



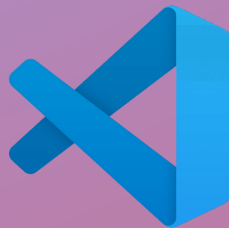
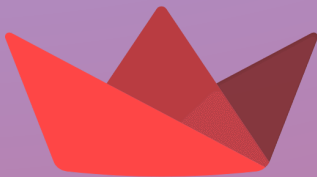
Gemini

# AI - Tutor



A GENERATIVE AI APPLICATION

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## **What AI - Tutor does???**

A LLM ( Google's Gemini ) powered application which takes study materials ( PDFs ) from user and uses the content in the PDF to create MCQs and conduct the same as a test and also provides the user the total marks obtained from the test and also assisting with right explanations to the answers.

## **Motivation for the project:**

Back in 2019 I was just entering my 12th standard and CBSE had announced that there will be a change in paper pattern, where each paper will consist of 20 MCQs. So at that time there no MCQ materials to prepare from :( the struggle was real solving tricky MCQs.

Even today MCQs are part of CBSE exam pattern, so I thought to use the power of LLM to create such an application to help students prepare for MCQs

# Front end

## MADE WITH STREAMLIT



### Home Page



Choose an option

- ☒ Upload Document
- ☐ Start Test

### Document Upload Page



#### Upload Your Material To Get Tested

Upload a PDF



Drag and drop file here  
Limit 200MB per file • PDF

Browse files

# Front end

## MADE WITH STREAMLIT



### Local Data Storage as JSON file

```
[
{
  "question": "What is federalism?",
  "information": "Federalism is a system of government in which the power is divided between a central authority and various constituent units of the country.",
  "options": [
    "A system of government where power is concentrated in a single authority.",
    "A system of government where power is divided between different levels of government.",
    "A system of government where power is shared between the government and the people.",
    "A system of government where power is based on the consent of the governed."
  ],
  "answer": "A system of government where power is divided between different levels of government."
},
{
  "question": "What is the difference between a unitary and a federal system of government?",
  "information": "In a unitary system, power is concentrated in a single authority, while in a federal system, power is divided between different levels of government.",
  "options": [
    "In a unitary system, power is shared between the government and the people, while in a federal system, power is concentrated in a single authority.",
    "In a unitary system, power is divided between different levels of government, while in a federal system, power is concentrated in a single authority.",
    "In a unitary system, the government is responsible for all aspects of governance, while in a federal system, the government is only responsible for the central government.",
    "In a unitary system, the people have no say in how the government is run, while in a federal system, the people have a say in how the government is run."
  ],
  "answer": "In a unitary system, power is concentrated in a single authority, while in a federal system, power is divided between different levels of government."
},
{
  "question": "What are the two main types of federations?",
  "information": "The two main types of federations are 'coming together' federations and 'holding together' federations.",
  "options": [
    "Unitary federations and federal federations",
    "Coming together federations and holding together federations",
    "Centralized federations and decentralized federations",
    "Democratic federations and authoritarian federations"
  ],
  "answer": "Coming together federations and holding together federations"
},
]
```

### Test Start Page

## AI Tutor

Choose an option

- ☐ Upload Document
- ☒ Start Test

Click the button below to start the test


Start Test

# Front end

## MADE WITH STREAMLIT



### Test Page

**AI Tutor** 

Score  
0 / 90

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**Question 1**

**What is federalism?**

---

A system of government where power is concentrated in a single authority.


A system of government where power is divided between different levels of government.

A system of government where power is shared between the government and the people.

A system of government where power is based on the consent of the governed.

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### Correct Answer

**AI Tutor** 

Score  
10 / 90

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**Question 1**

**What is federalism?**

---

A system of government where power is concentrated in a single authority.

A system of government where power is divided between different levels of government. (Correct answer)

A system of government where power is shared between the government and the people.

A system of government where power is based on the consent of the governed.

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# Front end

## MADE WITH STREAMLIT



### Wrong Answer

10 / 90

Question 2

What is the difference between a unitary and a federal system of government?

In a unitary system, power is shared between the government and the people, while in a federal system, power is concentrated in a single authority.

In a unitary system, power is divided between different levels of government, while in a federal system, power is concentrated in a single authority. (Incorrect answer)

In a unitary system, the government is responsible for all aspects of governance, while in a federal system, the government is only responsible for certain aspects of governance.

In a unitary system, the people have no say in how the government is run, while in a federal system, the people have a say in how the government is run.

Next

### Final Score & Restart

Quiz completed! Your score is: 30 / 90

Restart

## **Tech Stack Used:**

- Python
- LLM – Google's Gemini Pro
- Langchain
- Streamlit
- PyPDF2
- Github
- CSS