

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).
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3. Tools and Technologies Used:

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

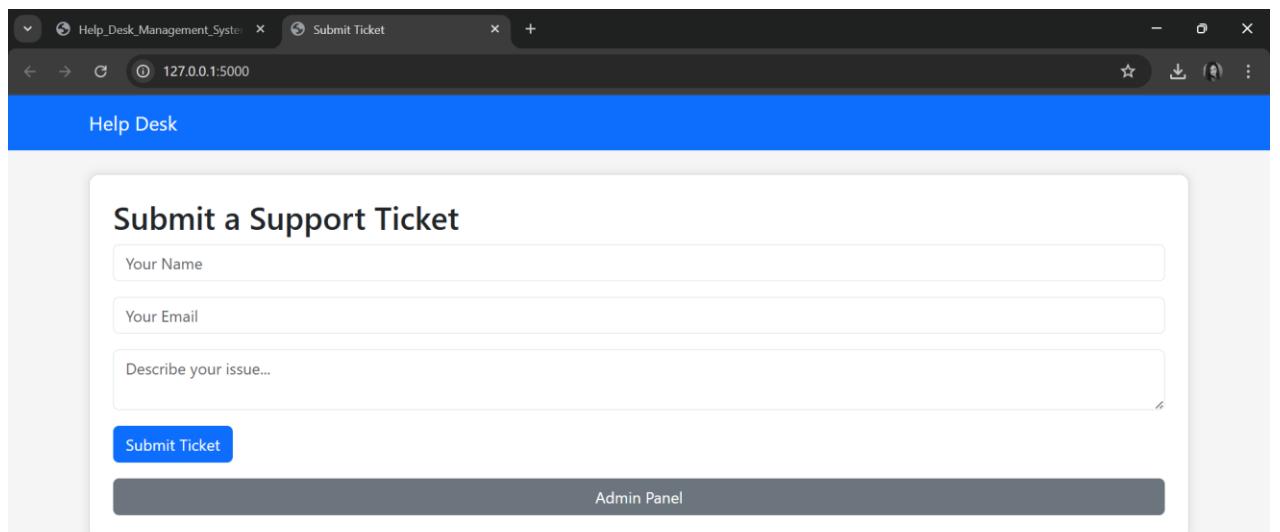
- Used SQLite commands to insert, fetch, and update ticket data.
- Default status for a ticket is "Open". Admin can change it to "Closed".

Step 5: Applied Styling

- Used Bootstrap and custom CSS to enhance the appearance.
 - Used badges and buttons for ticket status and actions.
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6. Screenshots:

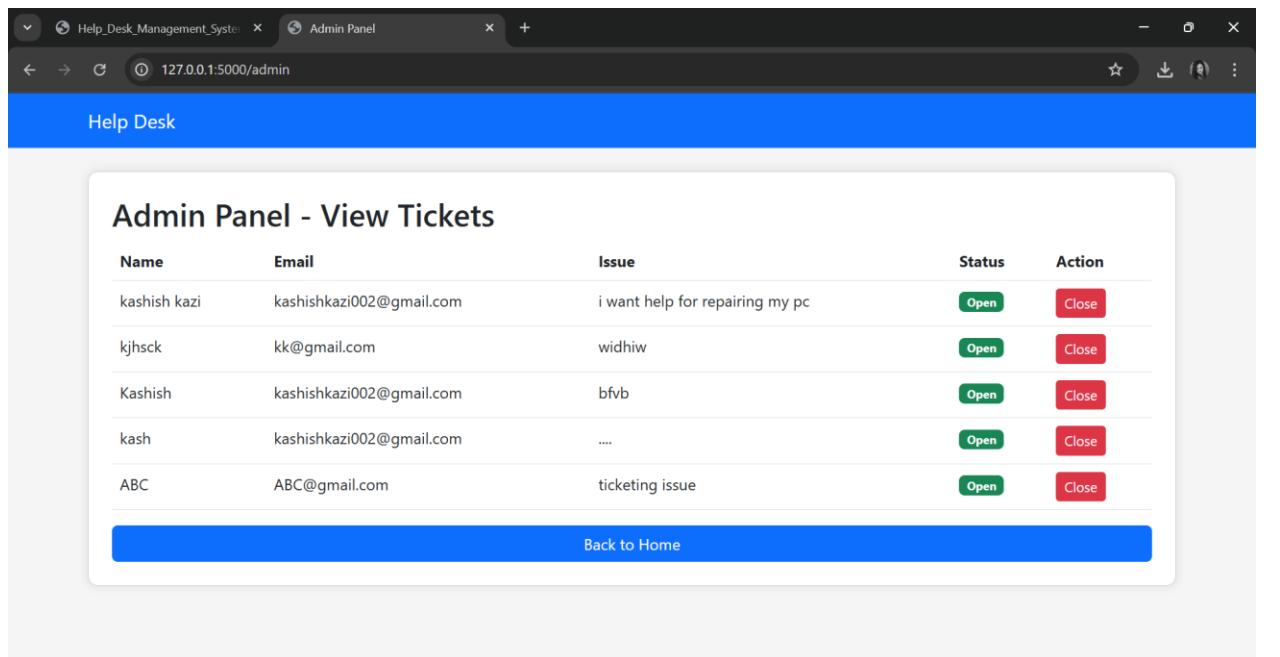
1. User Ticket Submission Form:



A screenshot of a web browser window titled "Submit Ticket" at "127.0.0.1:5000". The page has a blue header bar with the text "Help Desk". Below it is a form titled "Submit a Support Ticket" with three input fields: "Your Name", "Your Email", and "Describe your issue...". A blue "Submit Ticket" button is at the bottom left, and a grey "Admin Panel" button is at the bottom right.



2. Admin panel:



A screenshot of a web browser window titled "Admin Panel" at "127.0.0.1:5000/admin". The page has a blue header bar with the text "Help Desk". Below it is a table titled "Admin Panel - View Tickets" showing five ticket entries. The columns are "Name", "Email", "Issue", "Status", and "Action". Each row contains a "Status" button (green for Open, red for Close) and an "Action" button (red for Close). At the bottom is a blue "Back to Home" button.

Name	Email	Issue	Status	Action
kashish kazi	kashishkazi002@gmail.com	i want help for repairing my pc	Open	Close
kjhsck	kk@gmail.com	widhiw	Open	Close
Kashish	kashishkazi002@gmail.com	bfb	Open	Close
kash	kashishkazi002@gmail.com	Open	Close
ABC	ABC@gmail.com	ticketing issue	Open	Close

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>