## **My Flight Booking System Documentation**

This documentation provides instructions for users on how to use the Flight Booking System application and instructions for developers on how to maintain the software.

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### **1. Introduction**

The Flight Booking System is a software application that allows users to book flight tickets of different types and provides administrative functionality to manage bookings, view reports, and respond to user feedback. The system offers three types of tickets: Economy, First Class, and Business Class.

### **2. User Instructions**

#### Viewing Available Tickets

To view the available tickets, follow these steps:

* Launch the Flight Booking System application.
* On the main menu, select the "View Available Tickets" option.
* The system will display the ticket types along with the number of remaining tickets for each type.

#### Booking Tickets

To book tickets, follow these steps:

* Launch the Flight Booking System application.
* On the main menu, select the "Book Tickets" option.
* Enter your name and select the desired ticket type(s) and the number of tickets you want to book.
* Submit the booking request.
* The system will calculate the total cost, including any applicable discounts, and generate a unique ticket code.
* The system will display the total cost, price per ticket (after discount), and the generated ticket code.

#### Canceling Tickets

To cancel tickets, follow these steps:

* Launch the Flight Booking System application.
* On the main menu, select the "Cancel Tickets" option.
* Enter your name and the ticket code of the booking you wish to cancel.
* Confirm the cancellation request.
* The system will cancel the specified booking and update the availability of the corresponding tickets.

#### Viewing Booking Information

To view booking information, follow these steps:

* Launch the Flight Booking System application.
* On the main menu, select the "View Booking Information" option.
* Enter your ticket code.
* The system will display the details of your booking, including the ticket type, number of tickets, total price, and ticket code.

#### Giving Feedback

To give feedback, follow these steps:

* Launch the Flight Booking System application.
* On the main menu, select the "Give Feedback" option.
* Enter your name, ticket code (optional), and your feedback message.
* Submit the feedback.
* The system will store your feedback entry.

### **3. Developer Instructions**

#### Database Schema

The Flight Booking System uses the following database schema:

* **TicketType**: Stores information about ticket types, including the ticket type name, price, and availability.
* **User**: Stores user information, including the username and password.
* **Booking**: Tracks bookings made by users, including the user, ticket type, number of tickets, total price, and ticket code.
* **Feedback**: Stores user feedback entries, including the user, ticket code, feedback message, and admin response.

For more details on the database schema, please refer to the provided code and documentation.

#### Code Structure

The Flight Booking System codebase follows the Django framework structure and consists of the following components:

* **Settings**: Configuration settings for the Django project, including database settings, middleware, and application registration.
* **Models**: Defines the database models for users, tickets, bookings, and feedback entries.
* **Views**: Implements the logic for handling user requests and rendering appropriate responses.
* **Templates**: Contains HTML templates for rendering user interfaces.
* **Forms**: Defines forms for user input validation and processing.
* **Admin**: Configures the administrative interface for managing bookings and feedback.
* **Utils**: Contains utility functions and helper classes.
* **Tests**: Includes test cases for verifying the functionality of the system.

For more details on the code structure, please refer to the provided code and documentation.

#### Maintaining the Software

To maintain the Flight Booking System software, follow these guidelines:

* Regularly backup the database to prevent data loss.
* Keep the software up to date with the latest security patches and bug fixes.
* Perform thorough testing when making changes or adding new features.
* Document any modifications made to the codebase for future reference.
* Monitor system performance and address any issues promptly.
* Regularly review and update the documentation to ensure it reflects the current state of the software.

For more information on maintaining the software, please refer to the code and documentation provided.