Flask and PostgreSQL Integration: Hotel Booking Site

Duration: 1 Hour
Objectives: Enhance a hotel booking website with user-friendly features using Flask and PostgreSQL.

Introduction

In this assignment, you will apply your skills in Flask, a Python web framework, and PostgreSQL, a relational database management system, to develop and enhance a hotel booking website. The assignment is divided into three main objectives, each focusing on a specific aspect of the website.

Objective 1: Decorate the Booking Page

Task

Improve the aesthetics and user interface of the hotel booking page.

Requirements

- Utilize HTML and CSS to enhance the visual layout.
- Integrate a CSS framework like Bootstrap for a responsive design.
- The page should include fields for check-in and check-out dates, room selection, and user details.

Objective 2: Validate Check-In and Check-Out Dates

Task

Implement a validation system to ensure that the check-out date is later than the check-in date.

Requirements

- Use JavaScript or server-side Python for date comparison.
- Display an error message on the booking page if validation fails.
- The booking process should not proceed with invalid dates.

Objective 3: Show Booking Status on the Index Page

Task

Display the current booking status on the website's main (index) page.

Requirements

- Query the PostgreSQL database to retrieve current booking information.
- Use Flask to pass the booking data to the front end.
- Dynamically update the index page to show current booking status.

Submission Guidelines

- Submit all deliverables in a compressed file (.zip or .rar).
- Include a README file with instructions on how to run your code.
- Make sure your code is well-commented to explain your logic.

Evaluation Criteria

- Functionality: Does the application work as intended?
- Code Quality: Is the code well-structured and commented?
- Aesthetics: Is the user interface clean and user-friendly?

Additional Resources

- Flask Documentation
- PostgreSQL Documentation
- Bootstrap Framework