

PROJECT TOPIC

‘iDCipher’

Project Group Members:

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Project Mentor:

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About the Project:

iDCipher stands for ‘*Image Decipher*’. In other words, it is an application that will be performing two functions. One of them will be to detect the language of the text passed as the input by the user and, its other functionality will be that it will extract the text in any language from an image passed as input or the text, words or phrases entered by the user and then convert it into any desired language of the world.

For the purpose, we will be using technologies such as *Python* and *Tkinter* (GUI for Python), and various APIs such as Google Translate API, Speech Detection API and Google Language Detect API. Here, API stands for *Application Programming Interface*. It acts as an intermediate between two applications or software. Google API is developed by Google to allow communications with their servers and use their API keys to develop projects.

Python offers multiple options for developing a GUI. Out of all the GUI methods, *Tkinter* is the most commonly used method. Python with *Tkinter* outputs the fastest and easiest way to create GUI applications.

Motivation:

On the internet, nowadays we can see a lot of projects on Speech Recognitions, Speech to text, text to speech, etc. but here in this project we will be building something more advance than that. Let us assume a scenario, we are travelling to Malaysia and we don’t know how to speak Malay or we are in any other country and we don’t know their native language, then we can use this tool to overcome the problem. We can translate between all those languages which are present in google translator.

Project Planning:

Phases	February	March	April
Goal Identification	01 st – 08 th		
Designing	10 th – 26 th		
Learning Language		01 st – 15 th	
Implementation and coding		01 st – 31 st	01 st – 10 th
Testing			05 th - 14 th

Tools required:

➤ **Hardware Requirements:**

- PC / Laptop
- Minimum RAM required 4 GB
- Processor & Core – intel core i3 7th gen or higher
- Windows 10 / Ubuntu / Mac

➤ **Software Requirements:**

- Jupyter Notebook (Anaconda Navigator) / Google Colab / Any Python editor
- Git
- GitHub