

# Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation: Ministry of Commerce and Industries

PS Code: SIH1385

Problem Statement Title: Developing a software that can translate texts from one language to other regional languages

Team Name: Binary Brains

Team Leader Name: Shaik Ishak

Institute Code (AISHE): C-17965

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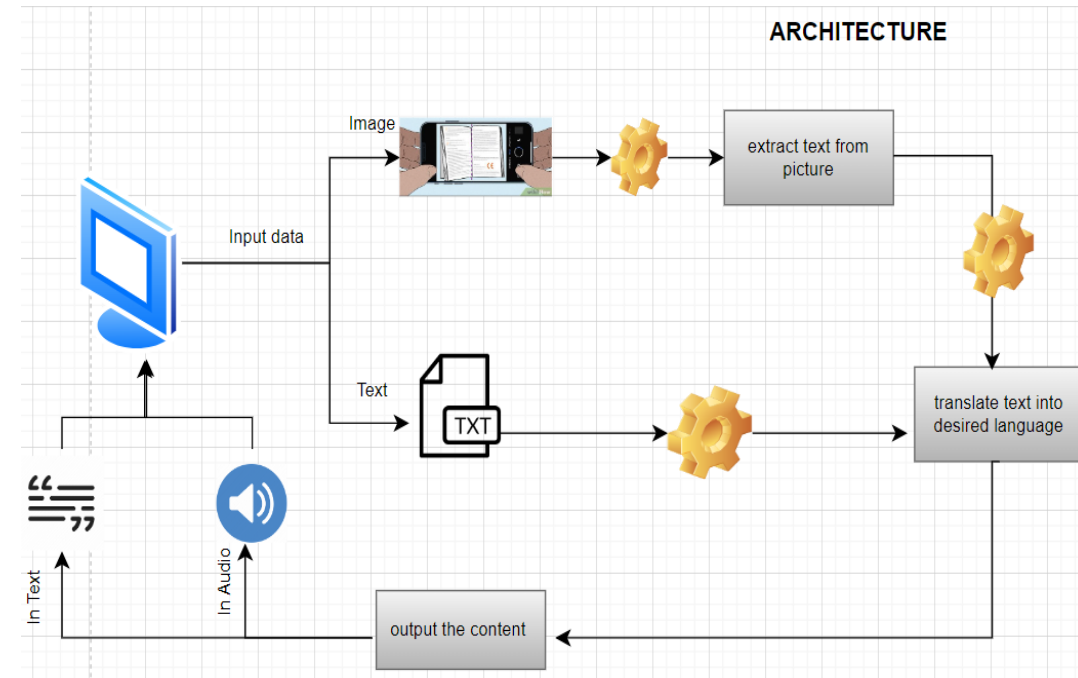
Institute Name: Vignan's Institute of Information Technology

Theme Name: Smart Education

# Idea/Approach Details

## Describe your idea/Solution/Prototype here:

- ❖ User uploads and image or text in a UI provided and select the language to be translated into.
- ❖ For image, the text is extracted by using OCR trained model.
- ❖ Language of the text extracted is detected by SpaCy / Googletrans package.
- ❖ The extracted text is now translated into user specified language.
- ❖ The translated text then displayed to the user in audio format and in text format.



## Describe your Technology stack here:

- ❖ Deep learning
- ❖ Django, HTML, CSS, JS
- ❖ Tesseract-ocr / Open-CV
- ❖ SpaCy / googletrans

# Idea/Approach Details

## Use Cases

- ❖ Enhances accessibility and communication across languages.
- ❖ Supports education, travel, and business interactions.
- ❖ Fosters cultural exchange and inclusivity.
- ❖ Saves time and costs in translation services.
- ❖ Enables research, content localization, and international relations.
- ❖ Can provide translations of course materials, lectures, and textbooks in multiple languages.

## Dependencies / Show stopper here

- ❖ Improve text recognition and translation accuracy with advanced algorithms.
- ❖ Add support for a variety of languages and dialects.
- ❖ Ensure recognition of complex fonts and scripts.
- ❖ Design an intuitive user interface.
- ❖ Incorporate context-aware translation capabilities.
- ❖ Allow users to customize language preferences.

# Team Member Details

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**Team Leader Name: Shaik Ishak**

Branch: Btech

Stream: CSE

Year: IV

**Team Member 1 Name: Sabbi Mohitha Swarna Vyshnavi**

Branch: Btech

Stream: CSE

Year: IV

**Team Member 2 Name: Revalla Vasu**

Branch: Btech

Stream: CSE

Year: IV

**Team Member 3 Name: Raja Bandi**

Branch: Btech

Stream: CSE

Year: IV

**Team Member 4 Name: Lokapal Sanapala**

Branch: Btech

Stream: CSE

Year: IV

**Team Member 5 Name: Srinivas Dadi**

Branch: Btech

Stream: CSE

Year: IV