






# Airport Announcement Software

 Subjects	Projects
 Date	@September 15, 2021
 AI summary	The Airport Announcement Software automates flight detail announcements at airports, improving efficiency and reducing errors associated with the manual system. It is a Python-based project that utilizes a database for flight information and generates audio announcements in English and Hindi using the Google Text-to-Speech library. Key features include user registration, login, and audio announcement generation, making it a reliable solution for airport staff.

## Introduction:

- The Airport Announcement Software is a project designed to automate the manual system of announcing flight details at airports.
- The software aims to provide a user-friendly interface for airport staff to generate audio announcements for flights, reducing the workload and increasing efficiency.

## Problem Statement:

- The current manual system of announcing flight details is time-consuming and prone to errors.
- The airport staff have to manually check the flight schedules and make announcements, which can lead to delays and miscommunication.

## Proposed Solution:

- The Airport Announcement Software is a Python-based project that uses a database to store flight information.
- The software generates audio announcements for flights using the Google Text-to-Speech (gTTS) library.
- The announcements are generated in both English and Hindi.

## Tools and Technologies Used:

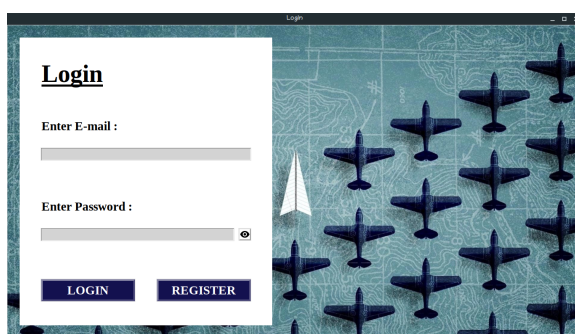
- Programming Language: Python

- Python Libraries:
  - Tkinter (for GUI)
  - OpenPyXL (for Excel file handling)
  - gTTS (for text-to-speech conversion)
  - PyDub (for audio processing)
  - Pandas (for data manipulation)
  - MySQL Connector (for database connectivity)
- Database: MySQL
- Web Server: XAMPP

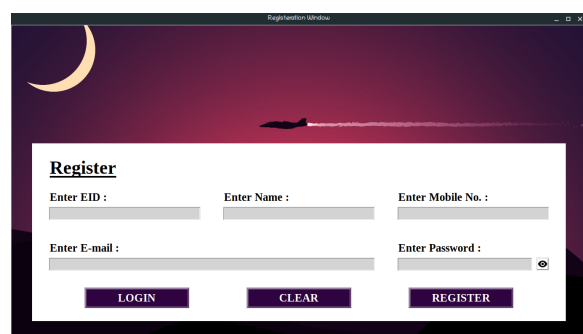
## Functional Requirements:

- User Registration: Airport staff can register themselves with a unique ID and password.
- Login: Registered users can log in to the system using their ID and password.
- Flight Information: The system stores flight information, including flight number, destination, gate number, and delay time.
- Audio Announcement: The system generates audio announcements for flights in both English and Hindi.
- Logout: Users can log out of the system.

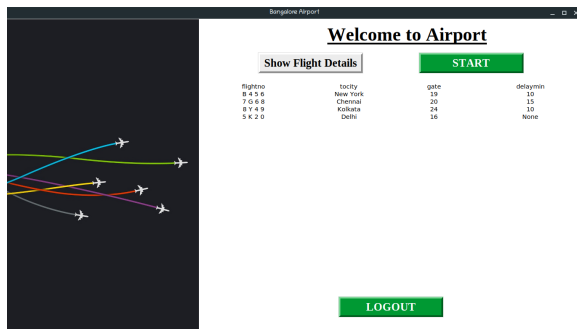
## Screenshots:



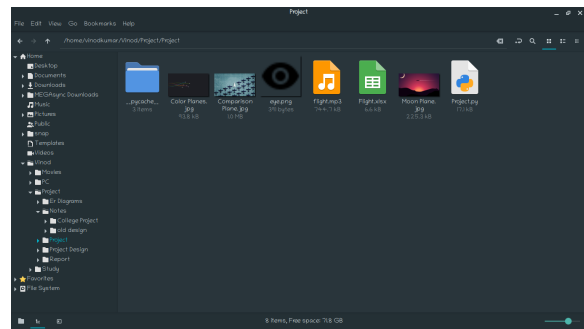
Login Page



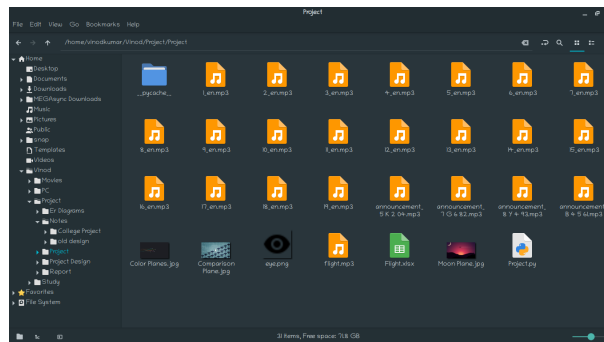
Register Page



Home Page



Folder Before Audio Generation



Folder After Audio Generation

## Conclusion:

The Airport Announcement Software is a user-friendly and efficient system that automates the manual process of announcing flight details at airports. The system meets the requirements and provides a reliable solution for airport staff.