**Software Requirement Specification (SRS) Template**

Title: Indigo Flight Booking

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1. Introduction

* **Purpose**: The purpose of IndiGo's airline booking system is to give users an easy-to-use way to schedule flights, handle reservations, and access extra services. It also helps the airline run more smoothly and offer a smooth travel experience.
* **Scope**: IndiGo's airline booking system is comprehensive, covering all areas of the customer journey as well as the airline's operational demands, with the goal of providing a seamless and efficient booking experience while handling the complicated nature of airline operations.
* **Background**: IndiGo's booking system evolved in parallel with the airline's expansion and market demands, reflecting the company's dedication to provide efficient and economical air travel while adopting technological advancements to improve the overall passenger experience.

2. Functional Requirements

* **Requirement 1**: User Registration and Authentication
* Users should be able to create accounts, provide personal information, and log in securely.
* **Requirement 2**: Flight Search and Listing
* A user should be able to search for flights according to specific parameters, such as date and destination.
* The flight with all of its details and price should be listed by the system based on the search.
* **Requirement 3**: Booking For Flight
* The user should be able to choose flights from the list and make a reservation after entering their personal information.

* **Requirement 4**: Web Check-In
* Passengers should be able to check in online 48 to 60 minutes prior to the departure of domestic flights and 24 to 75 minutes prior to the departure of international flights.
* **Requirement 5**: Payment Processing.
* The system should support various payment methods, including credit/debit cards, digital wallets and etc.
* It should securely process payments and generate invoices or receipts.
* **Requirement 6:** Filter and Sorting
* Filtering and sorting by time, stop, and price should be possible for the user.
* **Requirement 7:** Support and Helpdesk
* It should be possible for users to submit complaints, ask questions, and get in touch with customer service.
* **Requirement 8:** Offers and Promo Code
* When making a reservation, the user should to be able to see the offers and use the coupon.
* **Requirement 9:** Update details
* The user should have the ability to change account-related information and modify or cancel booking information..
* **Requirement 10:** Check Flight Status
* The user should be able to verify the flight's status using the PNR number or by using the departure, arrival, and date of travel information.

4. Non-Functional Requirements

* **Requirement 1:** Security
* Specify authentication and authorization requirements for users.
* Define encryption standards for sensitive data, such as payment information.
* **Requirement 2**: Performance.
* Response Time: Specify the maximum acceptable response time for various operations (e.g., search, booking, cancellation).

4. Use Cases

* **Use Case 1**: User Registration.
* A new user can create an account and add personalization to it by providing his name, age, phone number, and address.
* **Use Case 2**: Search and Book.
* The user can choose between different trip kinds, such as one-way and round-trip, and searches for flights with the From and To information and the date of travel.
* **Use Case 3**: Update User Profile.
* Registered users can update their profile information, including contact details, profile picture, and payment methods.
* **Use Case 4**: Make a Payment.
* The system interacts with payment gateways to process transactions securely, ensuring payment is made and confirmed.
* **Use Case 5**: Modify and Cancel Booking.
* Users can cancel a previously made booking. The system should handle refunds if applicable.
* **Use Case 6**: Contact Customer Support.
* Users can contact customer support for assistance with bookings, account issues, or other inquiries.

5. System Architecture

* **Architecture Overview**: 3 tier architecture. UI, API to request.
* **Data Model**: Collection of indexed data.

6. Constraints

* **Constraint 1**: Geographical Constraint.
* Regional variations in user preferences, regulations, and market conditions, which may affect the system's adaptation in different areas.
* **Constraint 2**: Regulatory Constraint.
* Compliance with local and international laws and regulations related to data privacy, consumer protection, and payment processing.
* **Constrain 3:** Content and Data Licensing.
* Constraints related to content and data licensing agreements for hotel listings, images, and other information.

7. Assumptions and Dependencies

* **Dependency 1**: Payment Gateway
* The system relies on third-party payment gateways for processing customer payments securely. Dependencies on the availability and functionality of these gateways are critical.
* **Assumption 1**: User Authentication
* Users are assumed to have valid email addresses or mobile phone numbers that can be used for registration and authentication. Users are also assumed to provide accurate information during registration.