Project Title: Help Desk Management System

1. Introduction

A Help Desk Management System is a tool that allows users to raise support tickets and helps administrators manage and respond to those tickets effectively. In this project, we have developed a simple web-based help desk system using Python (Flask framework) and SQLite for backend data storage. The system is useful for managing technical queries or issues raised by users in a structured way.

---

2. Objective:

- To develop a simple and intuitive support ticketing system.

- To allow users to submit technical issues via a web form.

- To enable the admin to view, manage, and close support tickets.

- To implement a ticket status tracking feature (Open/Closed).

---

3. Tools and Technologies Used:

- **Programming Language:** Python 3
- **Framework:** Flask
- **Database:** SQLite
- **Frontend:** HTML, CSS, Bootstrap
- **IDE Used:** VS Code / Jupyter Lab / PyCharm

---

4. System Description

This Help Desk Management System includes the following features:

- **A ticket submission form for users.**

- **A responsive user interface using Bootstrap.**

- **Admin interface to view and close tickets.**

- **Tickets stored in a SQLite database with a status field (Open/Closed).**

- **Basic analytics like ticket count and filtering.**

---

5. Steps Followed in the Project:

Step 1: Environment Setup

Installed Flask and created the basic project structure with templates and static folders.

Step 2: Designed User Interface

Developed two main pages:

- **User Page: Allows users to enter their name, email, and issue description.**

- **Admin Page: Displays submitted tickets in tabular format with the option to close them.**

Step 3: Created Backend Logic

- **Used Flask routes for different pages (/, /submit, /admin, /close_ticket/<id>).**

- **Connected to SQLite and created a table tickets with fields like id, name, email, issue, and status.**
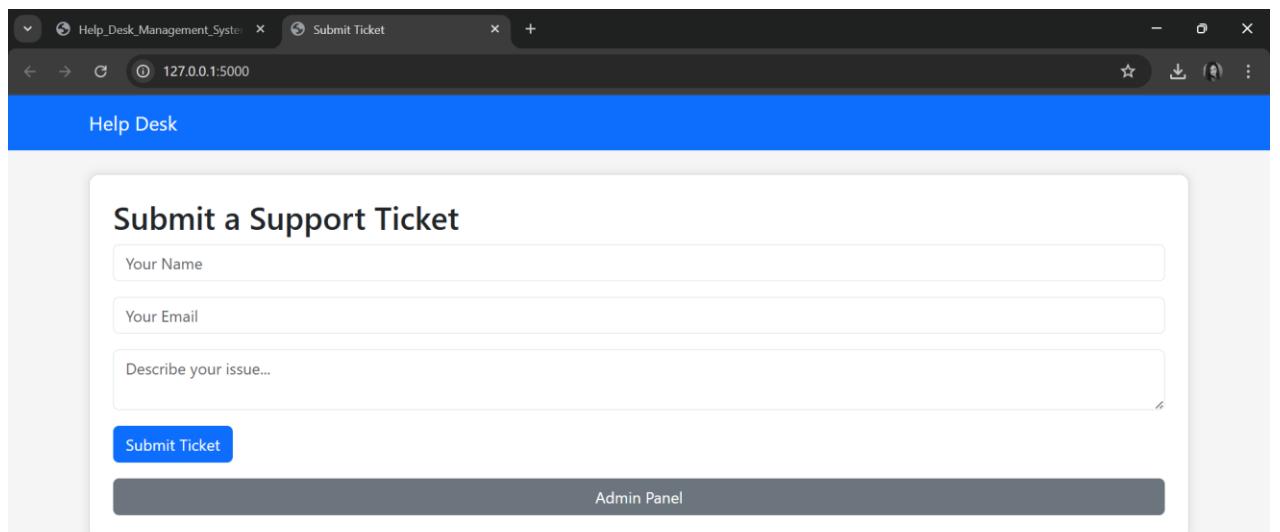
Step 4: Database Integration

- **Used SQLite commands to insert, fetch, and update ticket data.**

- **Default status for a ticket is "Open". Admin can change it to "Closed".**

Step 5: Applied Styling

- **Used Bootstrap and custom CSS to enhance the appearance.**

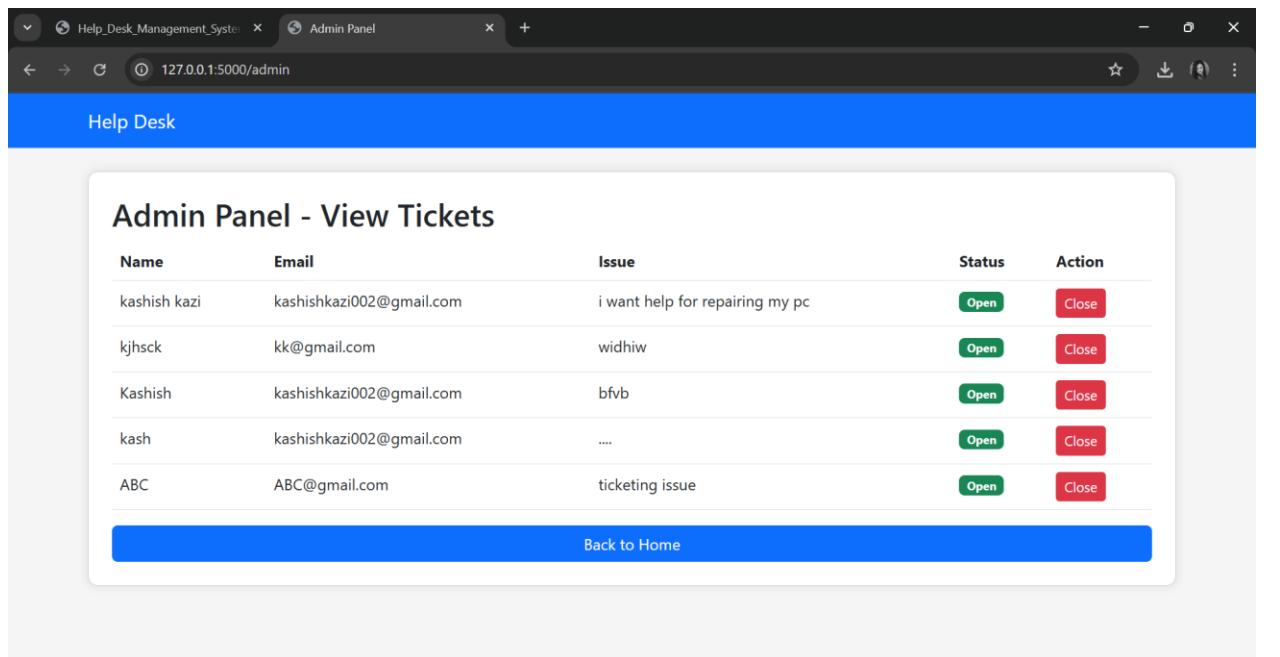- **Used badges and buttons for ticket status and actions.**

---

6. Screenshots:

1. **User Ticket Submission Form:**

2. **Admin pannel:**

7. Conclusion :

 The Help Desk Management System simplifies the support process. - Flask and SQLite combination made the system light and fast. - Admin can manage tickets efficiently through the web interface. - Bootstrap ensured responsiveness across devices.

---

8. Future Scope :

Add authentication for admin login. - Send email notifications for ticket submission and resolution. - Integrate with a chatbot or AI system for auto-responses. - Export tickets as CSV or Excel reports

---

9. References :

-Flask Documentation: https://flask.palletsprojects.com

- Bootstrap Framework: https://getbootstrap.com

- SQLite Docs: https://sqlite.org