Deployment Report - Cloud-Based Bus Pass System

Developer Information

Name: Musharraf Perwez

Internship Domain: Cloud Computing

Organization: CodeAlpha

Project Summary

Project Name: Cloud-Based Bus Pass System

Description: An online ticket booking platform built using Flask, designed to minimize ticket loss, incorrect pricing, and theft. The system enables digital bus pass registration and is deployed on AWS EC2.

Tech Stack Used

Backend: Python (Flask)

Frontend: HTML, CSS (Inline in Flask templates)

Database: SQLite

Deployment: AWS EC2 (Ubuntu Server)

Web Server: Flask dev server (running on port 8000)

Version Control: Git, GitHub

Deployment Details

Hosted on: AWS EC2 instance (Ubuntu)

Public IP: http://13.49.228.110:8000

Access: Flask app publicly accessible via port 8000

Project Repo: https://github.com/MusharrafPerwez-sam/CodeAlpha_BusPassSystem

Structure:

- app.py

- database.db

- static/

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- templates/

- requirements.txt

Features Implemented

- User Registration

- Bus Pass Form Submission

- SQLite Integration

- Deployment on AWS

- Static and template file integration

Security Measures

- HTTPS: No (runs on HTTP)

- Auth/Login: No authentication implemented yet

- SQL Injection Protection: Basic; input validation should be added

Suggestions for Improvement

- Add login/authentication

- Migrate to production-grade database like MySQL

- Use NGINX + Gunicorn for robust hosting

- Enable HTTPS with Let's Encrypt

- Improve validation and UI/UX

GitHub Repo Overview

GitHub Link: https://github.com/MusharrafPerwez-sam/CodeAlpha_BusPassSystem

Files: app.py, requirements.txt, templates/, static/

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Status: Functional, deployed online

Submission Summary

Tasks Completed: (Bus Pass System)

Live URL: http://13.49.228.110:8000