Project Documentation: "My College Tour"

1. Introduction

"My College Tour" is a web application developed in the domain of Edutech. It aims to assist students and visitors in navigating college campuses efficiently. The core functionality revolves around creating a virtual representation of college layouts and training a chatbot to provide navigation guidance within the campus.

2. Key Features

a. College Layout Creation:

- Institutions can log in to the application and add their college layout information.
- This includes specifying location names and the directional orientation (left, right, back, front) of each location.
- The layout information is saved and converted into the `intent.json` format.

b. Training with PyTorch Algorithm:

- The `intent.json` file containing the layout information is used to train the chatbot.
- PyTorch algorithm is employed for training the chatbot model.

c. Navigation Assistance:

- Users access the web application and initiate a tour.
- A chatbot interface guides the user through the navigation process within the college campus.
- The chatbot prompts the user for the institution name, current location, and desired destination.
- Based on the input, the chatbot provides step-by-step directions to reach the designated location.

3. User Flow

a. Institution Login:

- Institutions log in to the web application.
- They input and save their college layout information.

b. User Interaction:

- Users access the application and click on the "Go on Tour" button.
- The chatbot interface opens, initiating the navigation process.

c. Chatbot Interaction:

- The chatbot asks the user to specify the institution they belong to.
- After receiving input, the chatbot prompts for the user's current location.
- The user provides the current location information.
- The chatbot then asks for the destination location.
- Based on the provided information, the chatbot calculates and provides navigation instructions.

4. Technologies Used

Frontend:

- HTML, CSS, JavaScript

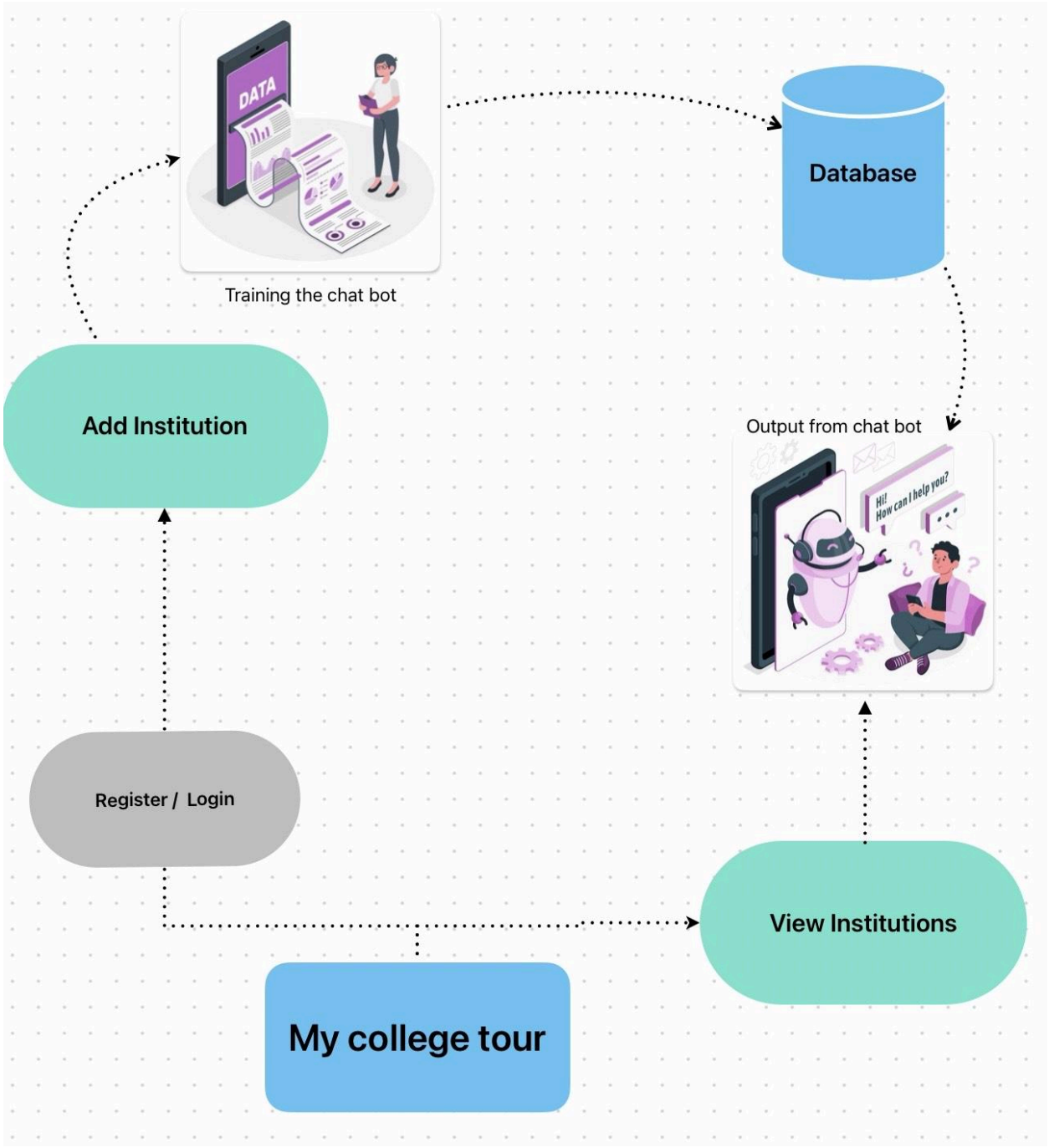
Backend:

- Python
- PyTorch for machine learning
- Web framework Flask

Database:

- Firebase Database system

5. Architecture/Work-Flow



6. Future Enhancements

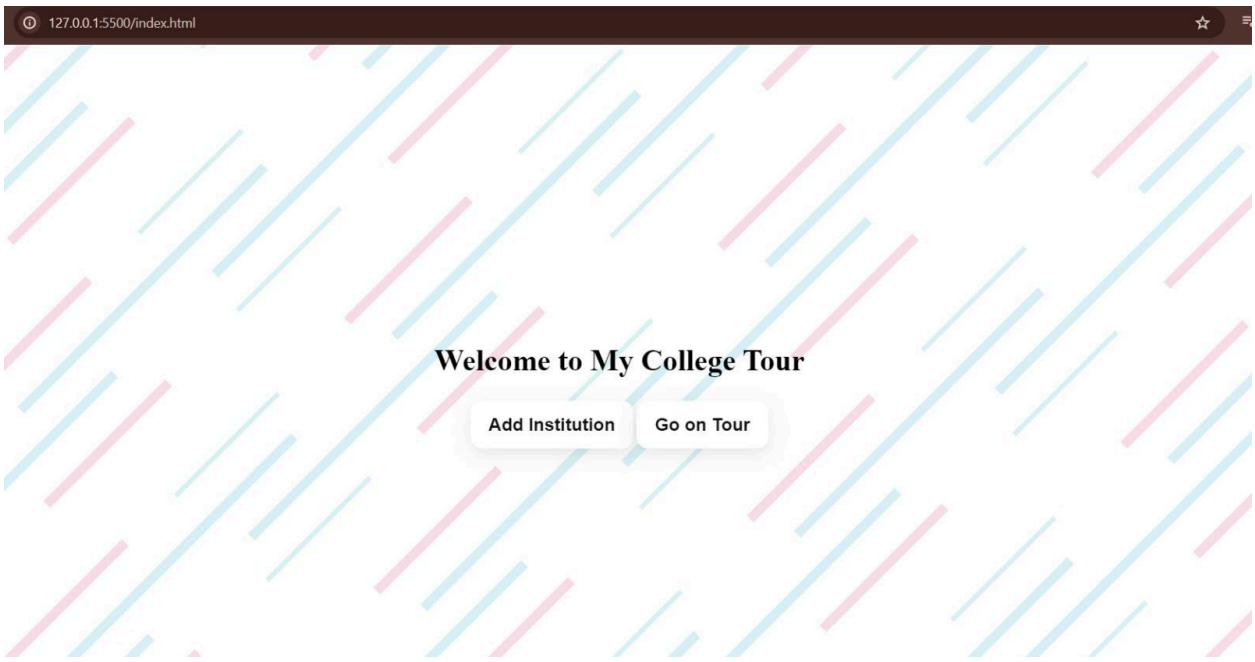
- Integration of real-time location tracking for more accurate navigation.
- Adding support for multiple languages in the chatbot interface.
- Implementing a mobile application version for enhanced accessibility.

7. Conclusion

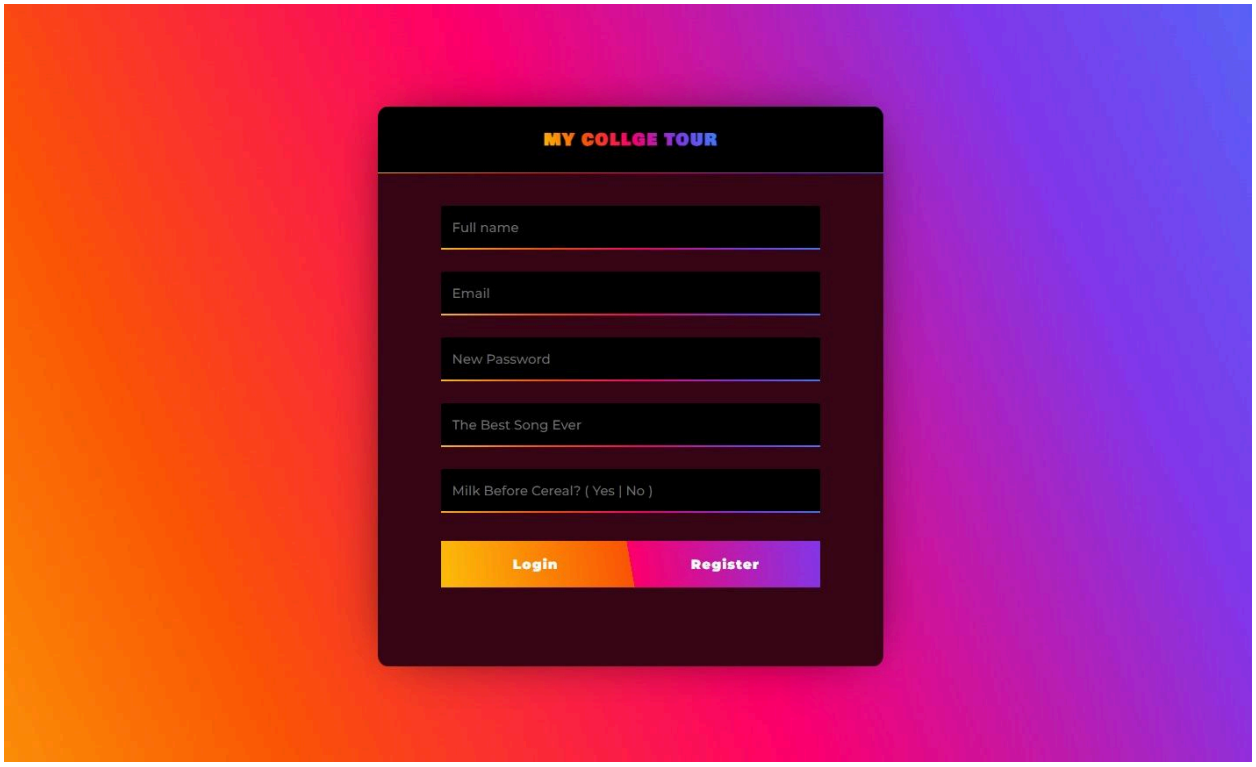
"My College Tour" provides a user-friendly solution for navigating college campuses effectively. By combining college layout visualization with chatbot assistance, the application offers a seamless experience for students and visitors alike. With ongoing development and enhancements, it aims to become an indispensable tool in the domain of educational technology.

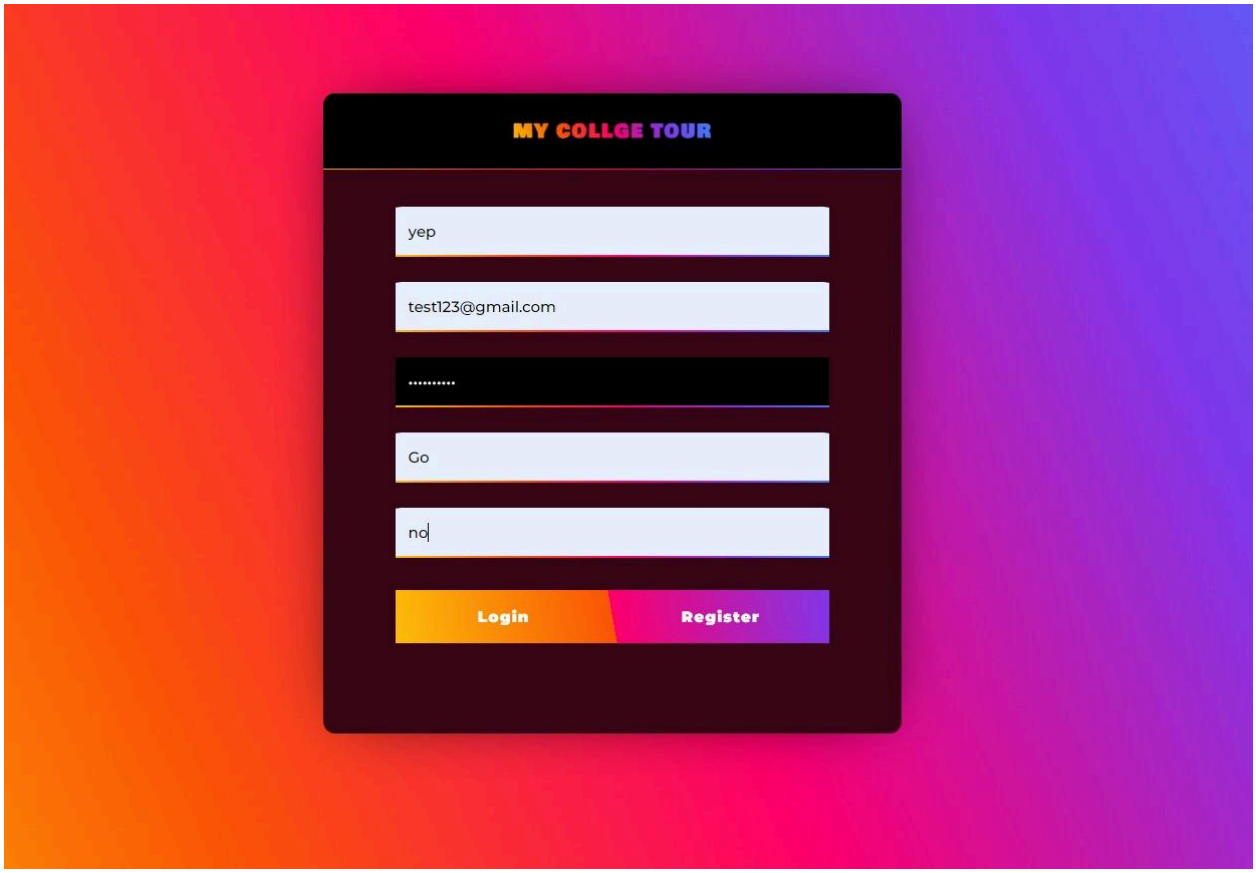
8. Screen Interface

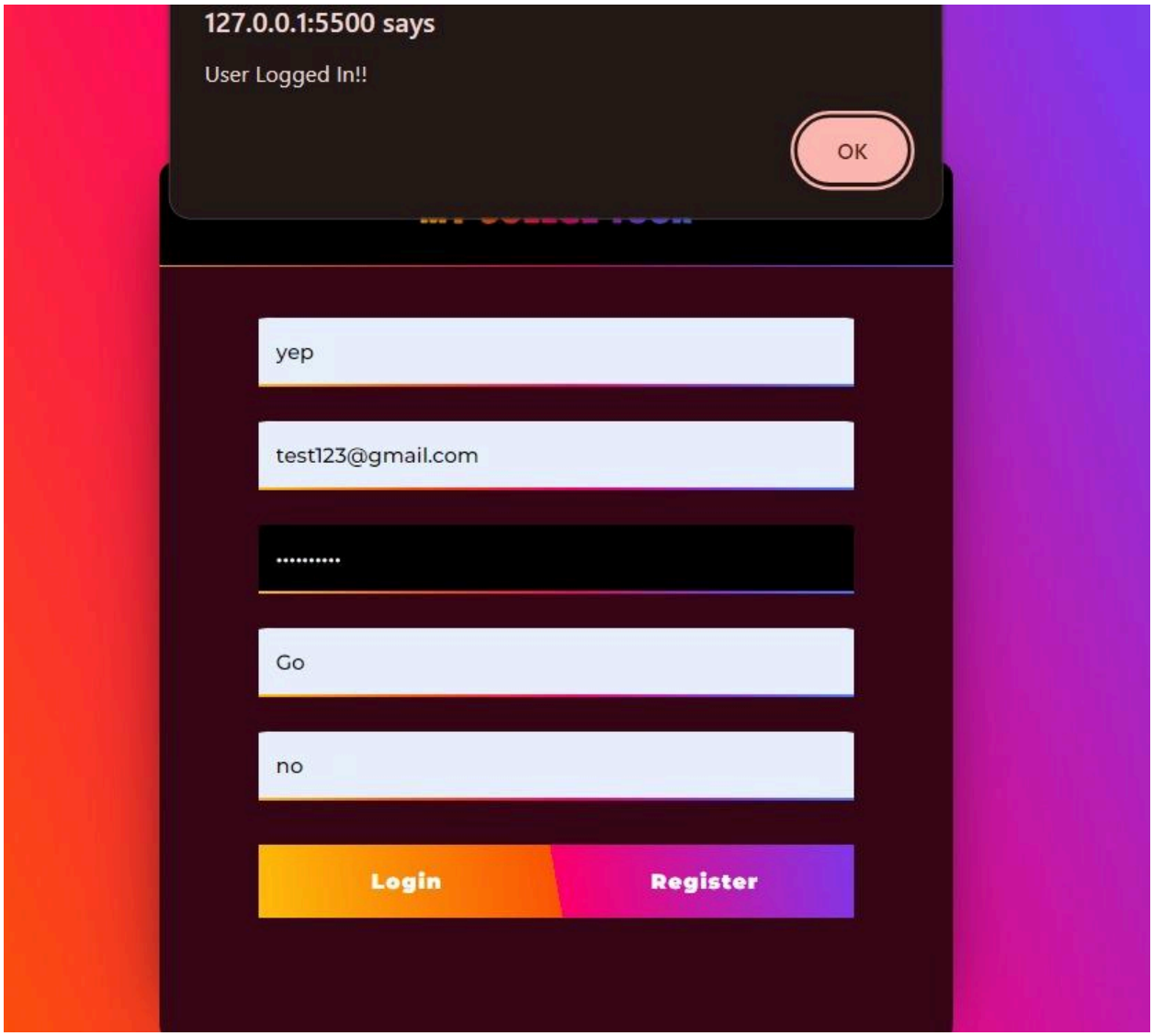
a. Homepage



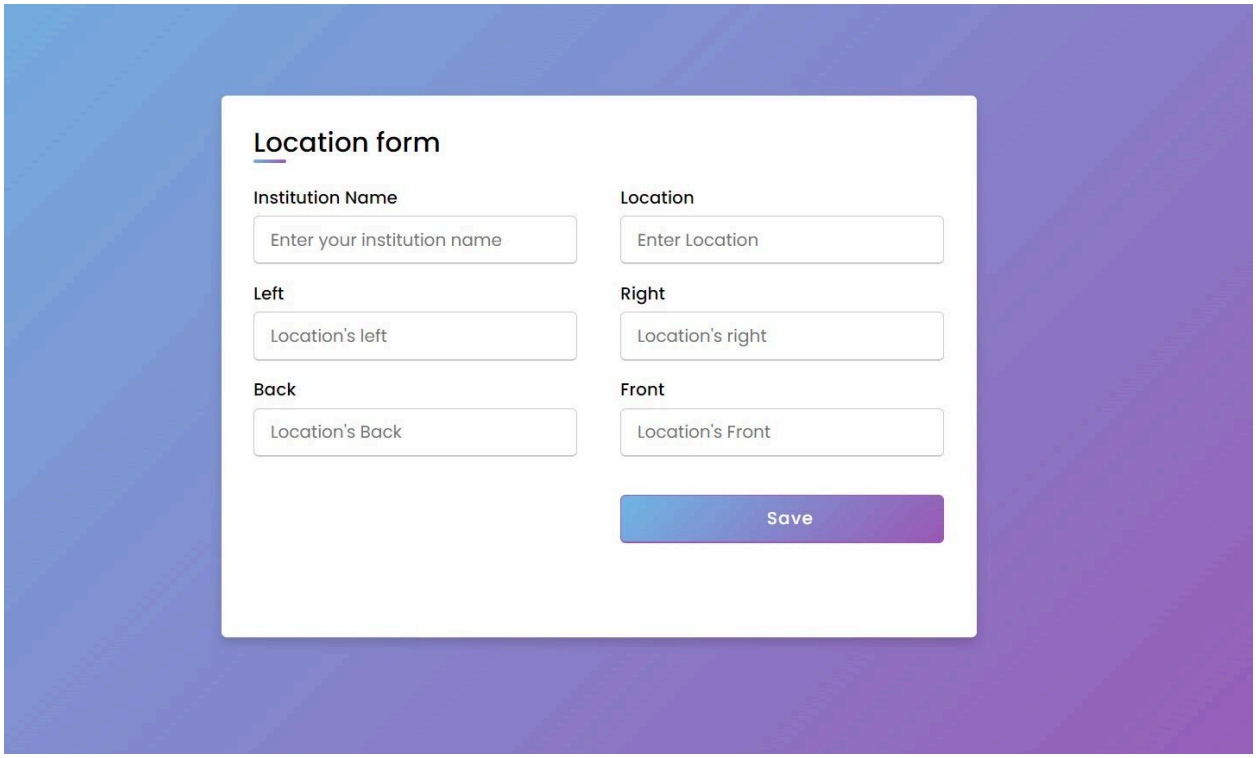
b. Register and Login Page


MY COLLGE TOUR
Full name
Email
New Password
The Best Song Ever
Milk Before Cereal? (Yes | No)
Login
Register


MY COLLGE TOUR
yep
test123@gmail.com
Go
no
Login
Register



c. **Location Detail By Institution Page**



d. Chat Bot Navigation Page