

Naan Mudhalvan Project Documentation

Project Title: EduTutor AI – Personalized Learning with IBM Granite

Team Details

- Team Leader: Suresh
- Team Members:
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Project Description

EduTutor AI leverages IBM Granite models (via Hugging Face) to build a personalized learning assistant.

It provides:

- Concept explainers
- Quiz generators
- And additional customizable learning tools

The project is deployed using Google Colab for ease of setup and GPU acceleration.

Pre-requisites

Before starting, ensure you are familiar with:

1. Gradio Framework → <https://www.gradio.app/guides/>
2. IBM Granite Models (Hugging Face) → <https://huggingface.co/ibm-granite>
3. Python Programming → <https://docs.python.org/3/>
4. Git & Version Control → <https://git-scm.com/docs/git>
5. Google Colab T4 GPU → <https://www.geeksforgeeks.org/python/how-to-use-gpu-in-google-colab/>

Project Workflow

Activity 1 – Exploring Naan Mudhalvan Smart Interz Portal

1. Open: <https://naanmudhalvan.smartinternz.com/>
2. Login → Go to Projects → Select EduTutor AI.
3. Access resources under Guided Project.
4. Open Workspace → Track project progress & upload Demo link.

Activity 2 – Choose an IBM Granite Model from Hugging Face

1. Go to <https://huggingface.co/> → Create account.
2. Search for IBM Granite Models.
3. For this project, use granite-3.2-2b-instruct (lightweight & fast).

Activity 3 – Running the Application in Google Colab

1. Open <https://colab.research.google.com/>.
2. Create a New Notebook → Rename as Health AI.
3. Change runtime → T4 GPU.
4. Install dependencies:

```
!pip install transformers torch gradio -q
```
5. Run the provided code →
<https://drive.google.com/file/d/1HV-VHnABR0OU93G3p3dL55U3h4K39w8S/view?usp=sharing>
6. Output → Model downloads & Gradio App launches.
7. Click on generated URL → Test your application.

Activity 4 – Upload Your Project to GitHub

1. Go to <https://github.com/> → Create account/sign in.
2. Create a new repository (e.g., IBM-Project).
3. Enable Add README.
4. Download your Colab code → Save as .py.
5. Upload the file to GitHub → Commit changes.

Final Deliverables

- GitHub Repository: <https://github.com/mgc7sureshe23-tech/Edututor.git>
- Live Demo: <https://4fed0a39ea83af04dc.gradio.live/>
- Working Gradio Web App link from Colab
- Source Code (.py) uploaded to GitHub
- Documentation (this file)