

Sprint Details with Estimated Timeline

Sprint 1: Account Creation, Login, Password, Account Management

User Stories:

- As a Customer, I want to create an account on the hotel booking system so that I can manage personal information.
- As a Customer, I want to log in to my account so that I can access my booking details and personal information.
- As a Customer, I want to reset my password if I forget it so that I can regain access to my account.
- As a manager, I want to log in to the system using hotel's credentials so that I can manage the hotel operations.
- As a receptionist, I want to log in to the system using Hotel's credentials so that I can access the hotel management features.
- As a customer, I want to view my account details so that I can review my personal information and booking history.
- As a customer, I want to update my personal information (e.g., email, phone number) so that my account details are up-to-date.
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Estimated Timeline: 3 weeks

Details: Develop the user registration, login, and password reset functionalities. This involves form design, validation, and email integration for confirmation and password reset. Implement account management features for updating personal information and viewing booking history. Also, enhance the search functionality for logged-in customers to show personalized search results.

Function Point Calculation:

1: Account Creation

- **EI:** 1 (User input form for account creation)
- **ILF:** 1 (User account details stored in the database)
- **EO:** 1 (Confirmation email sent to the user)

$$FP = (1 EI * 3) + (1 ILF * 7) + (1 EO * 4) = 3 + 7 + 4 = 14$$

2: User Login

- **EI:** 1 (User input form for login)
- **ILF:** 1 (Verification of user credentials)
- **EQ:** 1 (Query to check user credentials)

$$FP = (1 EI * 3) + (1 ILF * 7) + (1 EQ * 3) = 3 + 7 + 3 = 13$$

3: Password Reset

- **EI:** 1 (User input form for password reset)
- **ILF:** 1 (Update user credentials in the database)
- **EO:** 1 (Password reset email sent to the user)

$$FP = (1 EI * 3) + (1 ILF * 7) + (1 EO * 4) = 3 + 7 + 4 = 14$$

⇒ **Total FP** = 14 (Account Creation) + 13 (Login) + 14 (Password Reset) + 12 (Acc management) = 53 FP

Conclusion: The estimated function points for Sprint 1, which involves user account creation, login, and password management, is **53 FP**. This gives a quantitative measure of the scope of work for this sprint.

Sprint 2: Search, Filter and View for Users

User Stories:

- As a customer, I want to search for hotels based on location and dates so that I can explore options even before creating an account.

- As a customer, I want to view details of a hotel so that I can gather information before deciding to book.
- As a customer, I want to filter search results by price range and hotel rating so that I can find hotels that fit my budget and meet my quality expectations.
- As a customer, I want to view detailed information about a specific room so that I can decide if it meets my needs.
- As a customer, I want to search for available hotel rooms based on location and dates so that I can find a room that fits my travel plans.
- As a customer, I want to explore current promotions and special offers so that I can take advantage of discounts before deciding to log in or create an account.
- As an admin, I want to search and filter the list of hotels so that I can view all the currently registered hotels.

Estimated Timeline: 2 weeks

- **Search for Hotels (Location & Dates):** 10 FP
- **View Hotel Details:** 8 FP
- **Filter by Price & Rating:** 12 FP
- **View Detailed Room Information:** 8 FP
- **Search for Available Rooms:** 10 FP
- **View Promotions and Offers:** 5 FP
- **Total Function Points: 53 FP**

Details: Implement the search functionality for customers and display hotel details. This includes developing the UI for search results, hotel details as well as backend integration to handle search queries and data retrieval.

Sprint 3: Booking Review, Cancellation, and Ratings

User Stories:

- As a customer, I want to cancel my hotel booking so that I can change my travel plans.
- As a customer, I want to receive a refund if I cancel my booking according to the hotel's cancellation policy so that I am reimbursed appropriately.
- As a customer, I want to view my past bookings so that I can keep track of my previous stays.
- As a customer, I want to give ratings/reviews to the hotel after my stay so that I can share my experience with others.

Estimated Timeline: 2 weeks

Total Function Point: 18 FP

- **Details:** Implement booking cancellation and refund processing, customer reviews and ratings, and past booking history. This includes handling cancellation policies and enabling post-stay feedback.

Sprint 4: Role-Based Access for Users and Managers

User Stories:

User:

- As a user, I want to surf hotels by searching via city name, check-in date & check-out date
- As a user, I want to select number of rooms for a particular hotel and book them for my stay.

Manager:

- As a manager, I want to manage the availability of rooms by adding new ones or removing existing ones to align with market demand and optimize occupancy. manager, the booking history so that I can analyse past reservations and obtain data to resolve any conflicting or operational issues. As a manager, I want to access hotel analytics/stats for any time duration so that I can evaluate performance metrics and make informed decisions based on historical data.
- As a manager, I want to manage the prices for rooms so that I can adjust rates according to market demand, seasonality, and other factors to maximize revenue.

Estimated Timeline: 4 weeks

Total Function Point: 45 FP

- **Details:** Implement receptionist login, booking management, check-in/check-out processes, and handling of online bookings. This includes UI development for receptionist dashboards and backend support for booking updates and also Implement managerial controls for room availability, pricing, and analytics. This sprint involves integrating reporting tools, managing data export formats, and creating dashboards for analytics and pricing management.

⇒ **Total Number of Sprints: 4**