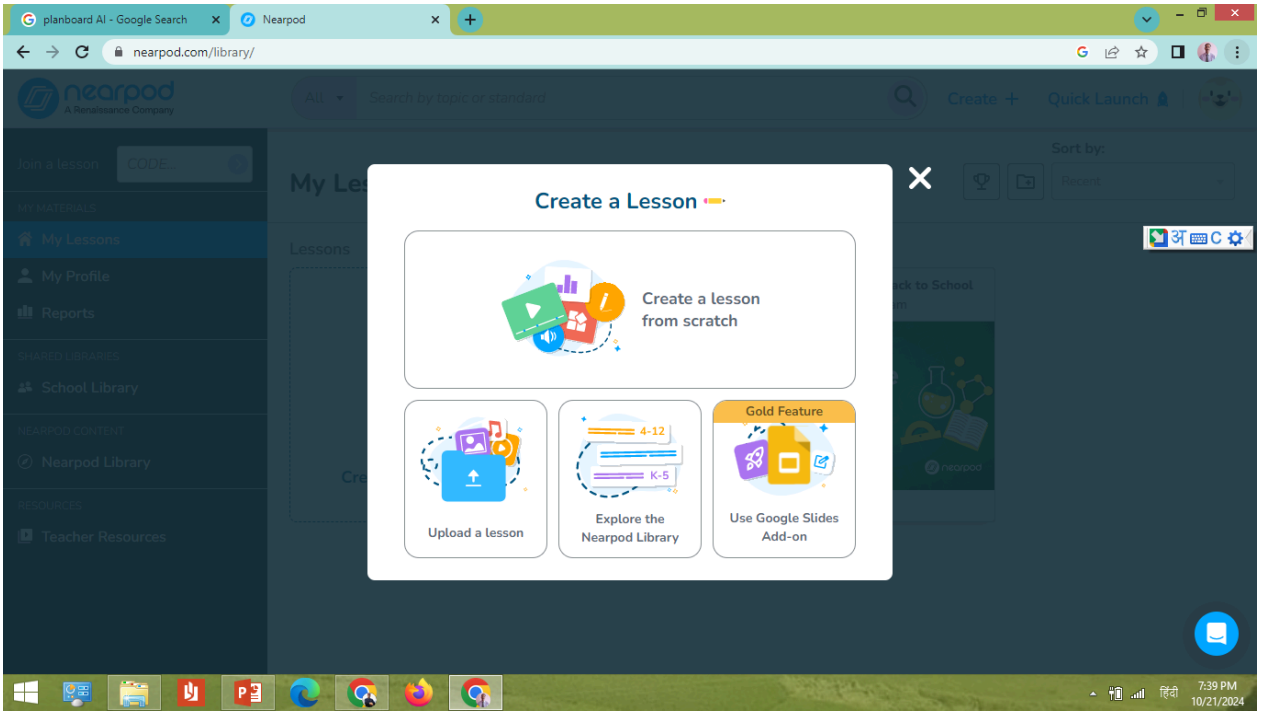
planboard AI - Google Search
Nearpod
nearpod.com/library/
Create a Lesson
Create a lesson from scratch
Upload a lesson
Explore the Nearpod Library
Gold Feature
Use Google Slides Add-on
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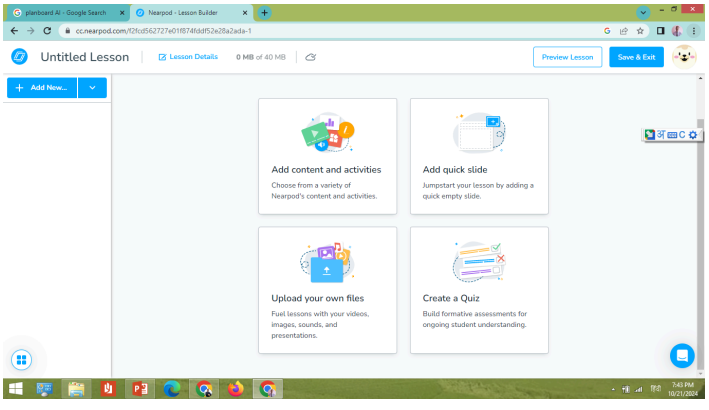
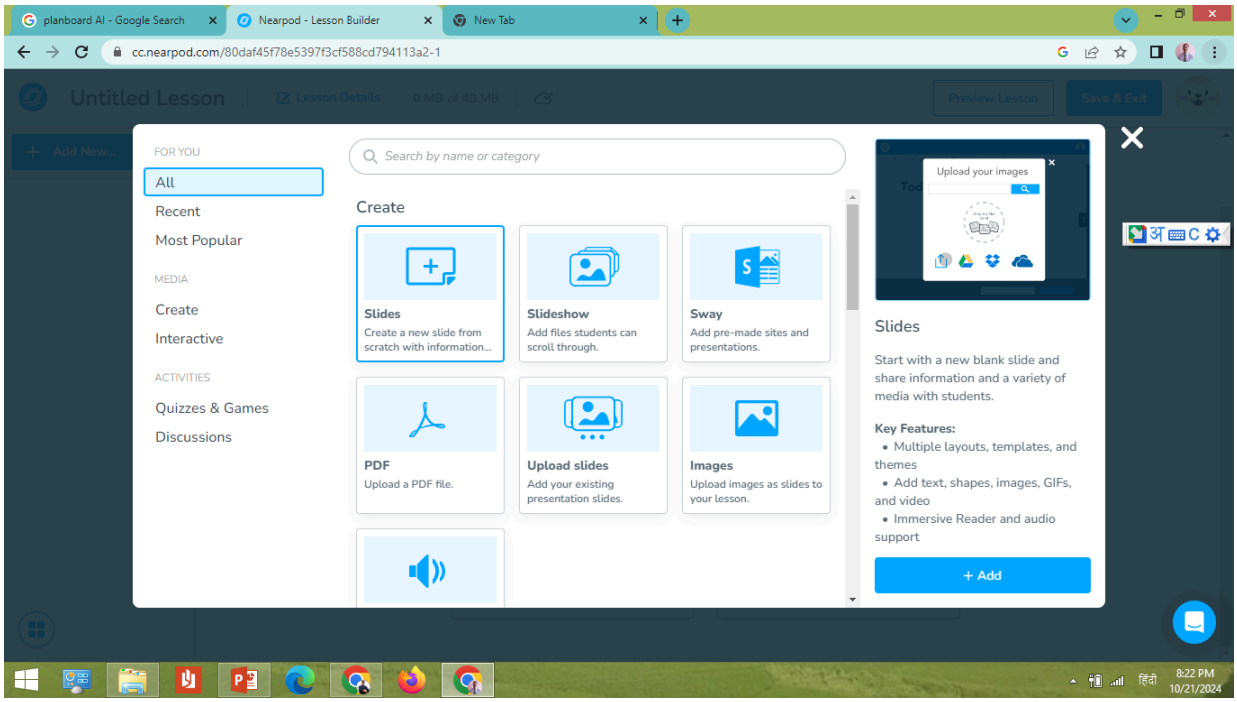
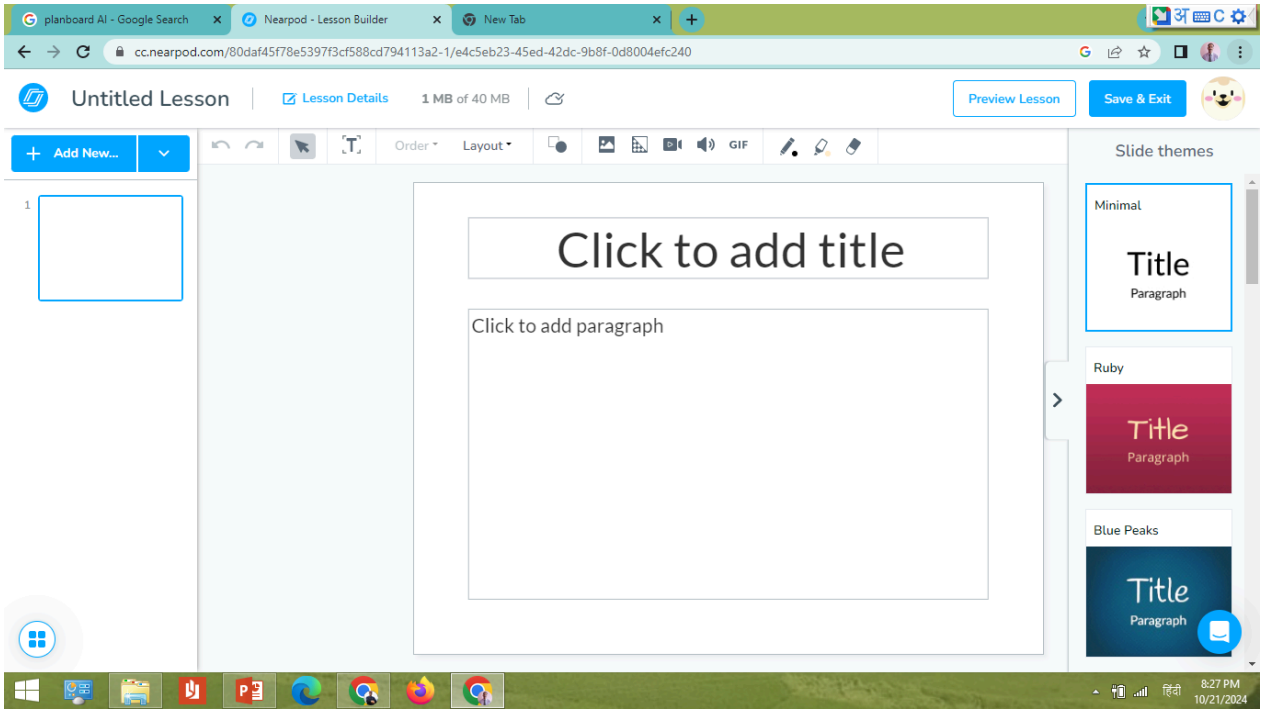

Untitled Lesson
Lesson Details
Preview Lesson
Save & Exit
Add New...
Add content and activities
Add quick slide
Upload your own files
Create a Quiz

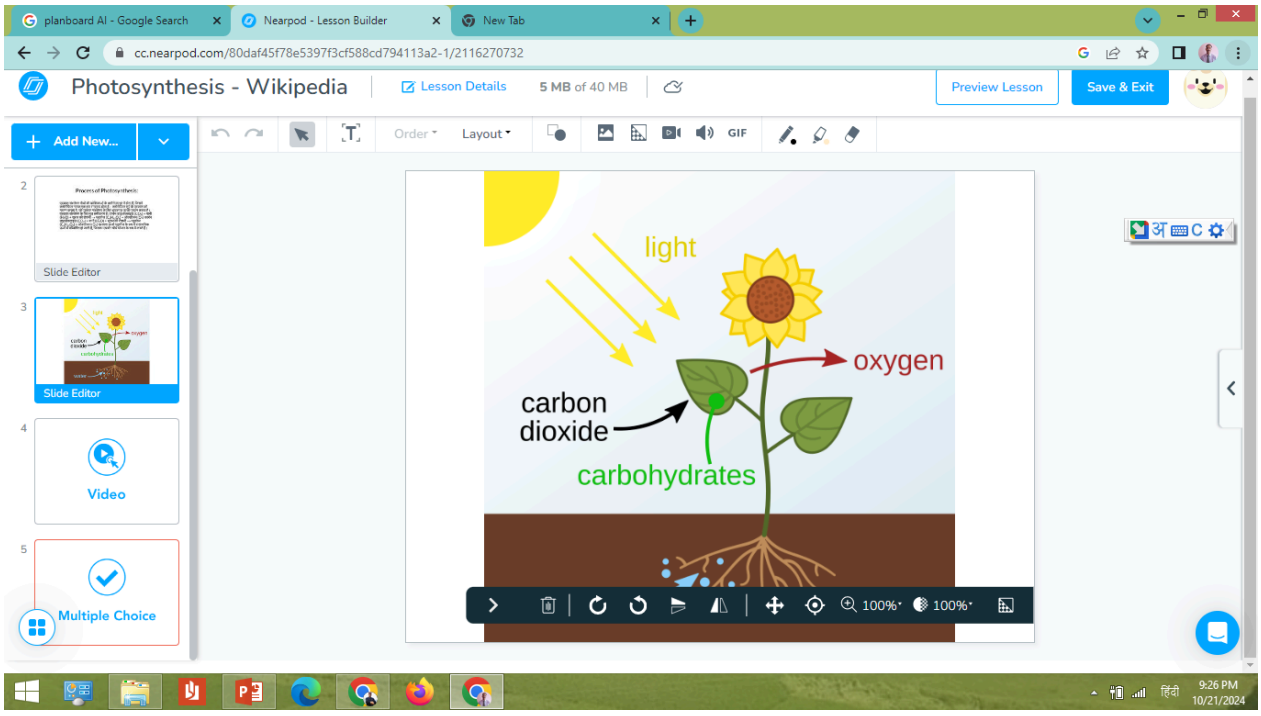
3.Click on add content and activities option and after that from the given options you can select the options as per your need, here we **Slides with option** Select the option Create a new slide from scratch with information



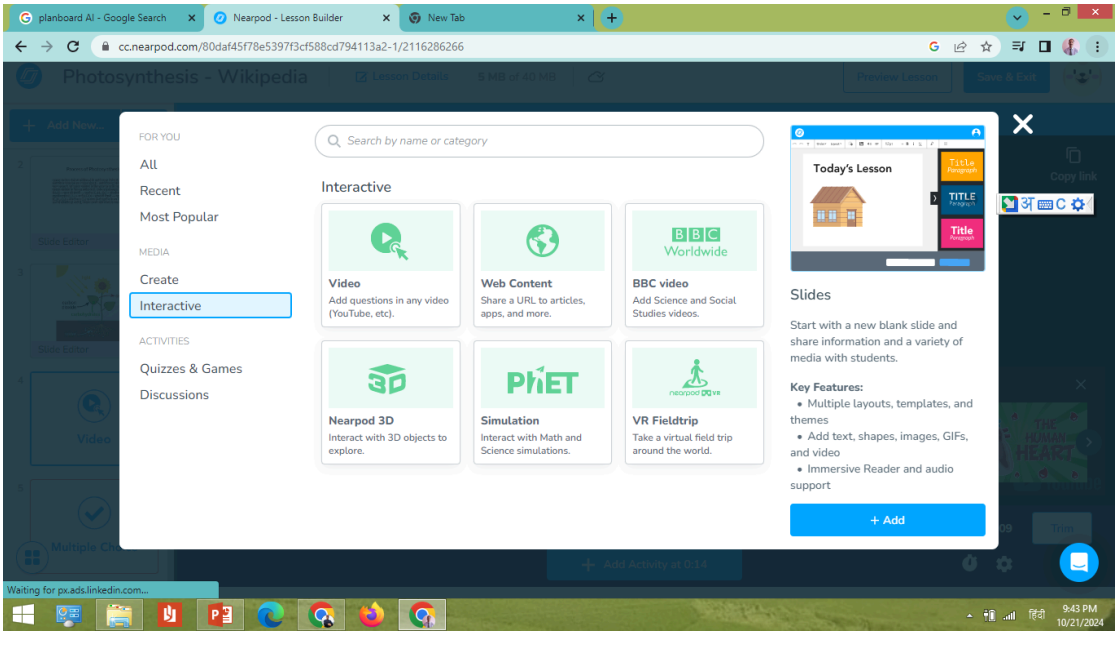
4.click to add title Name your slide and write content or add content to the slide with the help of chatGpt Once a slide is complete, click on Add New and add new content to your lesson

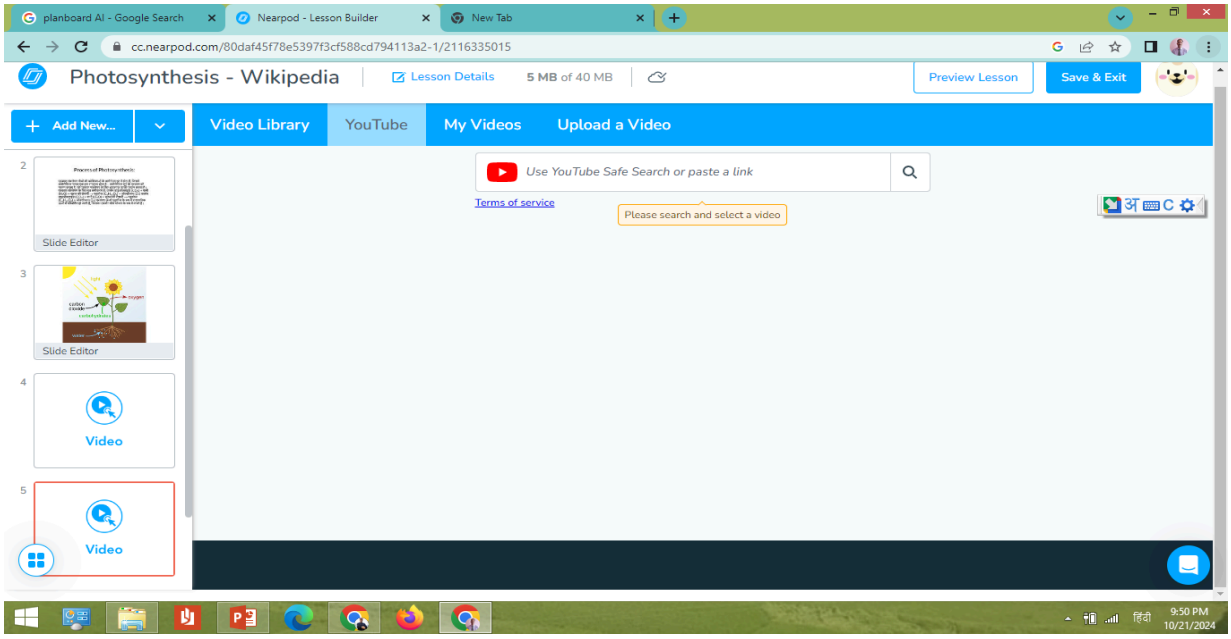


5. To add an image to your lesson, click on add new again and this time select the image option from the options and insert your image either from your computer or directly from Google search. Is

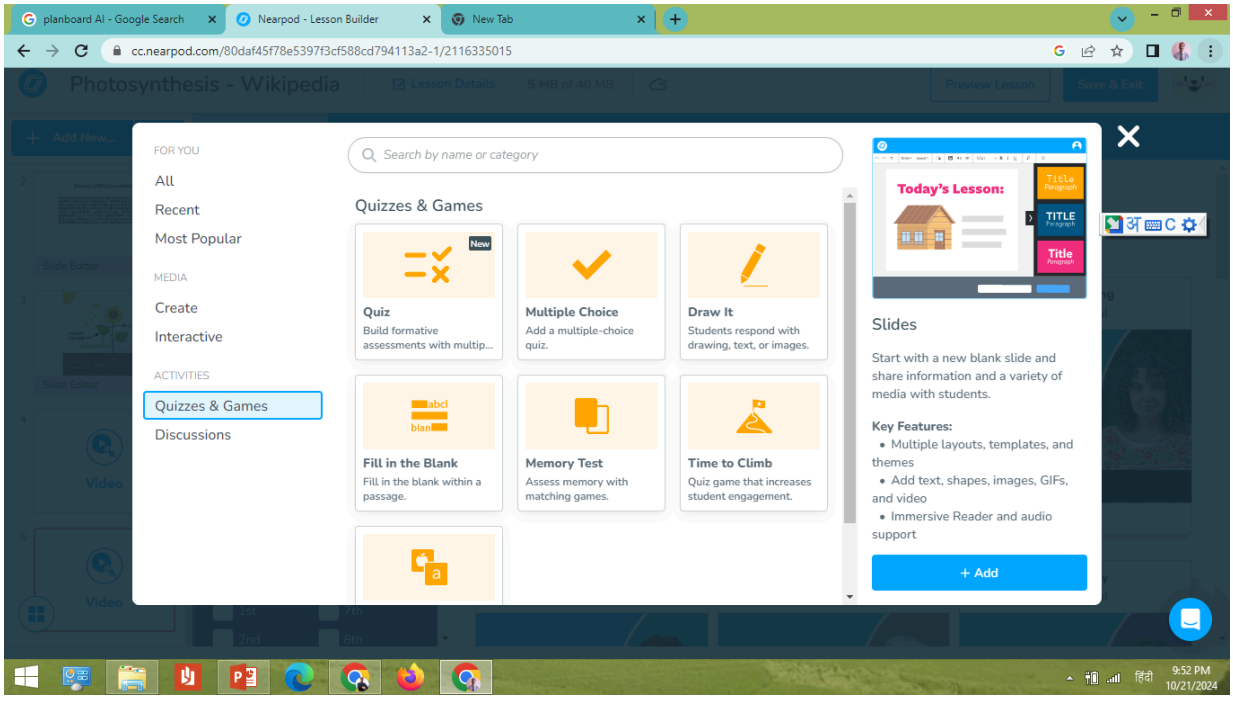


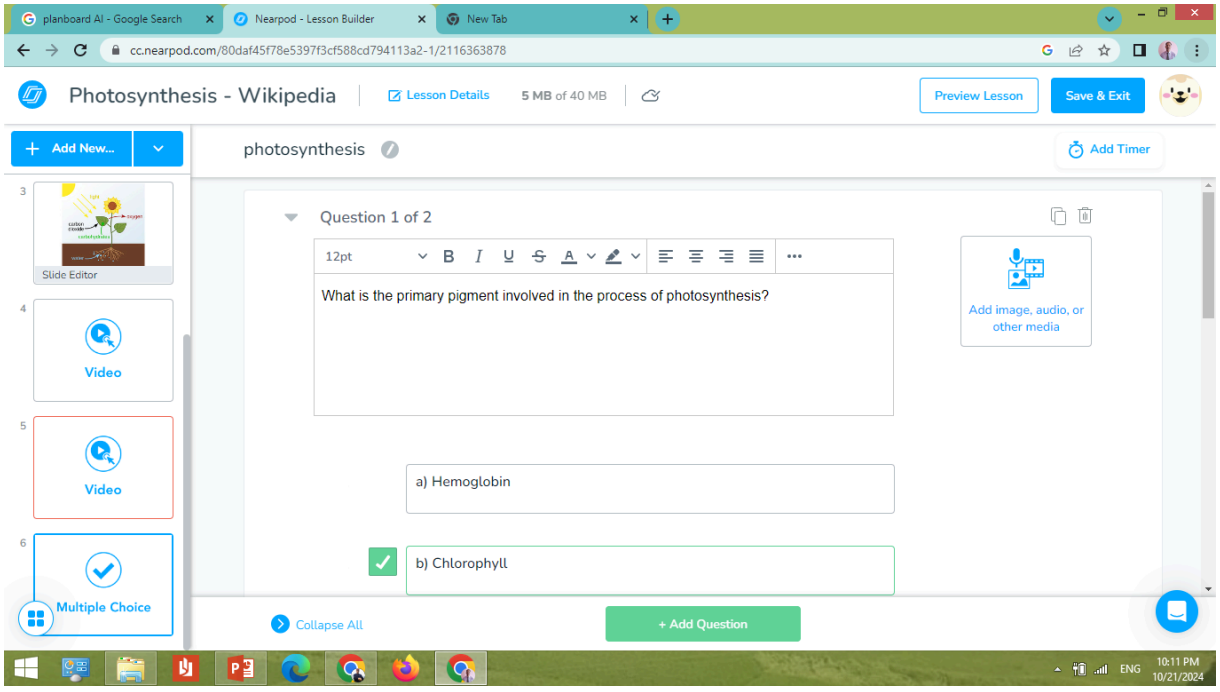
6. To make your lesson plan interactive, you can also add video to it. Nearpod gives you many options to add video to your lesson, to add video you click on add new, then click on interactive and then Click on the video option, you You can insert videos in your lesson plan using Video Library, YouTube, My Videos, and Upload a Video options. Search the video you want to insert in your slide in the search bar of YouTube and add it to your slide. insert



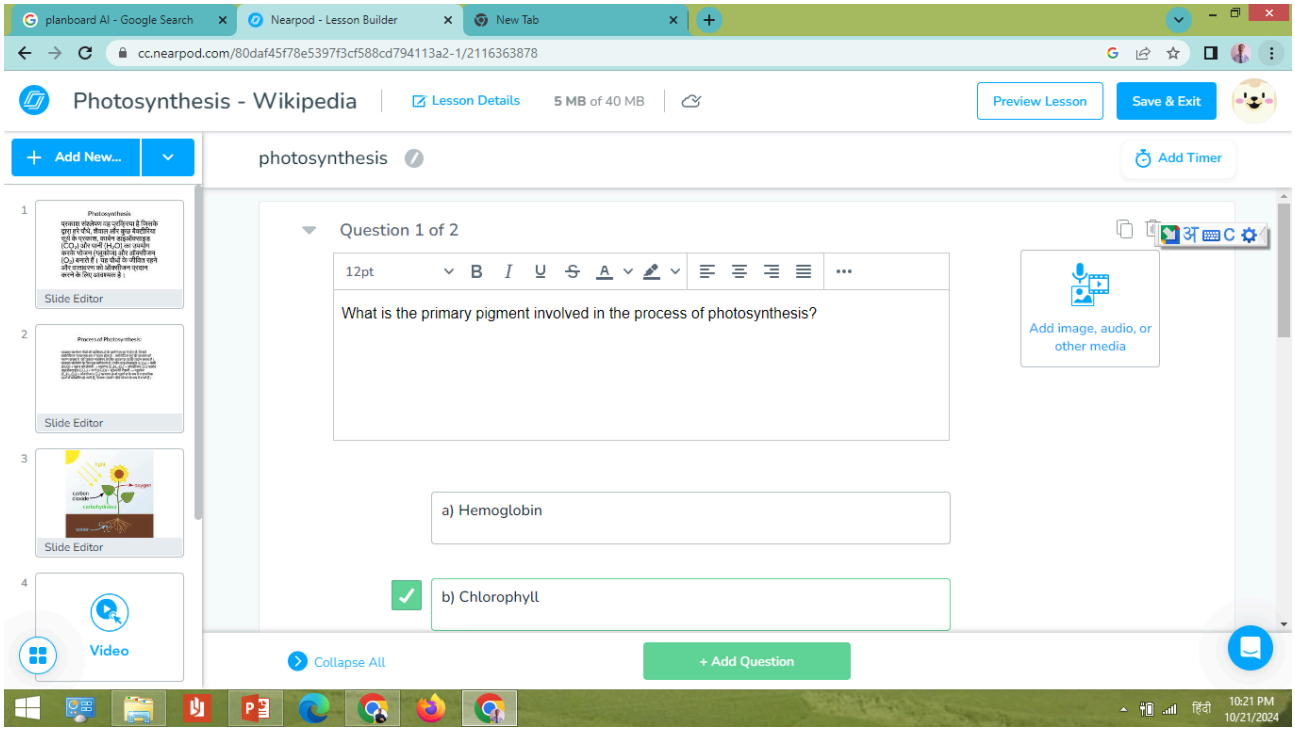


7. It is important that after teaching, you also evaluate the learner. For this, quizzes and game option of Nearpod is used. To add a quiz to your lesson plan, click on add new again and then Click on Quizzes & Games Select any tool from the given options Here we have used Multiple Choice Quiz, Name your quiz and add questions and write the options in the box given below, as per your requirement. You can increase the number of questions accordingly and make your quiz more fun.





8.Once the lesson plan is complete, click on Save & Exit and save your lesson



9.After the lesson is saved, you will reach the dashboard by clicking on the home button. Here you will see your saved lesson. Click on your lesson. Click on the teach option and you will be shown two more options. **Teach Options Live Participation (**Control the pace on your own device; students respond to questions on their device.) **Student-Paced (**Students complete the assignment on their own.)

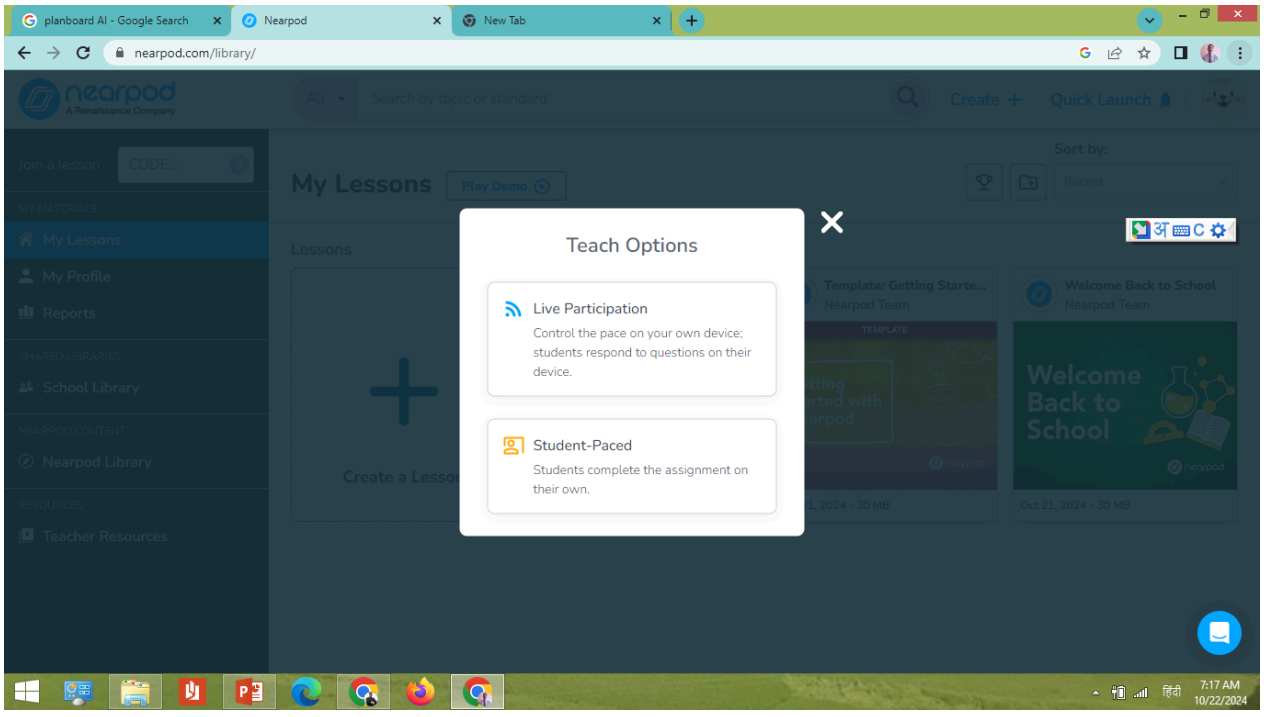
Live Participation:

- Under this option, the teacher has complete control over the conduct of the lesson. Teachers display slides and activities from their device, and students answer questions on their devices.
- **share how:**
  - ➔ Open your lesson plan in Nearpod and select 'Live Participation'.
  - ➔ A code will be generated that you can share with students.
  - ➔ Students can join the session using this code by visiting the Nearpod website on their device or using the Nearpod app.

2. Student-Paced:

- ➔ Under this option, students can view the lessons on their own time and complete the activities at their own pace.
- ➔ **share how:**
- ➔ Open the lesson in Nearpod and select 'Student-Paced'.
- ➔ A link will be generated that you can share with students.
- ➔ Students can complete the lesson at their own pace by clicking this link or using the Nearpod code.

With both of these options, teachers can easily share lessons created in Nearpod with students and also monitor their participation.



Apart from these tools, there are many other AI tools that you can use to create a detailed lesson plan for your students. Here are some other tools that you should check out in your browser.

- **Planboard:** It is an intuitive and user-friendly android tool that helps teachers organize their lessons, suggest activities as per curriculum standards, and track students' progress. https://play.google.com/store/apps/details?id=com.chalk.planboard&hl=en_IN
- **LessonUp:** The platform provides templates for creating interactive lesson plans and can integrate multimedia resources, increasing student engagement. https://www.lessonup.com/site/en

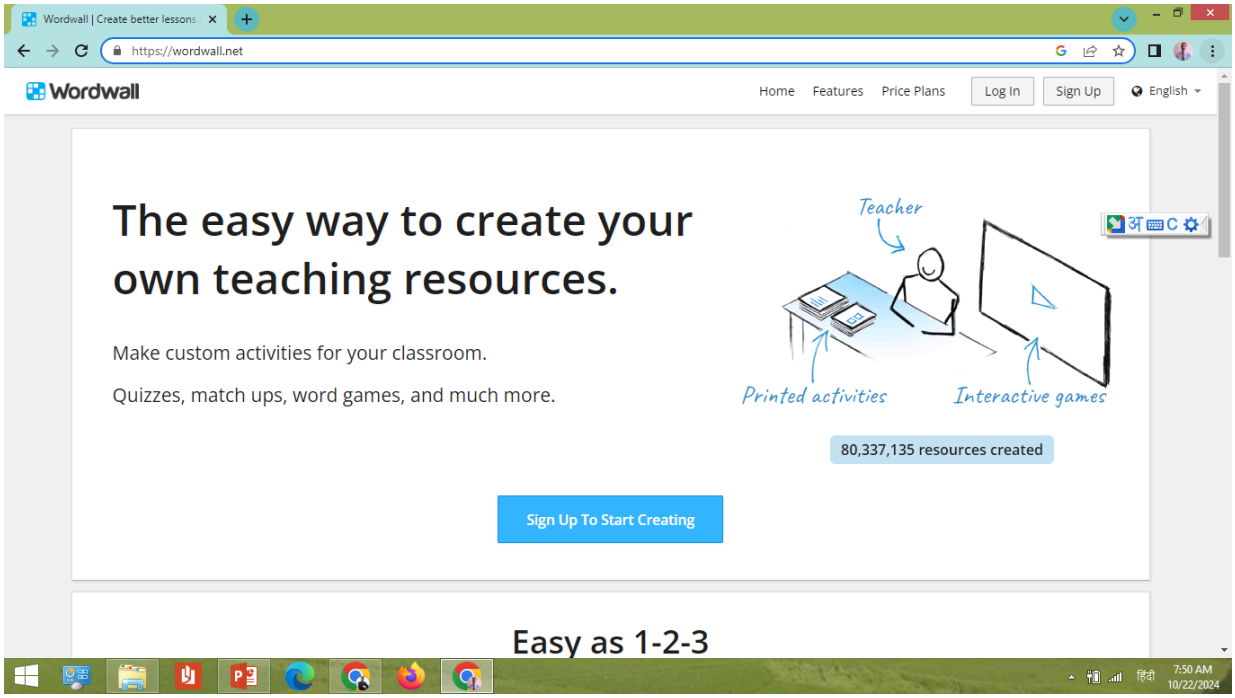
Activity No. 12

7. Gamification Tools

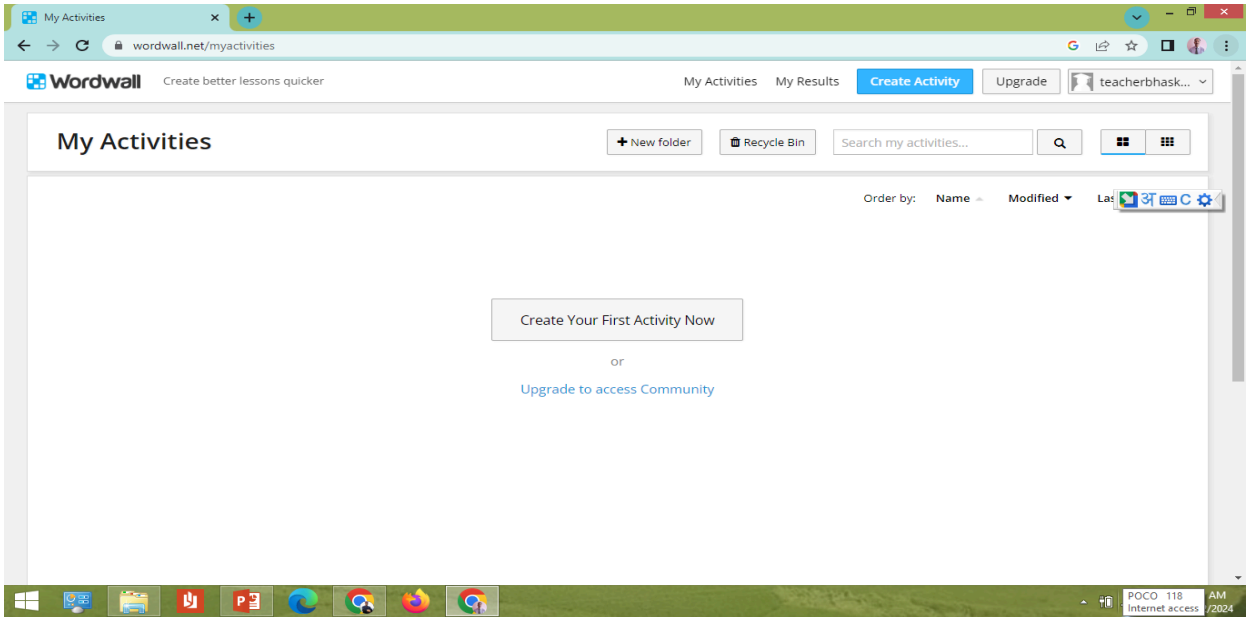
Incorporating gaming tools into learning is considered a good teaching-learning process to increase student engagement. Gamification is the use of game elements in educational activities to increase student engagement and learning. Let us discuss some important gamification tools

Word Wall: Word Wall is an online platform that provides teachers the ability to create interactive activities for their students. With a user-friendly interface and a wide range of features, Word Wall allows teachers to engage their students in a fun and educational way. Whether you want to create quizzes, flashcards or word games, Word Wall is for you.

1.https://wordwall.net/ Click on or type in the address bar You will have the web page of wordwall open. Click on the Login button on the web page Create your account or log in with your social media account

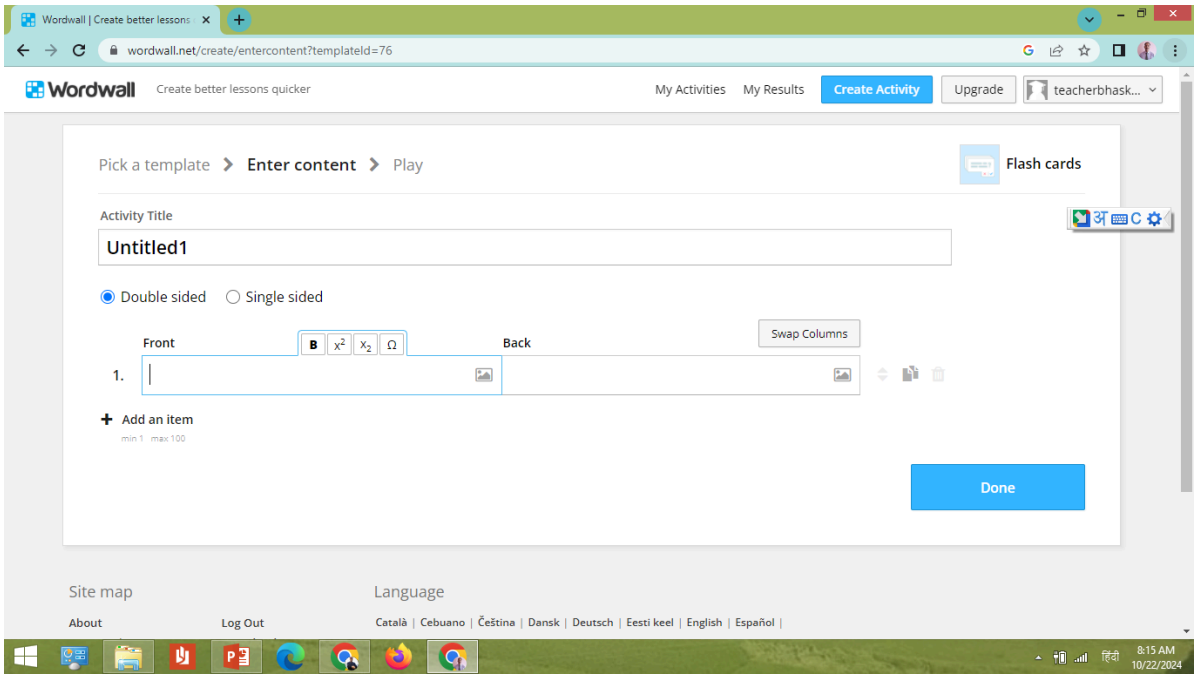


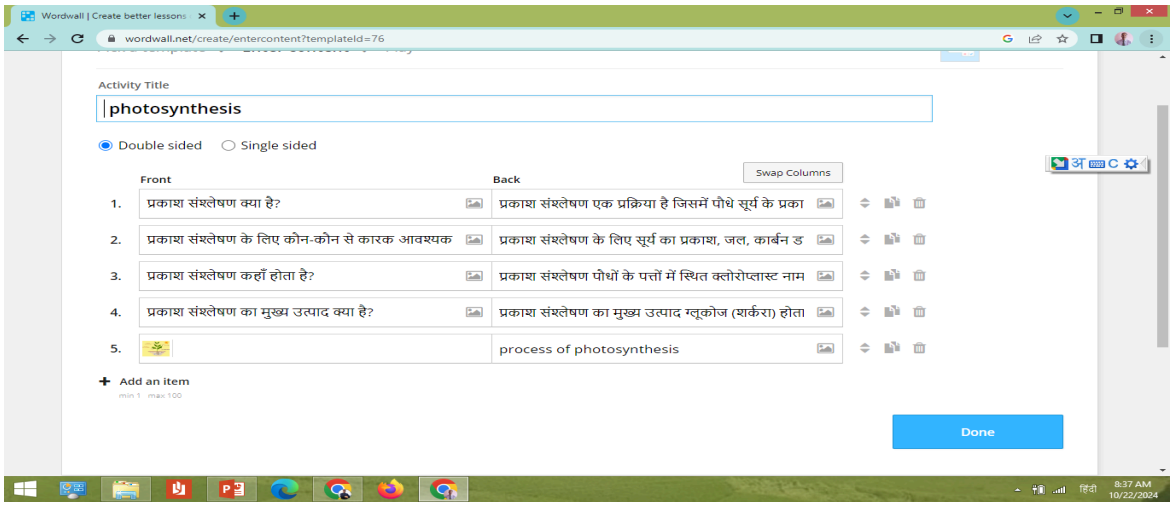
2. After logging into the account, you will come to the dashboard of Word Wall which will look something like this



3. Create your first activity or click on create activity many options like **Match up, Quiz ,Speaking cards, Flash cards, Find the match, Spin the wheel ,Group sort, Complete the sentence, Anagram ,Open the box ,Unjumble ,Matching pairs** etc. will be shown to you. Click on whatever content you want to create. For example, here we will create flash cards. With the help of flash cards, learners can be tested using cards with hints on the front and answers on the back - Click on the Flash Card option. A new page

will be displayed. Give a name to your activity and think about the topic on which you want to create a flash card, we took the topic of photosynthesis as an example. Done, after writing the content in back and front, click on done.





Flash Card 1:

Front: What is photosynthesis?

Back: Photosynthesis is a process in which plants use sunlight, water, and carbon dioxide to make their own food (glucose) and release oxygen.

Flash Card 2:

Front: Which factors are necessary for photosynthesis?

Back: Sunlight, water, carbon dioxide, and chlorophyll are necessary for photosynthesis.

Flash Card 3:

Front: Where does photosynthesis take place?

Back: Photosynthesis occurs in a cell organelle called chloroplast located in the leaves of plants, where chlorophyll is present.

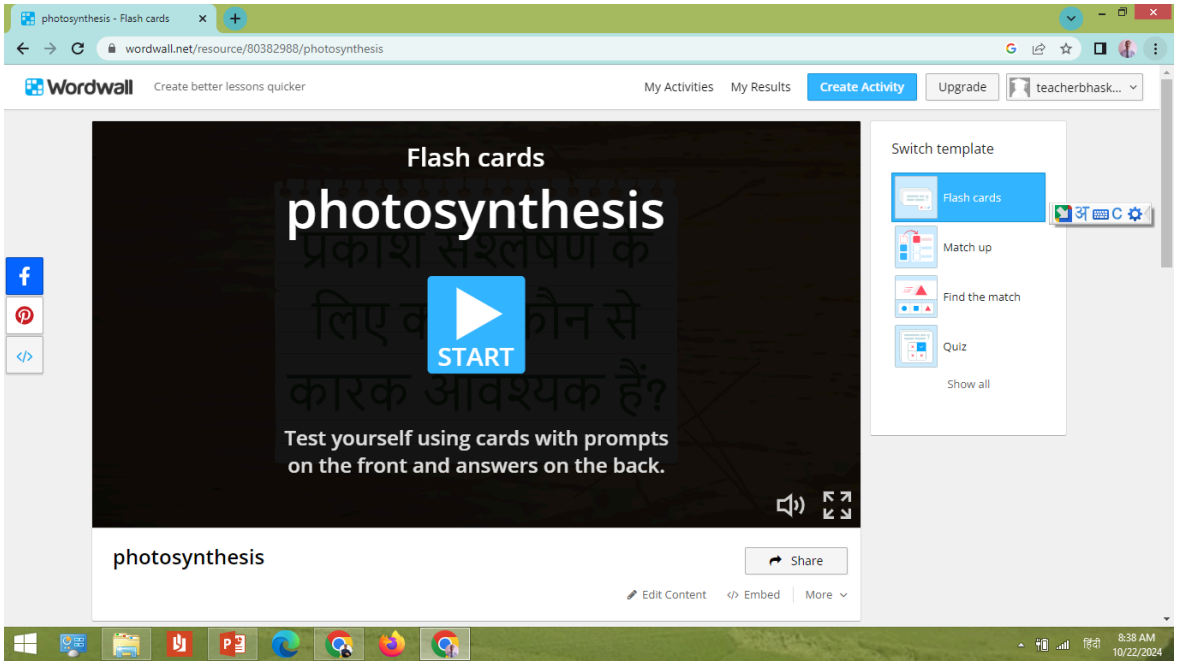
Flash Card 4:

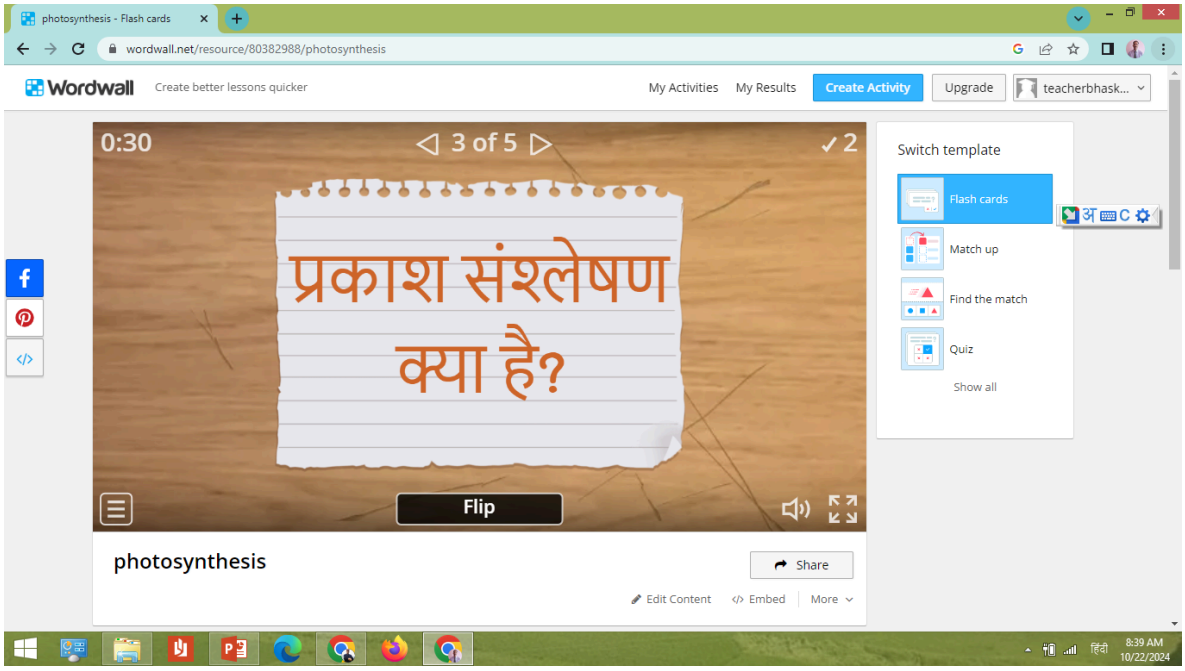
Front: What is the main product of photosynthesis?

Back: The main product of photosynthesis is glucose (sugar), and oxygen is produced as a co-product.

These flash cards will help students to understand the process of photosynthesis in an easy and interesting way. If you want, you can also use photographs instead of text.

3.After clicking on the done button, share the activity with the learners using the share button, publish it and set the activity as per your wish, if you wish, you can combine the flash card activity with other activities like quiz, match, jumble Can make changes in Word etc.





Apart from these tools, there are many other AI tools with which you can create activities for your students. Here are some other tools that you should check out in your browser -

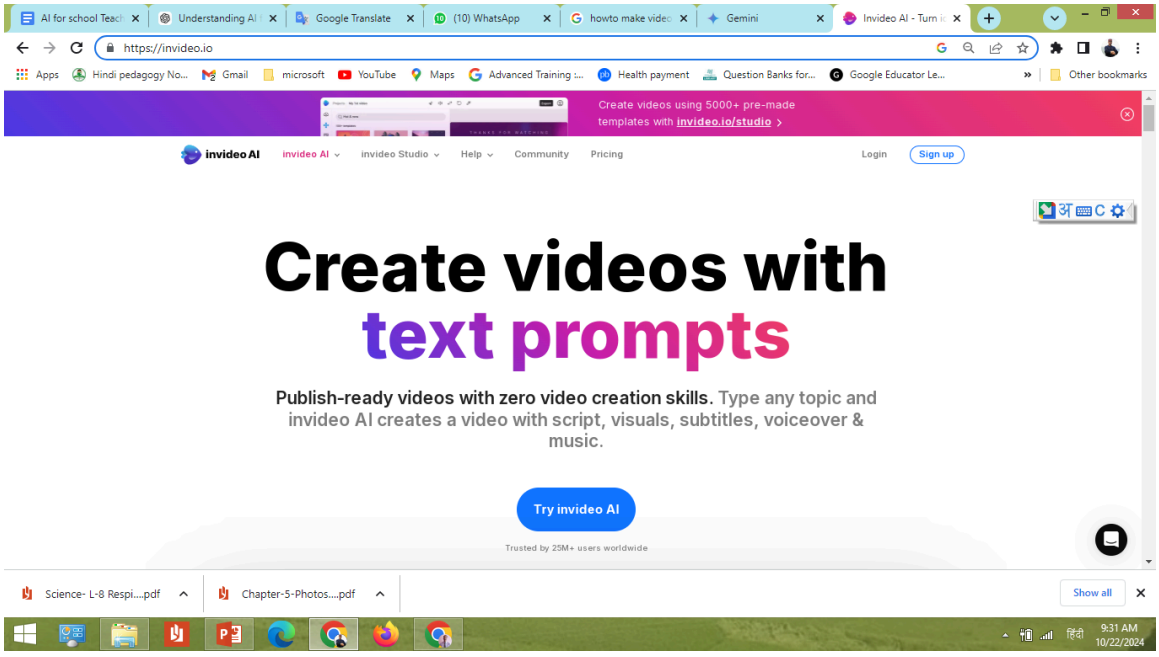
- **Classcraft: This** The gamification platform creates a collaborative learning environment and provides AI-based feedback on students' performance.
- **Kahoot!: game-like** Engages students through quizzes, creating a competitive yet fun learning environment.
- **Quizzes:** A quiz platform that enhances learning through competition and instant feedback, making assessments fun.
- **Quizalize :**QuizLyze is a web-based game that lets you connect your class and give instant assessments for personalized learning. This helps you quickly identify each student's strengths, weaknesses and learning gaps and intervene in real time to provide personalized help in the classroom.
- **LearningApps.org:** Learning Apps org is a web application that helps teachers create small interactive modules to support differentiated learning using activities and games.

Activity No. 13

8.AI tools for video making Video Making AI Tools

In today's digital age, video content has become an essential part of education. It helps engage students, makes complex topics more accessible, and allows for creative expression. Here are some notable AI tools for video creation that teachers can use to create engaging and informative videos for their lessons:

InVideo: InVideo One is an AI-powered video editing tool that enables users to create great videos using pre-made templates. It's ideal for teachers who want to quickly create instructional videos.



1. Create an account or log in: Visit the InVideo AI website https://invideo.io/ And sign up for a free account.

2. Choose a template: Choose a template that matches the purpose of your video. InVideo offers a variety of templates for different types of content.

3. Input your text: Paste your text into the specified area. You can also use InVideo's AI script generator to create a script based on a topic or keyword.

4. Customize the video:

Style: Choose a style that matches the tone of your brand or video.

Media: Add pictures, videos, or music to enhance your content.

Voiceover: Use InVideo's AI Voiceover feature to add a human touch to your videos.

Text elements: Customize text elements like fonts, colors, and animations.

5. Preview and editing: Preview your video to make sure it meets your expectations.

Make any necessary adjustments to the script, media, or style.

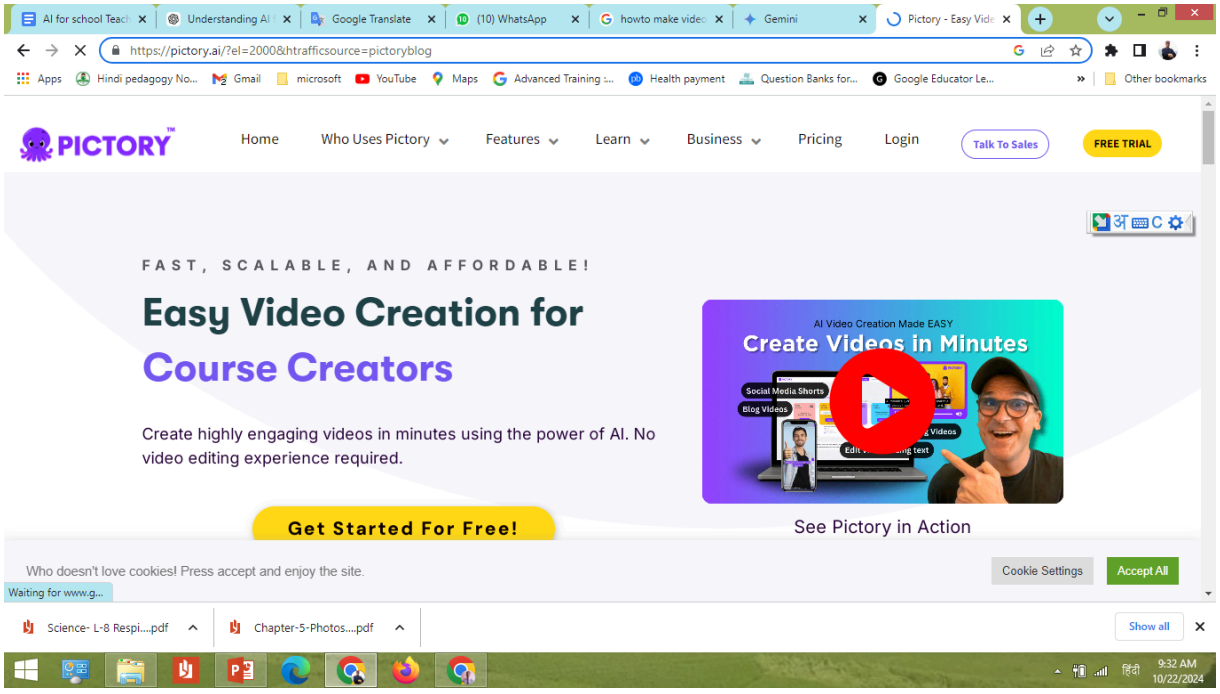
6. Export and Download: When you're satisfied with the video, export it to your desired format (e.g., MP4, MOV).

Pictory **Pictory: Pictory A**i-powered video creation platform that allows users to turn scripts or blog posts into engaging videos. It analyzes text and identifies key points to create visually appealing content. Pictory makes it easy to turn scripts, blog posts and long videos into short, shareable branded video content. With Pictory, no technical skills, software downloads, or video editing experience are required. Artificial Intelligence helps edit videos, add captions, create video highlights
https://pictory.ai/?el=2000&htrafficsource=pictoryblog

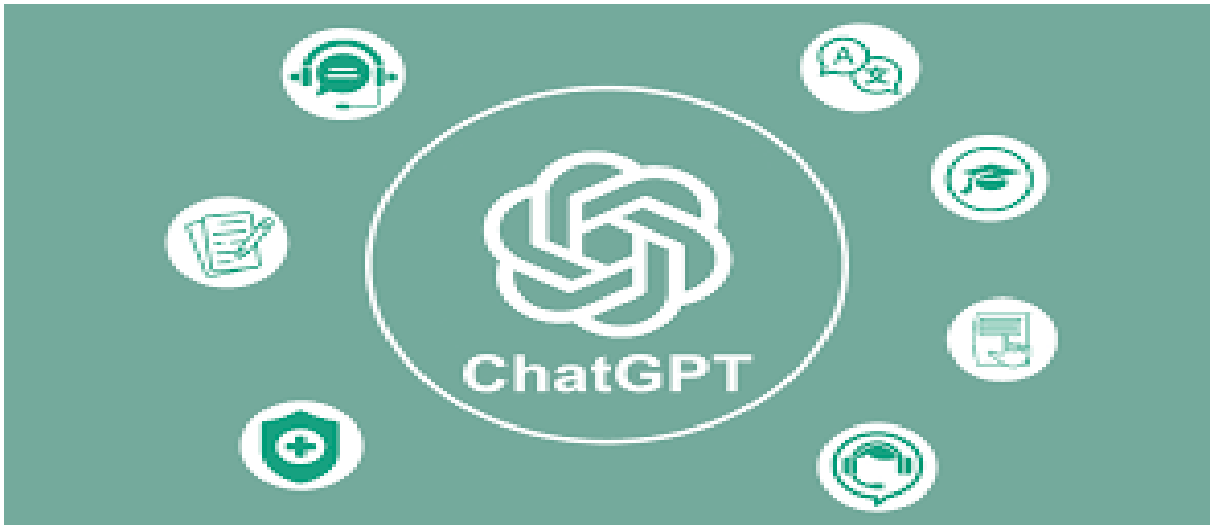
- Some of the key features powered by AI include:
- Text to Video – Convert scripts and blog posts to video with automatically generated visuals, voiceovers, and music.
- Blog to Video – Convert blog posts to engaging videos to increase traffic and rankings.
- Auto Video Summary – Shorten long videos by automatically extracting the key points. Perfect for creating social media clips.
- Auto Caption – Add captions to videos quickly and accurately.

Using Picture AI to create video stories – let's understand how step by step Pictory **Using Pictory we can create an attractive and informative video. Follow the steps given below and create the video-**

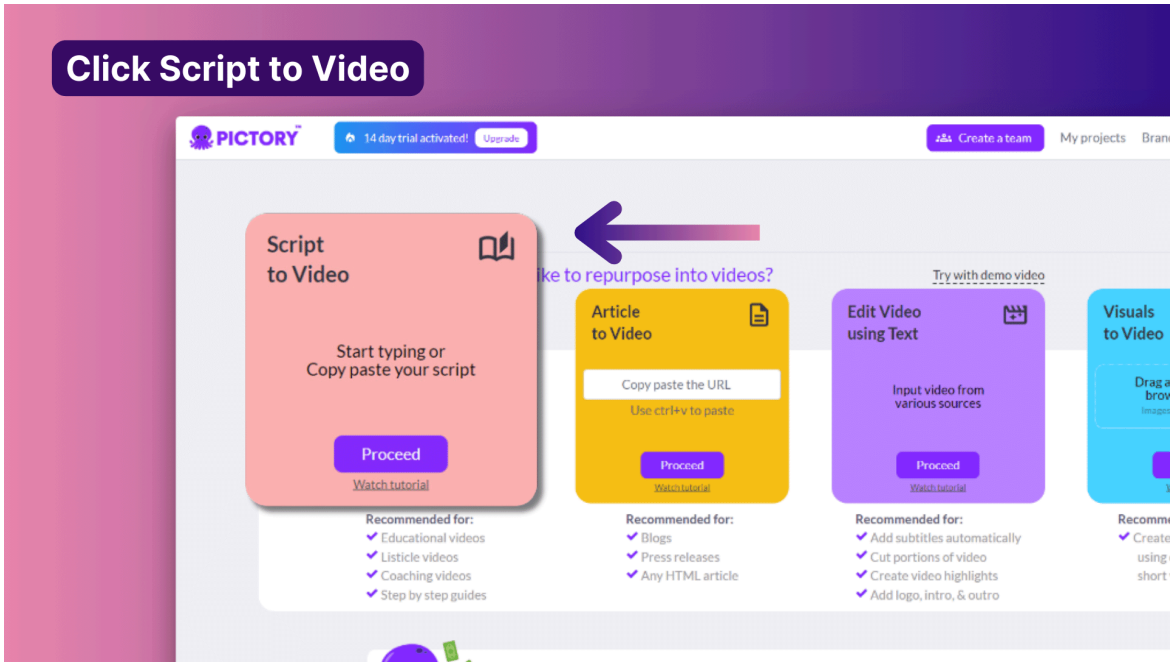
1.You can easily use chatgpt with Pictory AI to create video stories. Pictory AI's capabilities complement chatgpt's text generation, allowing users to create engaging video stories that are not only engaging but also unique Are. **Create an account or log in:** Visit Pictory AI's website and sign up for a free account.



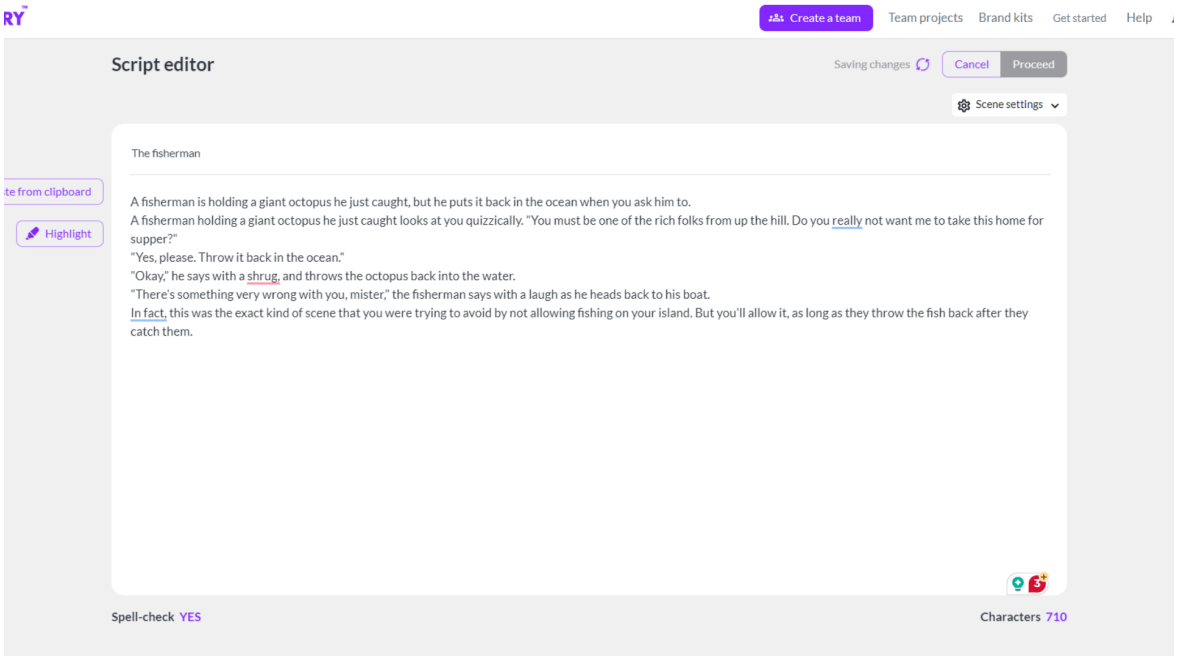
2. Ask chatgpt to write a script based on the episode of your video and copy the script



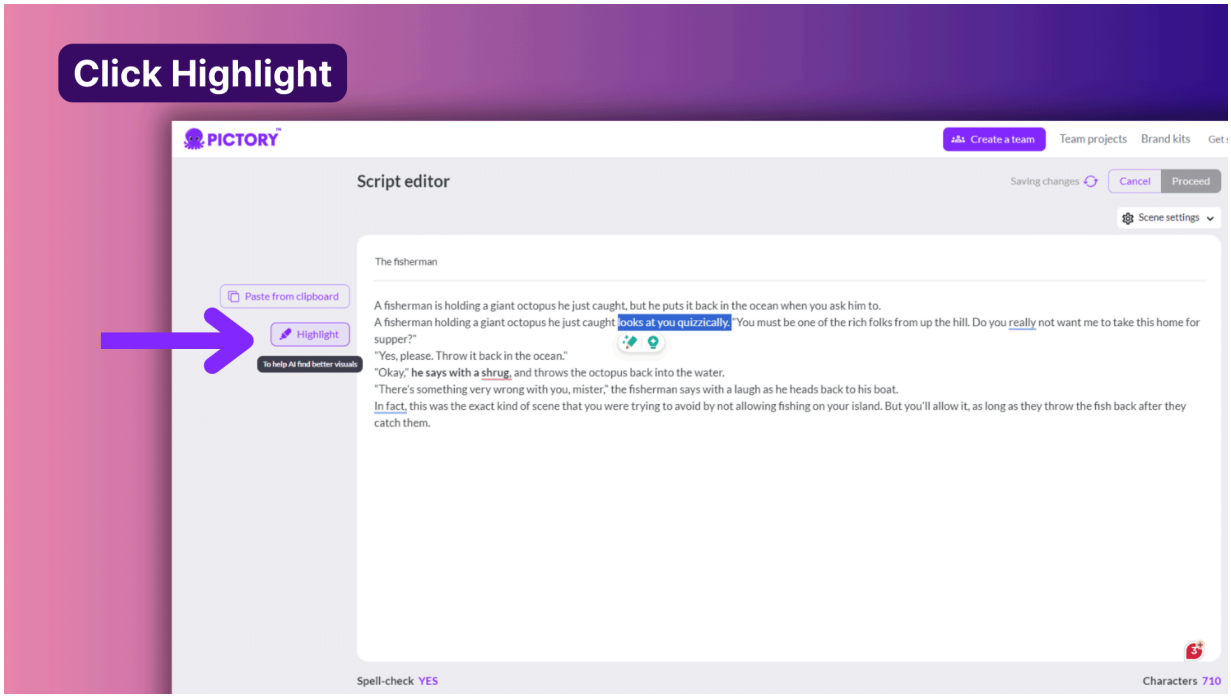
3.app.pictory.ai Sign up for a free account at and select 'Script to Video' on the account homepage.(Script to Video)



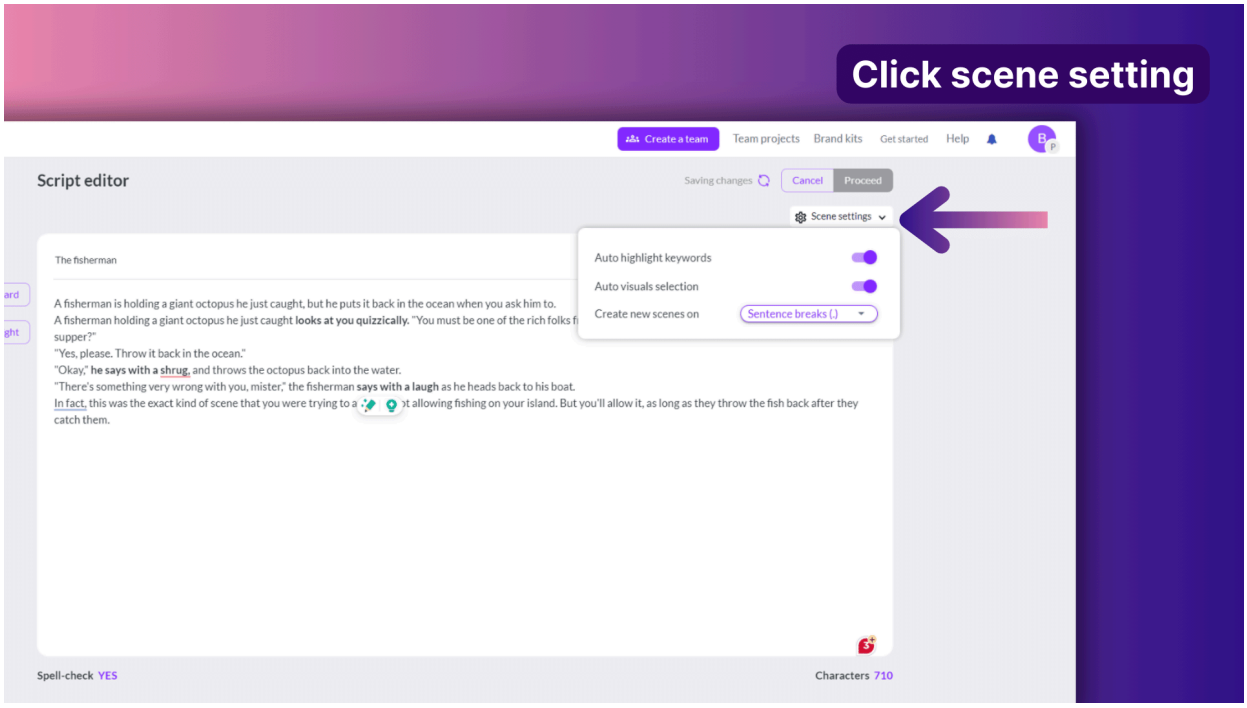
4.Paste your copied text into Pictory's script editor. Alternatively, place the title of your video here.



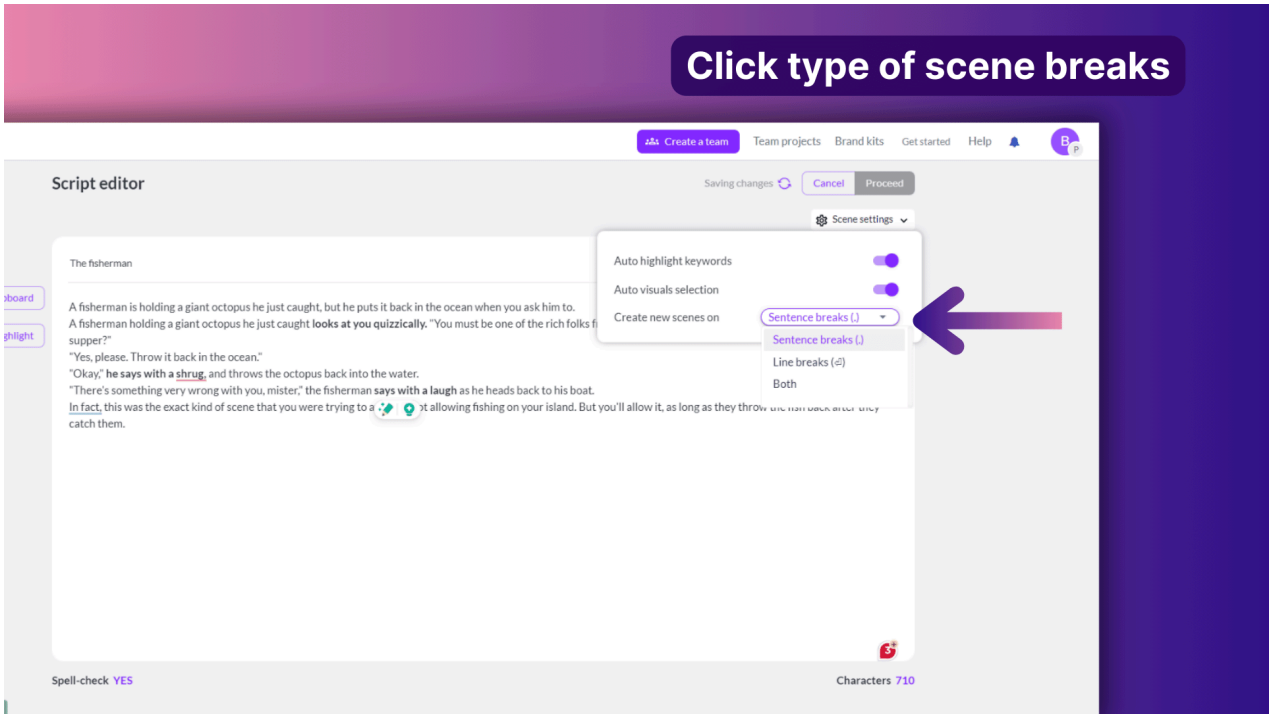
5.Highlight keywords in your text if you want particular words to be emphasized in the video transcript.



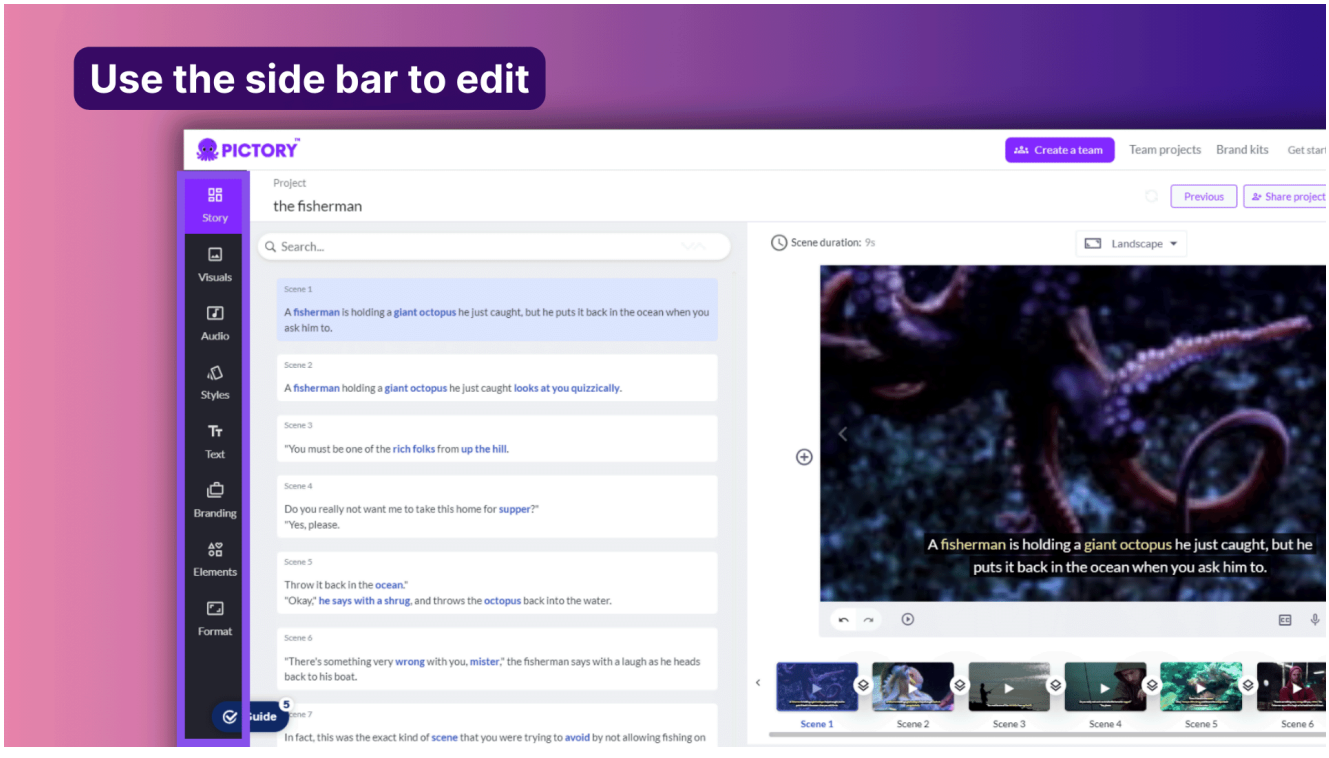
6.'Scene Settings' (scene settings)In the menu, choose whether you want the AI to automatically highlight keywords and automatically select scenes.(auto-select visuals)



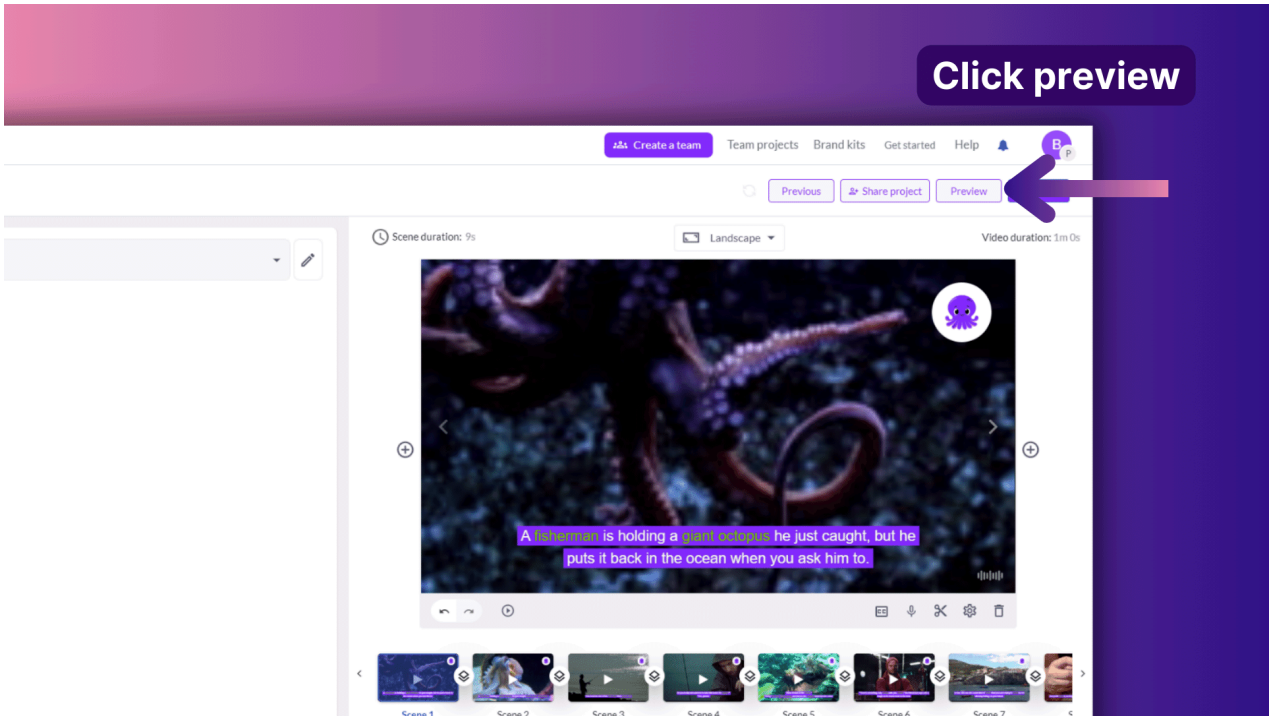
7.Decide how to create scenes (based on sentence breaks, line breaks, or both). AI will storyboard your video, automatically creating scenes and applying captions.



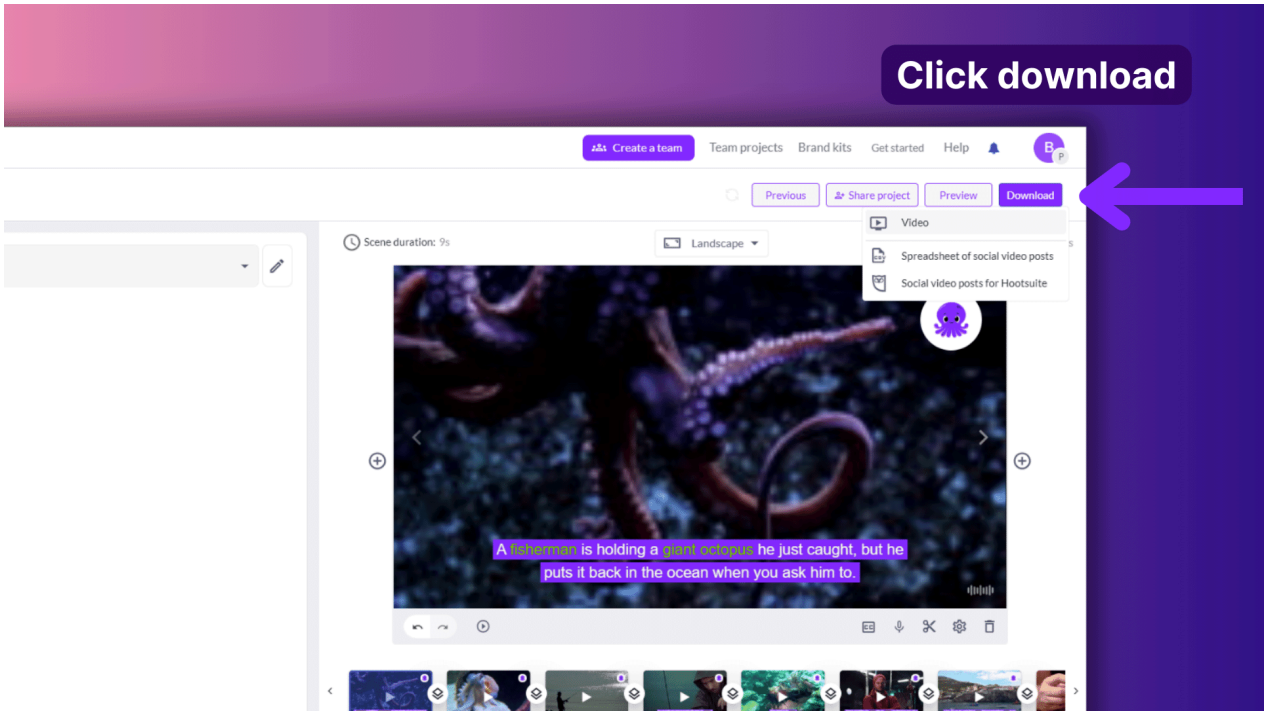
8.You can edit your video, add background music, branding and AI voiceover. Text can also be edited and reordered in the storyboard.



9.Preview your video to make sure it meets your expectations. Preview your video



10.Once satisfied, capture the video and download it as an MP4 file.



Assessment-

Dear teachers,. Through this content you have learned about different methods and tools for using AI in the classroom. This trip will not only make your teaching more effective but will also improve the learning experience of the students.

Now, it's time to evaluate what you've learned. We have designed an intuitive and interactive assessment process to assess the various AI tools included in this content. Please scan the QR code given below and assess your knowledge. This assessment will not only strengthen your understanding but will also tell you to what extent you can effectively implement AI in your teaching.

We are proud to be a part of this important journey of yours, and we look forward to you brightening the future of your students through AI.

Click here for assessment

Additional content for Extend learning :

Major components of AI: Machine Learning, Natural Language Processing, Data Analytics.

How AI adapts the curriculum to the individual needs of learners.

Interactive Learning Tools:

AI helps in keeping students engaged and testing their knowledge.

Identifying students' emotions and level of participation in the classroom

AI tool that helps automate teachers' administrative tasks

Holistic use of AI can be helpful in making education more effective and inclusive. Teachers must use these tools and technologies properly so that they can provide the best learning experience to their students. This content will help the facilitator to explain to teachers the importance of AI and how it can be used in classrooms.

AI and Technological Applications in Education

1. Learning Enhancement: AI can tailor learning experiences based on individual student needs, enhancing personalized learning.
2. Resource Management: AI can help educators efficiently manage classroom resources and track student progress.
3. Creative Engagement: By integrating AI with creative activities, students can better engage with subjects, improving retention and understanding.
4. Real-Time Feedback: AI tools can provide immediate feedback on student work, allowing for timely improvement and guidance.

Impact and Utility

Incorporating AI in the classroom can transform how students learn and interact with technology. By making AI understandable and accessible, teachers can foster a generation of tech-savvy students who are comfortable using AI in their daily lives. This project has the potential to reduce the digital divide, particularly in remote and resource-limited areas, by introducing AI with basic resources. It also equips students with critical thinking and problem-solving skills, encouraging them to be active participants in a digital society.

Conclusion

This classroom AI integration model offers a valuable pathway for students to learn about AI, understand its significance, and gain skills that will be essential in the future. By combining simple tools and hands-on activities, the project makes AI education accessible for students from all backgrounds, bridging the digital divide and preparing them for a tech-driven world.

Future Work Plan

1. AI Coding Modules for Students
   Introduce basic AI coding platforms like Scratch or Tynker to let students create their own AI projects.
2. Ethics and Privacy Workshop
   Discuss the ethical aspects of AI, including data privacy, transparency, and the responsible use of AI.
3. Advanced AI Topics
   Explore complex AI applications like self-driving cars and AI in medicine, encouraging students to think about the broader impacts of AI on society.

This project will set a foundation for AI literacy in the classroom, empowering students to understand and use AI responsibly and effectively. By bringing AI education into accessible formats, it aims to inspire a generation of students who can engage with and contribute to AI technology, driving innovation and fostering a balanced, informed perspective on AI in their daily lives.