

Assignment: Travel Booking Application

Objective:

Build a simple travel booking web application using **Python (Django)** that allows users to view available travel options, book a ticket, and manage their bookings. The frontend can be developed using **Django templates**.

Requirements:

Backend:

1. User Management:

- Implement user registration, login, and logout using Django's built-in authentication system.
- Allow users to update their profile information.

2. Travel Options:

- Create a model for **Travel Options** (e.g., flight, train, bus), which includes fields such as:
 - Travel ID
 - Type (Flight, Train, Bus)
 - Source
 - Destination
 - Date and Time
 - Price
 - Available Seats

3. Booking:

- Allow users to book travel options by selecting a travel option, entering details, and confirming the booking.
- Each booking should be stored in a **Booking model**, which includes:
 - Booking ID
 - User (Foreign Key)
 - Travel Option (Foreign Key)
 - Number of Seats
 - Total Price
 - Booking Date
 - Status (Confirmed, Cancelled)

4. View and Manage Bookings:

- Users should be able to view their current and past bookings.
- Implement functionality to allow users to **cancel** bookings.

Frontend:

1. User Interface:

- Design simple but user-friendly pages using **Django templates**.

- Create views for:
 - User registration, login, and profile management.
 - Listing available travel options with filters for type, source, destination, and date.
 - Booking form for selecting travel options and confirming the booking.
 - Displaying current and past bookings with options to cancel bookings.
- 2. **Responsiveness:**
 - Ensure the pages are responsive and functional across devices (e.g., desktop, mobile).
- 3. **Styling:**
 - Use **CSS** to style the pages. You can also use a framework like **Bootstrap** for faster development.

Bonus Points:

- Use **MySQL** as the database for the project.
- Implement basic **validation** (e.g., user input, number of available seats).
- Write unit tests for critical features.
- Add search and filtering capabilities for travel options (e.g., filter by type, date, or destination).

Submission:

- Push the code in a GitHub repository.
- Provide instructions in the README file on how to set up the project locally.
- Deploy the application to **AWS OR Pythonanywhere** (or any cloud platform) and share the deployed URL.
- Share the github link and deployment url

Evaluation Criteria:

- Backend functionality and adherence to Django best practices.
- Frontend usability, design, and responsiveness.
- Code quality and structure.
- Use of MySQL and any cloud deployment (if applicable).
- Problem-solving skills and creativity.