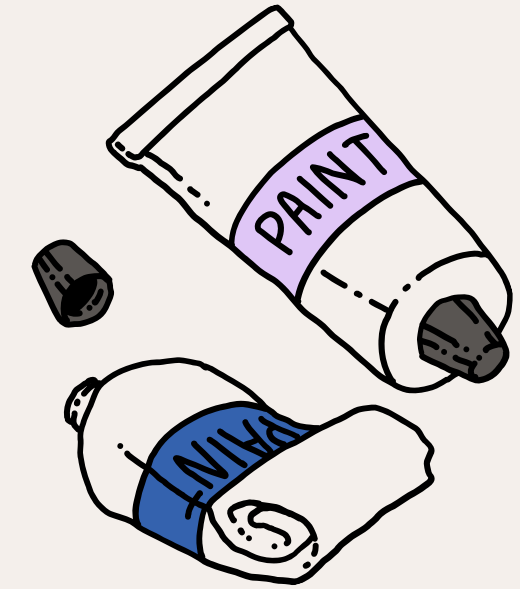
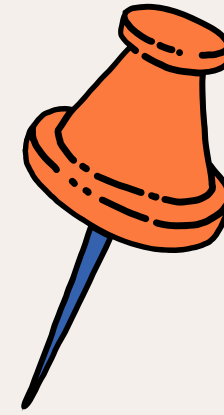
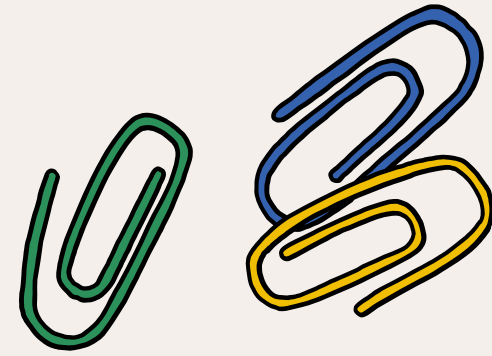
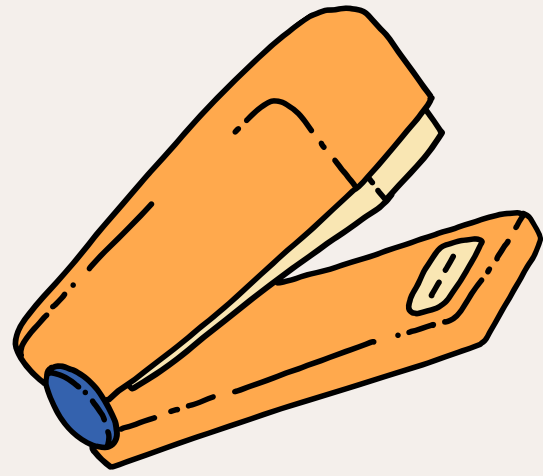


# Smarter Learn

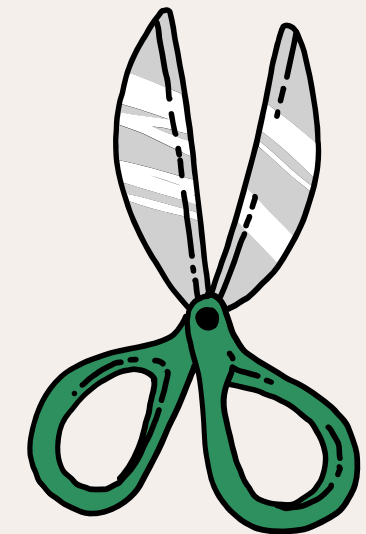
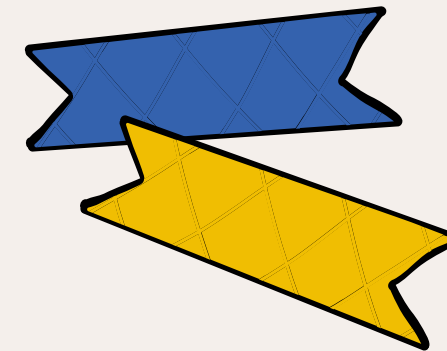
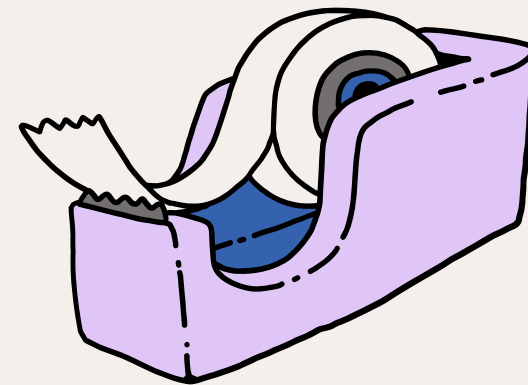
Intelligent Learning Tools for Personalized Education





Do you ever get bored watching  
educational videos?

We've all been there, right? 🙄



# What is SmarterLearn?

SmarterLearn turns regular educational videos into a personalized learning experience based on YOUR learning style — visual, auditory, kinesthetic, or reading/writing. We make learning engaging so you never get bored again!



# Objective of SmarterLearn



Offer a dynamic, fun, and efficient learning experience.

Keep learners engaged and improve information retention.

Transform educational videos into interactive and engaging content.

Personalize learning based on individual learning styles

# Learning Styles

1

Mind Mapping:  
Visual learners  
get colorful  
mind maps to  
organize  
information.

2

Quizzes:  
Kinesthetic  
learners can  
engage with  
interactive  
quizzes to test  
their knowledge.

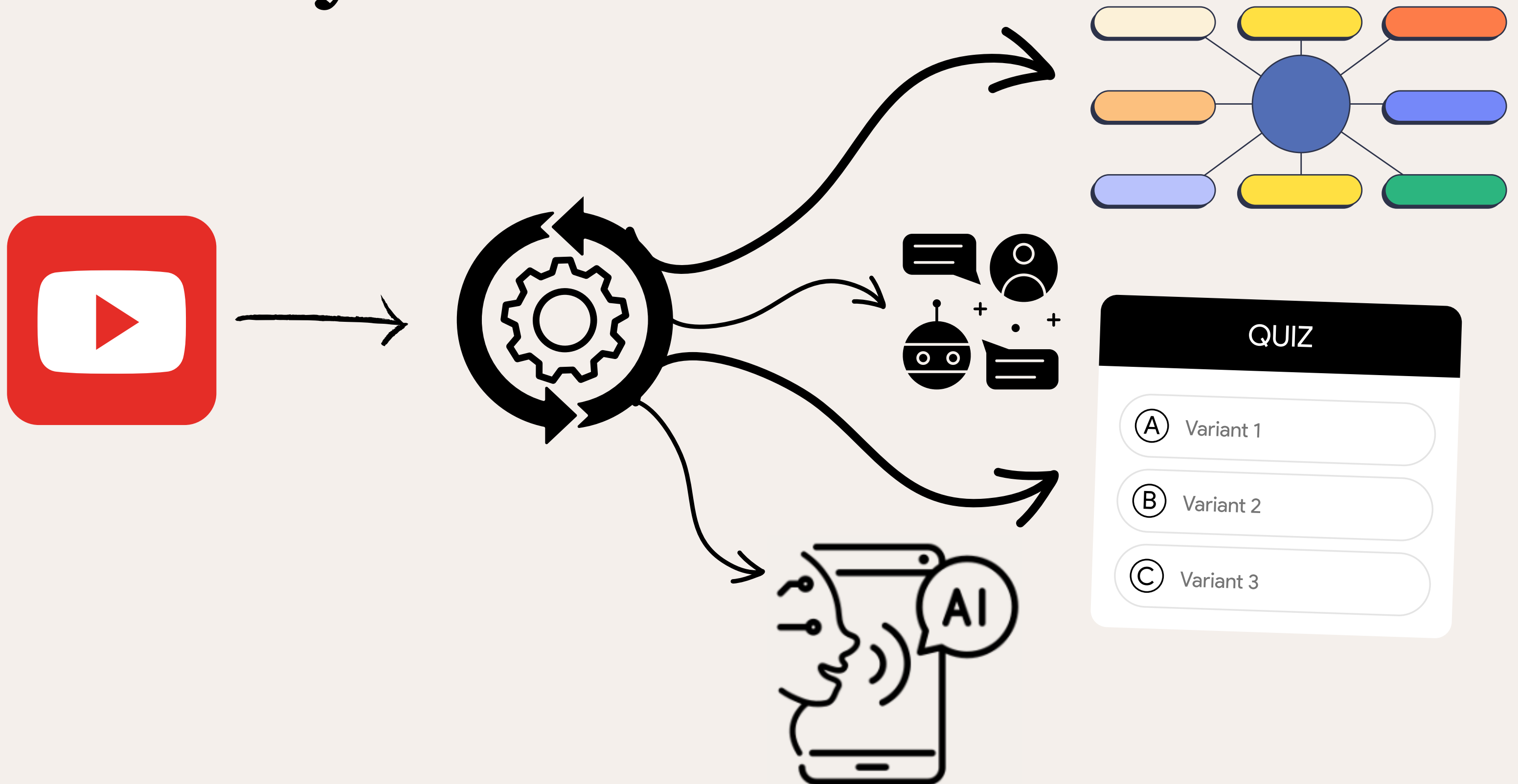
3

Voice  
Interaction:  
Auditory  
learners can ask  
questions and  
get spoken  
answers.

4

Reading &  
Writing: For  
text-based  
learners, we  
provide detailed  
transcriptions  
and summaries.

# System Workflow




# System Testing






# System Testing

- **Reading Style**

```
 Your question (or 'exit' to quit): What is the video content

 Response: The video introduces the concept of machine learning and explains how it is integrated into everyday activities. It provides examples of common uses of machine learning, such as:


1. Web Searches: Using search engines like Google or Bing, which utilize machine learning to rank web pages.
2. Photo Tagging: Apps like Instagram or Snapchat automatically recognizing and tagging friends in photos.
3. Movie Recommendations: Streaming services recommending similar movies based on what you've watched, powered by machine learning algorithms.
4. Voice Recognition: Using voice commands for texting or playing music on smartphones.


Overall, the video highlights the ubiquity of machine learning in various applications that enhance user experience.
```



# System Testing

- **Reading Style**

 Your question (or 'exit' to quit): Explain what its the everyday applications of machine learning that mentioned in

 Response: The video mentions several everyday applications of machine learning, including:

1. **\*\*Web Searches\*\***: When you use search engines like Google, Bing, or Baidu to find information (e.g., "how do I make a sushi roll?"), machine learning algorithms help rank the web pages to provide relevant results.
2. **\*\*Photo Tagging\*\***: In social media apps like Instagram or Snapchat, machine learning is used to recognize faces in uploaded pictures, allowing the app to automatically tag friends in photos.
3. **\*\*Movie Recommendations\*\***: Streaming services utilize machine learning to suggest movies that you might enjoy based on your viewing history, such as suggesting similar films after watching a movie like Star Wars.
4. **\*\*Voice Recognition\*\***: When using voice-to-text features on smartphones, such as sending messages or giving commands (e.g., "Hey Siri, play a song by Rihanna"), machine learning helps in understanding and processing your voice commands accurately.

# System Testing

- **Out-of-Scope Handling (Reading Style)**

These examples illustrate how machine learning enhances user experience in various applications throughout daily life.

. 📄 Your question (or 'exit' to quit): what is the lanchain?

🤖 Response: Sorry, I can only answer questions related to the video content or our conversation. Please ask something relevant.

# System Testing

- **Memory Recall**

```
gpt-relevant
📄 Your question (or 'exit' to quit): What did I ask you earlier?
🤖 Response: You asked me to explain the everyday applications of machine learning that were mentioned in the summary of the video.
📄 Your question (or 'exit' to quit): what is the first question i asked?
🤖 Response: The first question you asked was, "What is the video content?"
📄 Your question (or 'exit' to quit):
```



# System Testing

- **Out-of-Scope Handling (Auditory Style)**

```
🎧 Auditory Learning Mode ON!
🔊 Recording audio for 10 seconds...
✅ Audio recorded: user_input.wav
✅ Transcribed audio: user_input.wav

🗣️ You said: Can you summarize the content of the video for me?

🤖 AI said: The video introduces the concept of machine learning and explains how it is a part of our daily lives, often without us realizing it. It provides examples such as using search engines like Google or Bing to find information, tagging friends in photos on social media like Instagram or Snapchat, receiving movie recommendations from streaming services after watching a film, and using voice-to-text features on smartphones. These applications demonstrate how machine learning algorithms operate to enhance user experiences.
✅ Response saved as: reply.mp3
<IPython.lib.display.Audio object>

💬 Another question? (yes/no): yes
🔊 Recording audio for 10 seconds...
✅ Audio recorded: user_input.wav
✅ Transcribed audio: user_input.wav

🗣️ You said: What is the deep learning?

🤖 AI said: Sorry, I can only answer questions related to the video content or our conversation. Please ask something relevant.
✅ Response saved as: reply.mp3
<IPython.lib.display.Audio object>
```

# System Testing

- URL Validation

```
🎥 YouTube video URL: https://you.be/vStJoet0xJg=A7BseTqUrg_lu8Jb
⌚ Preparing content...
✅ Cleaned URL: https://you.be/vStJoet0xJg=A7BseTqUrg_lu8Jb
[generic] Extracting URL: https://you.be/vStJoet0xJg=A7BseTqUrg_lu8Jb
[generic] vStJoet0xJg=A7BseTqUrg_lu8Jb: Downloading webpage
[redirect] Following redirect to http://ww12.you.be/vStJoet0xJg=A7BseTqUrg_lu8Jb?usid=27&utid=12415552135
[generic] Extracting URL: http://ww12.you.be/vStJoet0xJg=A7BseTqUrg_lu8Jb?usid=27&utid=12415552135
[generic] vStJoet0xJg=A7BseTqUrg_lu8Jb?usid=27&utid=12415552135: Downloading webpage
WARNING: [generic] Falling back on generic information extractor
[generic] vStJoet0xJg=A7BseTqUrg_lu8Jb?usid=27&utid=12415552135: Extracting information
ERROR: Unsupported URL: http://ww12.you.be/vStJoet0xJg=A7BseTqUrg_lu8Jb?usid=27&utid=12415552135
❌ Error: Invalid URL: Please enter a valid YouTube URL (e.g., https://youtu.be/...).
ℹ Check API keys, FFmpeg, Graphviz, network, or microphone.
```

# Future Improvements

- Add user personalization based on learning history
- Integrate more languages beyond English.
- Expand to non-video content (like PDFs, articles).
- Improve mind map generation by using LLM-based direct diagram generation or future libraries once such technologies become available, as they are currently not yet accessible



# Thank You

