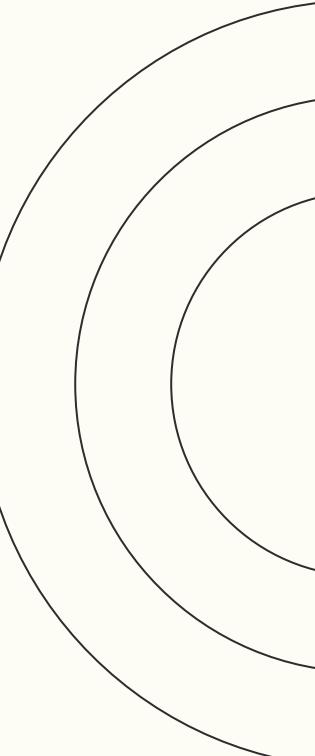


# AI-Powered Summarisation Platform

Tan Xinrui



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Objective

02

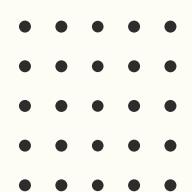
Project  
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03

Key Features

04

Future  
Implementation

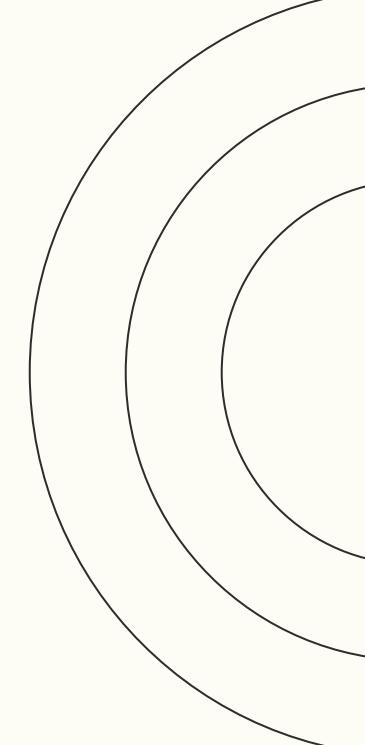




# 01

---

# Objective



# Objective

Automatically summarise documents (.txt, .docx, .pdf) using large language models (LLMs), with support for applying custom summary templates and making targeted adjustments to specific sections.

**Summarise Smarter. On Your Terms.**

Upload multiple documents, preview content, and summarise with your own custom templates.

**Summary Settings Panel**

**Choose Template:**

Use Template: Custom6  Create Custom Template

**File Upload Panel**

UPLOAD FILES (DRAG OR CLICK)

File	Preview	X
Test2.txt	PREVIEW	X
Test3.txt	PREVIEW	X
Test4.txt	PREVIEW	X

**Preview: Test4.txt**

Artificial intelligence (AI) has become a transformative force across industries. In healthcare, AI is used for diagnostics, personalized treatment plans, and drug discovery. AI-powered tools like ChatGPT and DALL-E are revolutionizing how we interact with machines, generating natural language responses and creative images.

Despite the advantages, concerns remain regarding data privacy, job displacement, and ethical governance. Governments and tech companies are actively debating AI regulation. Meanwhile, AI adoption continues to accelerate in sectors like finance, education, and retail. Collaboration between academia and industry is crucial to ensure responsible innovation.

**GENERATE SUMMARY**

**Environmental Impact**  
The main issues discussed are the acceleration of climate change due to increasing greenhouse gas emissions, its consequences such as rising sea levels, extreme weather events, and melting polar ice caps, and the uneven progress in meeting the Paris Agreement targets.  
Current responses or efforts include the adoption of renewable energy, particularly wind and solar, and the expansion of green technologies, as well as government subsidies and incentives to promote these technologies. However, developing countries face challenges in adopting these technologies due to limited infrastructure and financial constraints.  
[Regenerate Section](#)

**"Technology Developments"**  
AI is being used in various industries, including healthcare, finance, education, and retail, to improve efficiency and productivity. However, concerns about data privacy, job displacement, and ethical governance remain. Collaboration between academia and industry is necessary to ensure responsible innovation.  
The challenges or concerns surrounding AI include data privacy, job displacement, and ethical governance. Governments and tech companies are debating AI regulation. Despite these concerns, AI adoption continues to accelerate in various sectors. The collaboration between academia and industry is crucial to address these challenges and ensure responsible innovation.  
[Regenerate Section](#)

[Copy](#) [Download](#)

02

---

# Project Overview



# Landing Page

AI Summariser

Home Templates API About Login/Signup

**Summarise Smarter. On Your Terms.**

Upload multiple documents, preview content, and summarise with your own custom templates.

**Summary Settings Panel**

Choose Template:

Use Template: — Select Template —

Create Custom Template

**File Upload Panel**

UPLOAD FILES (DRAG OR CLICK)

**Preview: No file selected**

No preview available.

**GENERATE SUMMARY**

No summary generated yet.

Copy Download

# Upload Files

AI Summariser

Home Templates API About Login/Signup

**Summarise Smarter. On Your Terms.**

Upload multiple documents, preview content, and summarise with your own custom templates.

**Summary Settings Panel**

Choose Template:

- Use Template: — Select Template —
- Create Custom Template

**File Upload Panel**

UPLOAD FILES (DRAG OR CLICK)

The screenshot shows a 'File Selection' dialog box from a Mac OS X system. The path is 'Desktop > New folder > document'. The list contains several files: 'Table\_Test1' (Microsoft Word Document), 'TerrorismInfographic' (Microsoft Edge PDF), 'Test1' (Text Document), 'Test2' (Text Document), 'Test3' (Text Document), 'Test4' (Text Document), 'UnlicensedMoneyLending' (Text Document), and 'Voyeurism' (Text Document). The 'Test1.txt' file is selected, indicated by a blue checkmark in the list.

## File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

The stylized representation shows a dashed blue border around a panel titled 'UPLOAD FILES (DRAG OR CLICK)'. Inside, there are three preview cards for files 'Test1.txt', 'Test2.txt', and 'Test3.txt'. Each card has a checked checkbox, a 'PREVIEW' button, and a red 'X' button. A vertical scroll bar is visible on the right side of the panel.

Name	Date modified	Type
Test1.txt	2/6/2025 4:48 pm	文本文档
Test2.txt	3/6/2025 9:27 am	文本文档
Test3.txt	6/6/2025 11:49 am	文本文档

# Preview & Selection

AI Summariser

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**Summarise Smarter. On Your Terms.**

Upload multiple documents, preview content, and summarise with your own custom templates.

**Summary Settings Panel**

**Choose Template:**

Use Template: — Select Template —

Create Custom Template

**File Upload Panel**

**UPLOAD FILES (DRAG OR CLICK)**

- Test1.txt PREVIEW X
- Test2.txt PREVIEW X
- Test3.txt PREVIEW X

**Preview: Test3.txt**

In recent years, climate change has accelerated due to increasing greenhouse gas emissions. Global temperatures have risen by an average of 1.2°C since pre-industrial times. Rising sea levels, extreme weather events, and melting polar ice caps are direct consequences of this phenomenon. Nations are working to meet the Paris Agreement targets, but progress remains uneven.

Renewable energy adoption has gained traction, particularly in Europe and parts of Asia. Wind and solar installations are expanding rapidly, reducing reliance on fossil fuels. Governments are offering subsidies and incentives to promote green technologies. However, developing countries face challenges due to limited infrastructure and financial constraints.

**GENERATE SUMMARY**

No summary generated yet.

Copy Download

AI Summariser

Home Templates API About Login/Signup

**Summarise Smarter. On Your Terms.**

Upload multiple documents, preview content, and summarise with your own custom templates.

**Summary Settings Panel**

**Choose Template:**

Use Template: — Select Template —

Create Custom Template

**File Upload Panel**

**UPLOAD FILES (DRAG OR CLICK)**

- Test3.txt PREVIEW X
- Test4.txt PREVIEW X
- Table\_Test1.docx PREVIEW X

**Preview: Table\_Test1.docx**

Germany and Japan are two of the world's leading industrial economies, known for their high-quality manufacturing sectors. Both countries have large urban populations and export-driven economic models focused on machinery, vehicles, and electronics.

Country	Total Population	Urban Population	Rural Population	GDP	Machinery Exports	Vehicle Exports
Germany	83 million	64 million	19 million	4.2 trillion USD	500 billion USD	400 billion USD
Japan	126 million	115 million	11 million	5.1 trillion USD	650 billion USD	700 billion USD

**GENERATE SUMMARY**

No summary generated yet.

Copy Download

# Preview & Selection

AI Summariser

Home Templates API About Login/Signup

Summarise Smarter. On Your Terms.

Upload multiple documents, preview content, and summarise with your own custom templates.

## Summary Settings Panel

Choose Template:

Use Template: — Select Template —

Create Custom Template

## File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

Test4.txt

PREVIEW



Table\_Test1.docx

PREVIEW



AdvisoryforNewHouseowners.pdf

PREVIEW



## Preview: AdvisoryforNewHouseowners.pdf

The preview shows a PDF document with the following content:

**SINGAPORE POLICE FORCE**  
SAFEGUARDING EVERY DAY

**CRIME ADVISORY FOR NEW HOUSEOWNERS**

Dear Residents

As you are renovating or moving into your new flats, Police would like to take this opportunity to share the following crime advisories.

- Secure your gate and windows with a shackled lock or a robust padlock at all times. Change all locks promptly if any of your keys are lost or stolen;
- Advise your contractors to avoid using a number lock to secure the main door as it is relatively easy to open. Use a closed-shackled or robust padlock instead.
- Arrange for the home appliances such as home entertainment system, television sets or expensive household items to be delivered after you have moved in. If this is not possible, storage of appliances and construction materials should be kept inside locked rooms in the unit;
- Consider installing Closed-Circuit Television (CCTV) cameras and security alarms; and
- Look out for any suspicious person(s) loitering outside your unit and notify the police immediately if you spot them.

If you have any information relating to a crime or wish to report suspicious person(s) loitering around the neighbourhood, please contact the nearest Neighbourhood Police Centre (NPC) or dial '999' if you require urgent Police assistance.

CRIME CONTROL DIVISION  
OPERATIONS DEPARTMENT  
SINGAPORE POLICE FORCE

## File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

Test1.txt

PREVIEW



Test2.txt

PREVIEW



Test3.txt

PREVIEW



# Choose Existing Template

**Summary Settings Panel**

**Choose Template:**

Use Template:

Create Custom

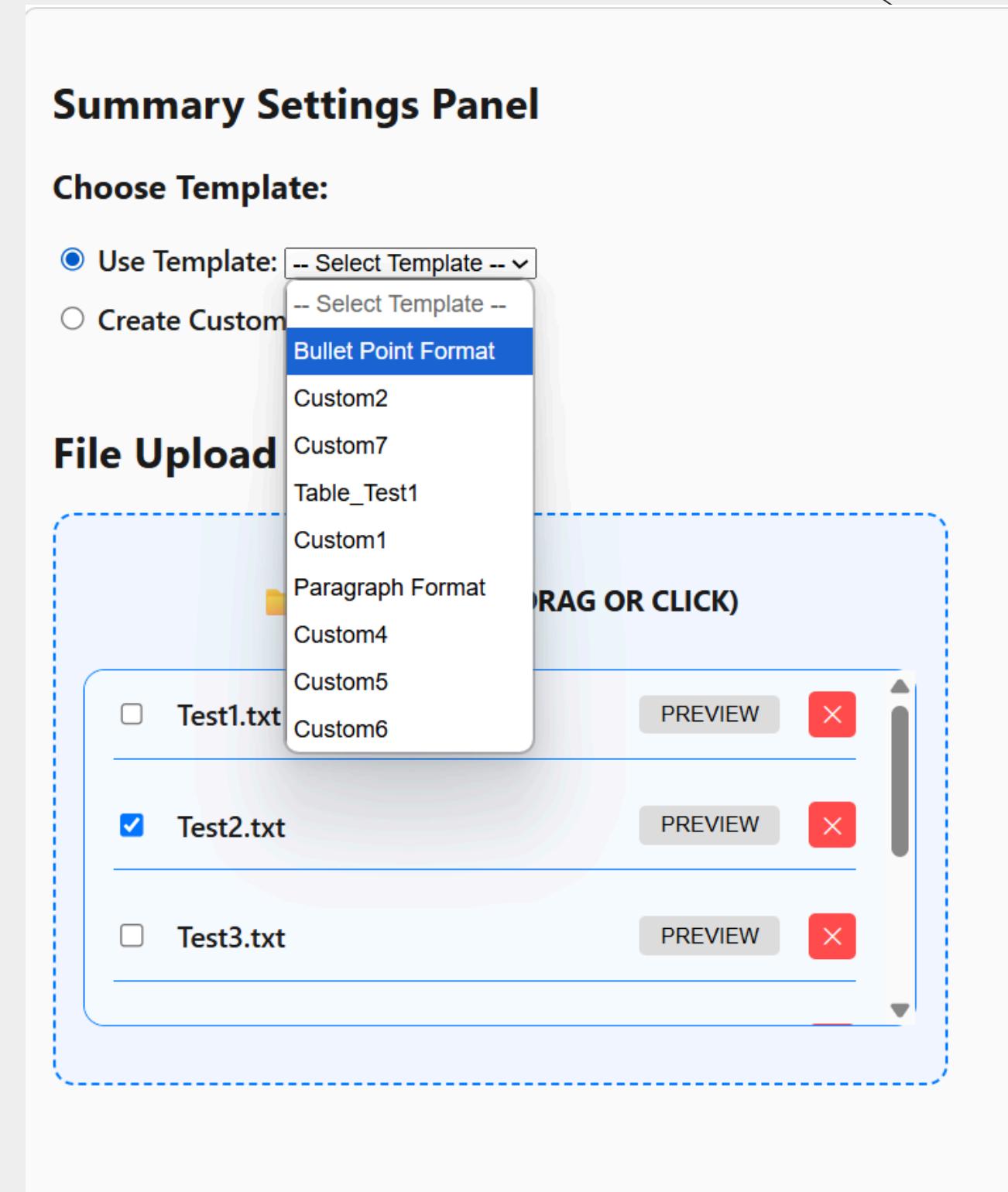
**File Upload**

(DRAG OR CLICK)

Test1.txt PREVIEW X

Test2.txt PREVIEW X

Test3.txt PREVIEW X



A screenshot of a user interface for choosing a template. At the top, it says "Summary Settings Panel" and "Choose Template:". There are two radio button options: "Use Template:" (which is selected) and "Create Custom". Below this is a "File Upload" section with a dashed blue box and a "(DRAG OR CLICK)" placeholder. Underneath are three file entries: "Test1.txt" (unchecked), "Test2.txt" (checked), and "Test3.txt" (unchecked). Each entry has a "PREVIEW" button and a red "X" button. A dropdown menu titled "Select Template" is open, listing several options: "Bullet Point Format" (selected and highlighted in blue), "Custom2", "Custom7", "Table\_Test1", "Custom1", "Paragraph Format", "Custom4", "Custom5", and "Custom6".

# Create Customised Template

### Summary Settings Panel

**Choose Template:**

Use Template:

Create Custom Template

### Custom Template Builder

Template Name: Report Summary

Overview: "Provide a brief summary of the scientific discovery."

+ Add Subsection | Remove Section

Key Contributors: "List the main scientists or inventors involved in this discovery."

+ Add Subsection | Remove Section

+ Add Section

Save Template

### File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

Test1.txt PREVIEW

Test2.txt PREVIEW

Test3.txt PREVIEW

### Summary Settings Panel

**Choose Template:**

Use Template:

Create Custom Template

### Custom Template Builder

Template Name: Report Summary

+ Add Subsection | Remove Section

Key Contributors: "List the main scientists or inventors involved in this discovery."

+ Add Subsection | Remove Section

+ Add Section

Save Template

### File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

Test1.txt PREVIEW

Test2.txt PREVIEW

Test3.txt PREVIEW

localhost:8080 says  
Template saved successfully

AI Summariser

Upload multiple documents, preview content, and summarise with your own custom templates.

### Summary Settings Panel

**Choose Template:**

Use Template:

Create Custom Template

### Custom Template Builder

Template Name: Report Summary

+ Add Subsection | Remove Section

Key Contributors: "List the main scientists or inventors involved in this discovery."

+ Add Subsection | Remove Section

+ Add Section

Save Template

### File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

Test1.txt PREVIEW

Test2.txt PREVIEW

Test3.txt PREVIEW

SUMMARISE DOCUMENTS WITH YOUR TEMPLATES.

Preview: AdvisoryforNewHouseowners.pdf

SINGAPORE POLICE FORCE SAFEGUARDING EVERY DAY

CRIME ADVISORY FOR NEW HOUSEOWNERS

Dear Residents

As you are renovating or moving into your new flats, Police would like to take this opportunity to share the following crime advisories.

- Secure your gate and windows with a shackled lock or a robust padlock at all times. Change all locks promptly if any of your keys are lost or stolen;
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CRIME CONTROL DIVISION OPERATIONS DEPARTMENT SINGAPORE POLICE FORCE

# Summary Generation

AI Summariser

Home Templates API About Login/Signup

## Summarise Smarter. On Your Terms.

Upload multiple documents, preview content, and summarise with your own custom templates.

### Summary Settings Panel

Choose Template:

Use Template: Custom6  Create Custom Template

### File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

- Test2.txt PREVIEW X
- Test3.txt PREVIEW X
- Test4.txt PREVIEW X

### Preview: Test3.txt

In recent years, climate change has accelerated due to increasing greenhouse gas emissions. Global temperatures have risen by an average of 1.2°C since pre-industrial times. Rising sea levels, extreme weather events, and melting polar ice caps are direct consequences of this phenomenon. Nations are working to meet the Paris Agreement targets, but progress remains uneven.

Renewable energy adoption has gained traction, particularly in Europe and parts of Asia. Wind and solar installations are expanding rapidly, reducing reliance on fossil fuels. Governments are offering subsidies and incentives to promote green technologies. However, developing countries face challenges due to limited infrastructure and financial constraints.

Generating summary...  
Please wait.

Copy Download

Summarise Smarter. On Your Terms.

Upload multiple documents, preview content, and summarise with your own custom templates.

### Summary Settings Panel

Choose Template:

Use Template: Custom6  Create Custom Template

### File Upload Panel

UPLOAD FILES (DRAG OR CLICK)

- Test2.txt PREVIEW X
- Test3.txt PREVIEW X
- Test4.txt PREVIEW X

### Preview: Test3.txt

In recent years, climate change has accelerated due to increasing greenhouse gas emissions. Global temperatures have risen by an average of 1.2°C since pre-industrial times. Rising sea levels, extreme weather events, and melting polar ice caps are direct consequences of this phenomenon. Nations are working to meet the Paris Agreement targets, but progress remains uneven.

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### GENERATE SUMMARY

#### Environmental Impact

The main issues discussed are the acceleration of climate change due to increasing greenhouse gas emissions, its consequences such as rising sea levels, extreme weather events, and melting polar ice caps, and the uneven progress in meeting the Paris Agreement targets.

Current responses or efforts include the adoption of renewable energy, particularly wind and solar, and the expansion of green technologies, as well as government subsidies and incentives to promote these technologies. However, developing countries face challenges in adopting these technologies due to limited infrastructure and financial constraints.

Regenerate Section

#### "Technology Developments"

AI is being used in various industries, including healthcare, finance, education, and retail, to improve efficiency and productivity. However, concerns about data privacy, job displacement, and ethical governance remain. Collaboration between academia and industry is necessary to ensure responsible innovation.

The challenges or concerns surrounding AI include data privacy, job displacement, and ethical governance. Governments and tech companies are debating AI regulation. Despite these concerns, AI adoption continues to accelerate in various sectors. The collaboration between academia and industry is crucial to address these challenges and ensure responsible innovation.

Regenerate Section

Copy Download

# Adjust by Section

GENERATE SUMMARY

## Environmental Impact

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[Regenerate Section](#)

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[make it into bullet point format](#)

[Submit](#) [Cancel](#)

[Copy](#)

[Download](#)

# Adjust by Section

GENERATE SUMMARY

## Environmental Impact

The main issues discussed are the acceleration of climate change due to increasing greenhouse gas emissions, its consequences such as rising sea levels, extreme weather events, and melting polar ice caps, and the uneven progress in meeting the Paris Agreement targets.

Current responses or efforts include the adoption of renewable energy, particularly wind and solar, and the expansion of green technologies, as well as government subsidies and incentives to promote these technologies. However, developing countries face challenges in adopting these technologies due to limited infrastructure and financial constraints.

Regenerate Section

## Technology Developments

AI is being used in various industries, including healthcare, finance, education, and more to improve efficiency and productivity. However, concerns about data privacy, job displacement, and ethical governance remain. Collaboration between academia and industry is necessary to ensure responsible innovation.

The challenges of consumers regarding AI include data privacy, job displacement, and ethical governance. Governments and tech companies are drafting AI regulations. Despite these challenges, AI adoption continues to accelerate.

### Adjusting summary...

Please wait.

Copy

Download

# Adjust by Section

GENERATE SUMMARY

## Environmental Impact

The main issues discussed are the acceleration of climate change due to increasing greenhouse gas emissions, its consequences such as rising sea levels, extreme weather events, and melting polar ice caps, and the uneven progress in meeting the Paris Agreement targets.

Current responses or efforts include the adoption of renewable energy, particularly wind and solar, and the expansion of green technologies, as well as government subsidies and incentives to promote these technologies. However, developing countries face challenges in adopting these technologies due to limited infrastructure and financial constraints.

Regenerate Section

## "Technology Developments"

### Original:

AI is being used in various industries, including healthcare, finance, education, and retail, to improve efficiency and productivity. However, concerns about data privacy, job displacement, and ethical governance remain. Collaboration between academia and industry is necessary to ensure responsible innovation.

The challenges or concerns surrounding AI include data privacy, job displacement, and ethical governance. Governments and tech companies are debating AI regulation. Despite these concerns, AI adoption continues to accelerate in various sectors. The collaboration between academia and industry is crucial to address these challenges and ensure responsible innovation.

Keep Original

Regenerate Section

### Updated:

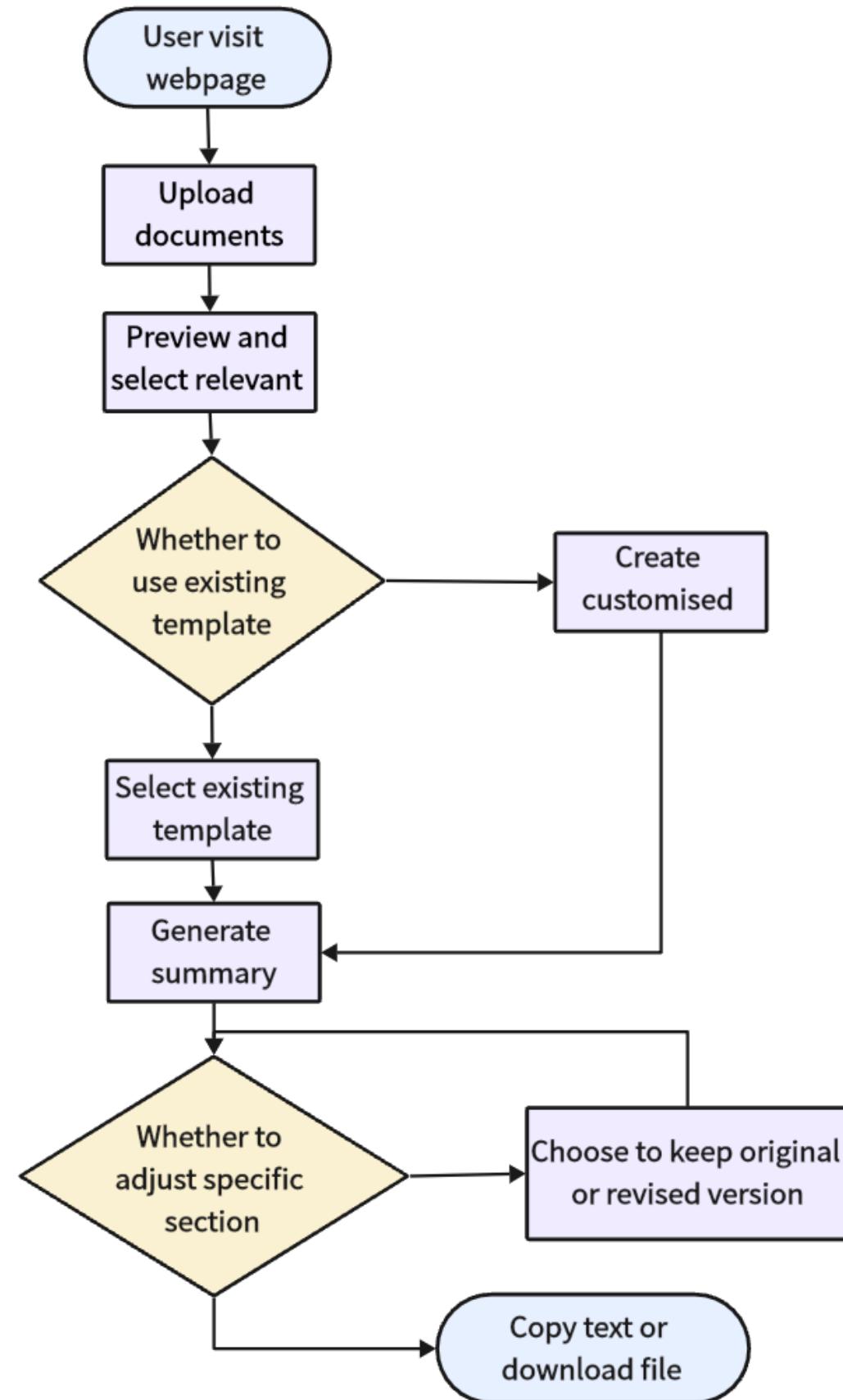
- AI is being used in various industries, including healthcare, finance, education, and retail, to improve efficiency and productivity.
- Concerns about data privacy, job displacement, and ethical governance remain.
- Collaboration between academia and industry is necessary to ensure responsible innovation.
- The challenges or concerns surrounding AI include:
  - Data privacy
  - Job displacement
  - Ethical governance
- Governments and tech companies are debating AI regulation.
- Despite these concerns, AI adoption continues to accelerate in various sectors.
- The collaboration between academia and industry is crucial to address these challenges and ensure responsible innovation.

Keep Updated

Copy

Download

# Overall User Flow



## Terminator

The terminator symbol represents the start or end point of the system.



## On-Page Reference

This symbol would contain a letter inside. It indicates that the flow continues on a matching symbol containing the same letter somewhere else on the same page.



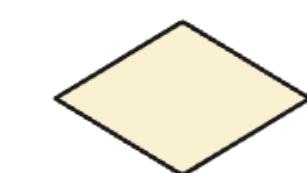
## Process

A box indicates some particular operation.



## Decision

A diamond represents a decision or branching point. Lines coming out from the diamond indicate different possible situations, leading to different sub-processes.

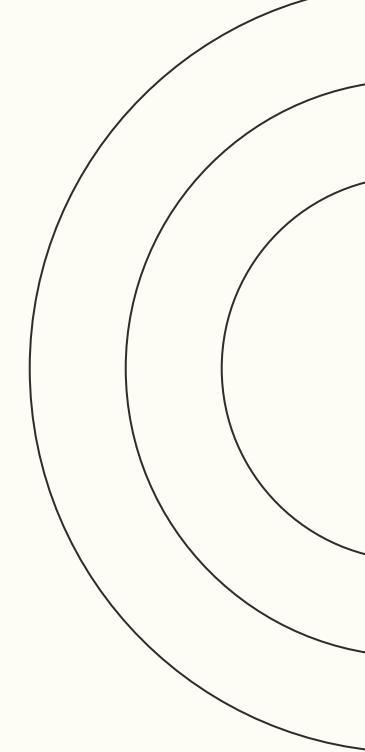




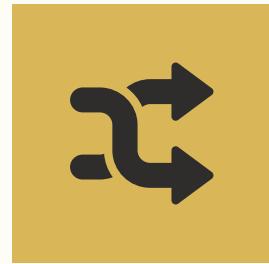
# 03

---

# Key Features



# Customisable Template



- Create personalised templates with control over:
  - Section headings (e.g., Executive Summary, Key Insights)
  - Paragraph styles (e.g., bullet points, numbered lists, narrative)
  - Section content (e.g., brief overview about AI, advantage of AI in healthcare)
- Per-Section Instruction Control:
  - Define unique summarisation instructions per section (e.g., “Summarise in 3 bullet points,” “Include key statistics”)
- Template-driven Summarisation
  - The selected template guides the LLM in formatting, tone, and content emphasis.
- Reusable Across Projects
  - Save custom templates for future reuse, enabling efficient and consistent summaries.

# Structured Document Parsing



- Support for Mixed Content & File Types
  - Accepts a variety of document formats: .txt, .docx, .pdf, etc.
  - Capable of handling text, tables, headings, and metadata commonly found in real-world use cases.
- Automatic Content Segmentation
  - Breaks down documents by paragraph and structural logic.
  - Automatically detects content types (e.g., narrative text vs. tabular data) and processes them accordingly.
- Preservation of Contextual Flow
  - Maintains the semantic order between segments—ensuring the summary remains logically consistent and coherent.
- Interactive Content Preview
  - Users can preview parsed content, confirm relevance, and select relevant ones for summarising.

# Table-to-Text Conversion



- Table Detection
  - While reading uploaded files (PDF, DOCX, etc.), tables are automatically detected using parsing tools.
- Convert Table into Markdown Format
  - Each row of the table is stored as a list of values (list of lists structure).
  - Rows are then joined using | delimiters to generate Markdown-style tables, which LLMs can easily understand.

## Preview: Table\_Test1.docx

Germany and Japan are two of the world's leading industrial economies, known for their high-quality manufacturing sectors. Both countries have large urban populations and export-driven economic models focused on machinery, vehicles, and electronics.

Country	Total Population	Urban Population	Rural Population	GDP	Machinery Exports	Vehicle Exports
Germany	83 million	64 million	19 million	4.2 trillion USD	500 billion USD	400 billion USD
Japan	126 million	115 million	11 million	5.1 trillion USD	650 billion USD	700 billion USD

Country	Total Population	Urban Population	Rural Population	GDP	Machinery Exports	Vehicle Exports
Germany	83 million	64 million	19 million	4.2 trillion USD	500 billion USD	400 billion USD
Japan	126 million	115 million	11 million	5.1 trillion USD	650 billion USD	700 billion USD

# Table-to-Text Conversion



- Few-Shot Prompting for Structured Output
  - Use few-shot examples to prompt the LLM to convert the Markdown table into a clean, structured JSON format.
  - This step ensures consistency and makes further processing easier.

```
[  
  {  
    "Label": "Germany",  
    "Total Population": "83 million",  
    "Urban Population": "64 million",  
    "Rural Population": "19 million",  
    "GDP": "4.2 trillion USD",  
    "Machinery Exports": "500 billion USD",  
    "Vehicle Exports": "400 billion USD"  
  },  
  {  
    "Label": "Japan",  
    "Total Population": "126 million",  
    "Urban Population": "115 million",  
    "Rural Population": "11 million",  
    "GDP": "5.1 trillion USD",  
    "Machinery Exports": "650 billion USD",  
    "Vehicle Exports": "700 billion USD"  
  }  
]
```

# Table-to-Text Conversion



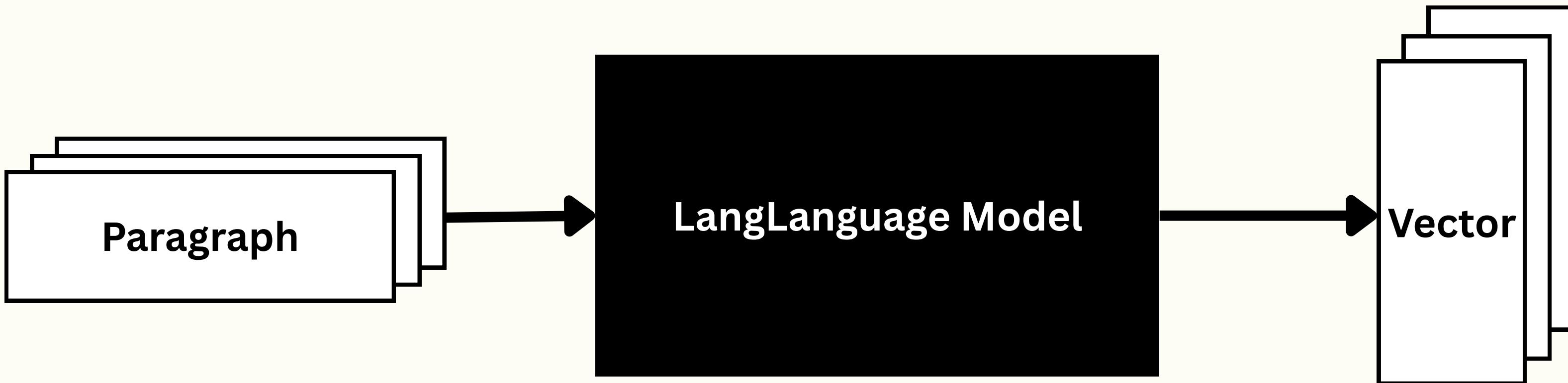
- Flatten for Embedding & Summarisation
  - JSON is then flattened into plain text with semantic structure preserved .
- This enables:
  - Effective use by LLMs during summarisation
  - Accurate indexing and retrieval via FAISS semantic search

```
Label: Germany; Total Population: 83 million; Urban Population: 64 million; Rural Population: 19 million; GDP: 4.2 trillion USD; Machinery Exports: 500 billion USD; Vehicle Exports: 400 billion USD Label: Japan; Total Population: 126 million; Urban Population: 115 million; Rural Population: 11 million; GDP: 5.1 trillion USD; Machinery Exports: 650 billion USD; Vehicle Exports: 700 billion USD
```

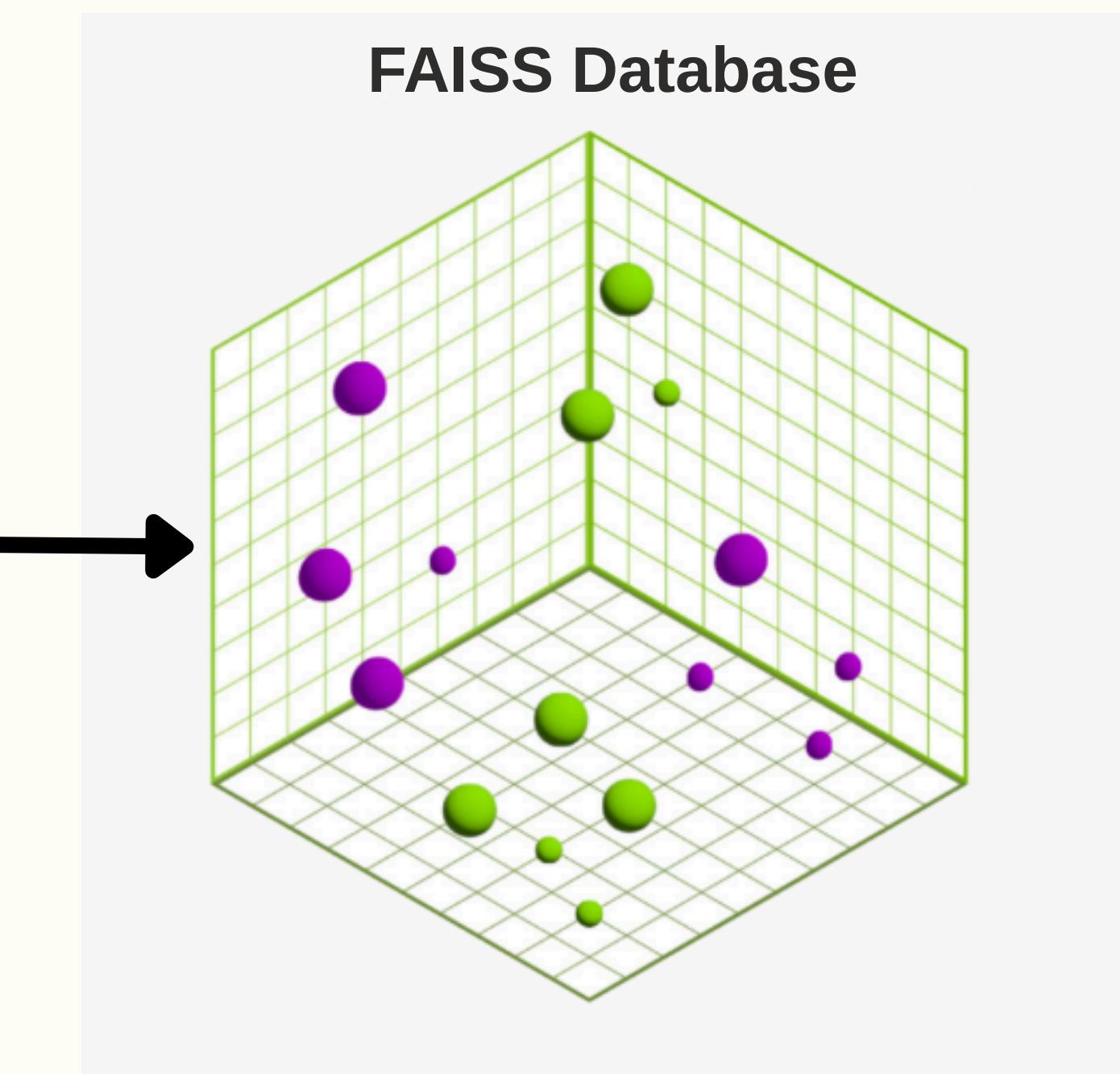
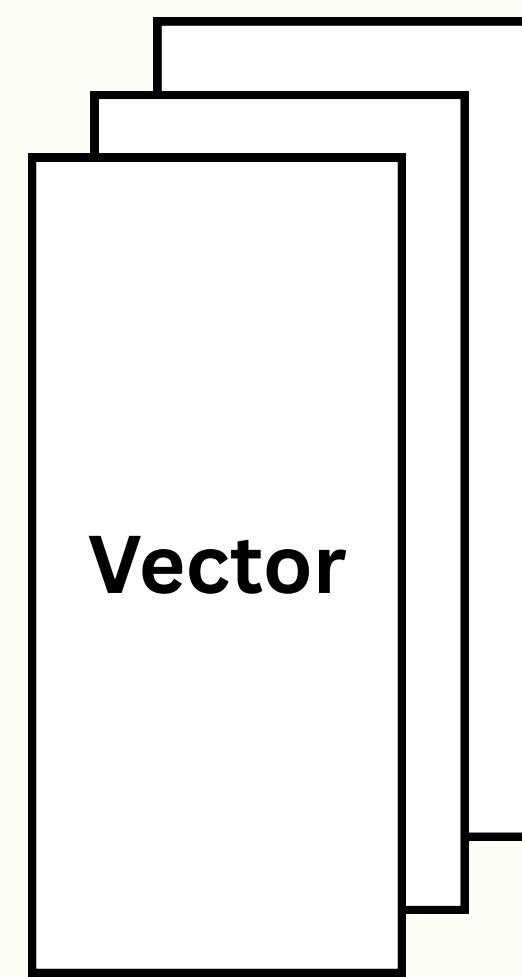
# Facebook Artificial Intelligence Similarity Search (FAISS)



- FAISS (Facebook AI Similarity Search) is a tool that helps us quickly find similar content — like finding the most relevant paragraph from many documents.
- An open source library developed by Facebook designed to quickly search and retrieve vectors that are similar to a given input vector from a database of vectors



# Facebook Artificial Intelligence Similarity Search (FAISS)



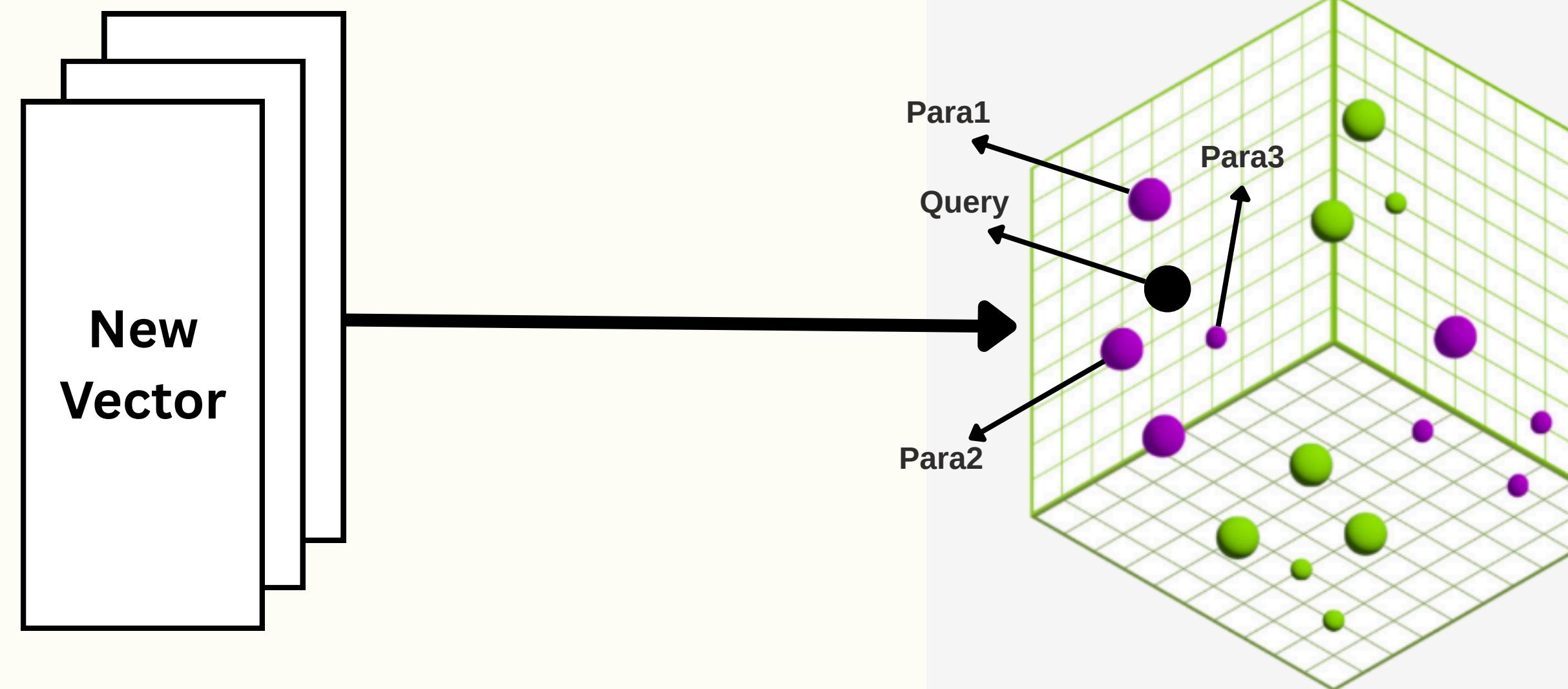
# Facebook Artificial Intelligence Similarity Search (FAISS)



"Economic Comparison"  
"Summarize the economic similarities and differences between Germany and Japan"



# Facebook Artificial Intelligence Similarity Search (FAISS)



# Few Shot Prompting



Few-shot prompting means we give the language model a few example inputs and outputs so it learns how to respond in a similar way — without requiring fine-tuning.

```
prompt = f"""You are a helpful summarization assistant.  
Your task is to generate section-wise summaries STRICTLY based on the input text. → Define role  
  
⚠️ IMPORTANT RULES:  
- DO NOT add any external knowledge or assumptions.  
- DO NOT invent or modify section titles or subsections.  
- ONLY use the content found in the provided passage.  
- Follow the format in the example strictly. → Define instructions  
  
{examples} → Provide examples  
  
---  
Now follow the same pattern generate summary.  
Only summarise the content strictly based on the provided passage below. Do not include external information or assumptions.  
== Format Specification ==  
"""
```

# Few Shot Prompting

```
== Example 1 ==

== Format Specification ==

Causes
Summarise: What led to this event? ➔

== Input Text ==
The American Civil War broke out in 1861 after decades of simmering tensions between Northern and Southern states over slavery, states' rights, and economic differences. The election of Abraham Lincoln, who opposed the expansion of slavery, led Southern states to secede and form the Confederacy, prompting war.

== Summary ==
The American Civil War was caused by long-standing tensions over slavery, states' rights, and economic differences, culminating in the secession of Southern states following Abraham Lincoln's election.

== End of Output ==

== Example 2 ==

== Format Specification ==

Significance
Summarise: Why is this event important? ➔

== Input Text ==
The moon landing in 1969 was a pivotal moment in human history, demonstrating the capabilities of space exploration and marking the United States' victory in the Space Race. Neil Armstrong became the first human to walk on the moon, which inspired generations of scientific and technological advancement.

== Summary ==
The 1969 moon landing symbolized a major achievement in space exploration and American innovation, inspiring future technological progress and demonstrating the potential of human ingenuity.

== End of Output ==

== Example 3 ==

== Format Specification ==

Benefits
Summarise: List the benefits of a plant-based diet. ➔

== Input Text ==
A plant-based diet emphasizes whole grains, vegetables, fruits, legumes, nuts, and seeds while minimizing or eliminating animal products. Research shows that it can reduce the risk of chronic illnesses such as heart disease, type 2 diabetes, and certain cancers. It may also promote weight loss, improve digestion, and contribute to environmental sustainability.

== Summary ==
A plant-based diet can reduce the risk of chronic diseases, promote healthy weight management, improve digestion, and support environmental sustainability.

== End of Output ==
```

Different topics and format specification

# Early Stopping



- A technique to tell the Language Model when to stop generating output by using a predefined stop token to prevent hallucinations.
- Our Stop Token: “`==== End of Output ===`”
- We append “`==== End of Output ===`” at the end of each example summary in few-shot prompts
- The model learns the pattern and add the stop token at the end of generated summary
- It stops generating once it sees the same token

```
==== Example 1 ====
==== Format Specification ====
Causes
Summarise: What led to this event?

==== Input Text ====
The American Civil War broke out in 1861 after decades of simmering tensions between Northern and Southern states over slavery, states' rights, and economic differences. The election of Abraham Lincoln, who opposed the expansion of slavery, led Southern states to secede and form the Confederacy, prompting war.

==== Summary ====
The American Civil War was caused by long-standing tensions over slavery, states' rights, and economic differences, culminating in the secession of Southern states following Abraham Lincoln's election.
==== End of Output ===

==== Example 2 ====
==== Format Specification ====
Significance
Summarise: Why is this event important?

==== Input Text ====
The moon landing in 1969 was a pivotal moment in human history, demonstrating the capabilities of space exploration and marking the United States' victory in the Space Race. Neil Armstrong became the first human to walk on the moon, which inspired generations of scientific and technological advancement.

==== Summary ====
The 1969 moon landing symbolized a major achievement in space exploration and American innovation, inspiring future technological progress and demonstrating the potential of human ingenuity.
==== End of Output ===

==== Example 3 ====
==== Format Specification ====
Benefits
Summarise: List the benefits of a plant-based diet.

==== Input Text ====
A plant-based diet emphasizes whole grains, vegetables, fruits, legumes, nuts, and seeds while minimizing or eliminating animal products. Research shows that it can reduce the risk of chronic illnesses such as heart disease, type 2 diabetes, and certain cancers. It may also promote weight loss, improve digestion, and contribute to environmental sustainability.

==== Summary ====
A plant-based diet can reduce the risk of chronic diseases, promote healthy weight management, improve digestion, and support environmental sustainability.
==== End of Output ===
```

**04**

---

# **Future Implementation**



# Future Implementation



## Live-Streamed Summarisation

Current:

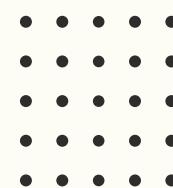
- Users wait until the entire summary is completed before viewing any content.

Future Goal:

- Stream the summary section-by-section or sentence-by-sentence as it is being generated by the model.

Why it matters:

- Faster feedback loop: Users can start reading or adjusting earlier.
- Improved UX: Reduces uncertainty, improves perceived performance.



## Smarter Table Interpretation

Current:

- Assumes headers only at top (row) or left (column).
- Fails on complex tables with irregular layouts.

Future Enhancement:

- Use LLM reasoning to detect:
  - Transposed tables
  - Contextual relationships (e.g., "Q1", "Total")

**Thanks for Your  
Attention!**

