

# **SE Project Deliverable 1**

## **Part B**

### **Development Methodology (Scrum)**

#### **Team Members:**

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## Sprint 1 Backlog (Project Setup)

### Module Name: Project Initialization Module

#### Selected User Stories for Sprint 1

- **US02: Booking a Hotel Room:** As a Guest, I want to securely book a hotel room in real-time so that I have my accommodation confirmed to my liking
  - **US02.1:** Display comprehensive room details, including images, descriptions, pricing, and available dates.
  - **US02.2:** Offer guests the ability to select additional services such as breakfast, airport transportation, or special accommodations.
  - **US02.3:** Issue immediate booking confirmations and receipts upon successful payment transactions to assure guests of their reservations.
  
- **US08: Register/Login:** As a User, I want to authenticate myself by logging in or creating a new account through signup so that I can book a room:
  - **US08.1:** Provide a registration option for new users so that I can create an account to access hotel booking services.
  - **US08.2:** Enable secure login with valid credentials so that I can access my account safely.
  - **US08.3:** Implement verification via a PIN for new signups so that I can ensure account security.
  - **US08.4:** Notify users of successful login so that I can confirm access to my account.
  - **US08.5:** Redirect users to the homepage upon successful authentication so that I can start browsing and booking rooms immediately.
  
- **US09: Managing Rooms:** As an Admin, I want to add and manage rooms so that I can optimise usage and costs
  - **US09.1:** Allow detailed entry of new room information including type, price, capacity, and special features.
  - **US09.2:** Facilitate easy updates to existing room details to keep information current.
  - **US09.3:** Provide functionality to remove rooms that are no longer available or in service.
  
- **US11: Manage Hotels:** As an Admin, I want to add and manage hotels within the system so that hotel information is accurate and reflective of available inventory
  - **US11.1:** Provide an intuitive interface for admins to add new hotels with necessary details like name, location, contact information, and amenities.

- **US11.2:** Enable updating and editing of existing hotel information to ensure accuracy.
- **US11.3:** Allow removal of hotel listings to maintain an up-to-date inventory.
  
- **US12: Manage Accounts:** As an Admin, I want to add, update, or remove user accounts so that I can ensure account information is accurate, secure, and up-to-date.
  - **US12.1:** Allow the creation of new user accounts so that I can grant system access to authorized users.
  - **US12.2:** Enable updating of existing user details so that I can keep account information current and accurate.
  - **US12.3:** Provide functionality to remove user accounts so that I can maintain security and restrict access when necessary.
  - **US12.4:** Ensure that all account modifications are logged so that I can track changes for auditing purposes.

## **Structured Specifications for Selected User Stories**

### **US02: Booking a Hotel Room**

#### **US02.1: Display Room Details**

Pre-condition: User selects a hotel.

Post-condition: Comprehensive room details are displayed.

Normal Flow: Select hotel → View room details → Display images, descriptions, and pricing.

Alternative Flow: Notify if no rooms are available.

#### **US02.2: Selecting Additional Services**

Pre-condition: User is in the booking process.

Post-condition: Selected additional services are added to the booking.

Normal Flow: Choose additional services → Confirm selection → Update booking summary.

Alternative Flow: Notify if service is unavailable.

#### **US02.3: Booking Confirmation**

Pre-condition: Payment is successfully processed.

Post-condition: Booking confirmation and receipt are generated.

Normal Flow: Process payment → Generate confirmation → Send receipt via email/SMS.

Alternative Flow: Notify if payment fails.

### **US08: Register/Login**

#### **US08.1: User Registration**

Pre-condition: User provides valid registration details.

Post-condition: Account is successfully created.

Normal Flow: Enter registration details → Submit → Receive verification PIN → Verify PIN → Account created.

Alternative Flow: Notify user if registration details are invalid or if the email/phone number is already in use.

### **US08.2: Secure Login**

Pre-condition: User has a registered account.

Post-condition: User is successfully logged in.

Normal Flow: Enter login credentials → Authenticate → Redirect to homepage.

Alternative Flow: Notify user if login credentials are incorrect.

### **US08.3: PIN Verification for Signup**

Pre-condition: User has successfully submitted registration details.

Post-condition: Account is verified and activated.

Normal Flow: System sends verification PIN → User enters PIN → Account activated.

Alternative Flow: Notify user if PIN is incorrect or expired.

### **US08.4: Successful Login Notification**

Pre-condition: User has entered correct credentials.

Post-condition: User receives confirmation of login.

Normal Flow: Authenticate user → Notify successful login → Redirect to homepage.

Alternative Flow: Alert if login is from a new device and require additional verification.

### **US08.5: Homepage Redirection**

Pre-condition: User is successfully authenticated.

Post-condition: Homepage is displayed.

Normal Flow: Authenticate → Redirect to homepage.

Alternative Flow: Redirect user to an onboarding page if first-time login.

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## **US09: Managing Rooms**

### **US09.1: Adding New Rooms**

Pre-condition: Admin has the necessary permissions.

Post-condition: Room is successfully added to the system.

Normal Flow: Enter room details → Save → Confirm addition.

Alternative Flow: Notify if required fields are missing.

### **US09.2: Updating Room Details**

Pre-condition: Room exists in the system.

Post-condition: Updated details are saved.

Normal Flow: Select room → Edit details → Save changes.

Alternative Flow: Notify if update fails due to missing or incorrect data.

### **US09.3: Removing Rooms**

Pre-condition: Admin has necessary permissions.

Post-condition: Room is removed from active listings.

Normal Flow: Select room → Remove → Confirm deletion.

Alternative Flow: Notify if the room cannot be deleted due to active bookings.

## **US11: Manage Hotels**

### **US11.1: Adding New Hotels**

Pre-condition: Admin has necessary permissions.

Post-condition: Hotel is successfully added to the system.

Normal Flow: Enter hotel details → Save.

Alternative Flow: Notify if details are incomplete or if the hotel already exists.

### **US11.2: Updating Hotel Details**

Pre-condition: Hotel exists in the system.

Post-condition: Updated details are saved.

Normal Flow: Select hotel → Edit details → Save changes.

Alternative Flow: Notify if update fails.

### **US11.3: Removing Hotels**

Pre-condition: Admin has necessary permissions.

Post-condition: Hotel is removed from active listings.

Normal Flow: Select hotel → Remove → Confirm deletion.

Alternative Flow: Notify if hotel has active bookings and cannot be removed.

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## **US12: Manage Accounts**

### **US12.1: Creating User Accounts**

Pre-condition: Admin is logged in.

Post-condition: User account is created.

Normal Flow: Enter user details → Assign role → Save.

Alternative Flow: Notify if details are invalid.

### **US12.2: Updating User Details**

Pre-condition: User account exists.

Post-condition: Updated details are saved.

Normal Flow: Select user → Edit details → Save.

Alternative Flow: Notify if the update fails.

### **US12.3: Removing User Accounts**

Pre-condition: Admin has necessary permissions.

Post-condition: Account is removed.

Normal Flow: Select user → Remove account → Confirm deletion.

Alternative Flow: Notify if the user has active reservations or permissions preventing deletion.

### **US12.4: Logging Account Changes**

Pre-condition: Any modification is made to a user account.

Post-condition: Change is recorded in the system.

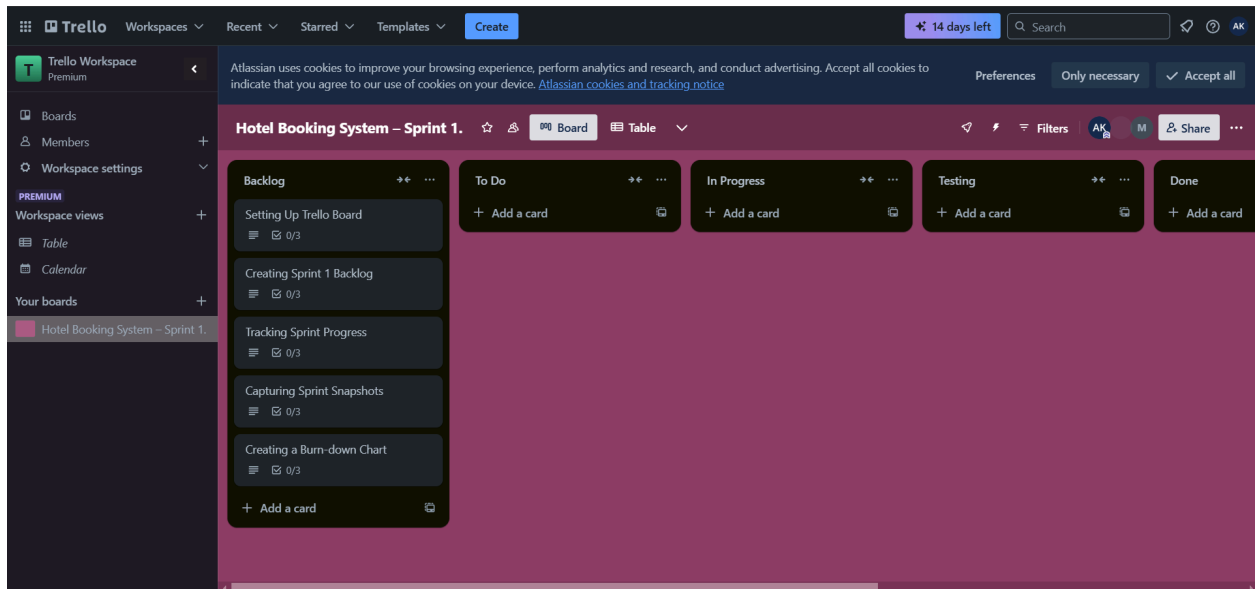
Normal Flow: Admin modifies an account → System logs change.

Alternative Flow: Notify if logging fails due to a system issue.

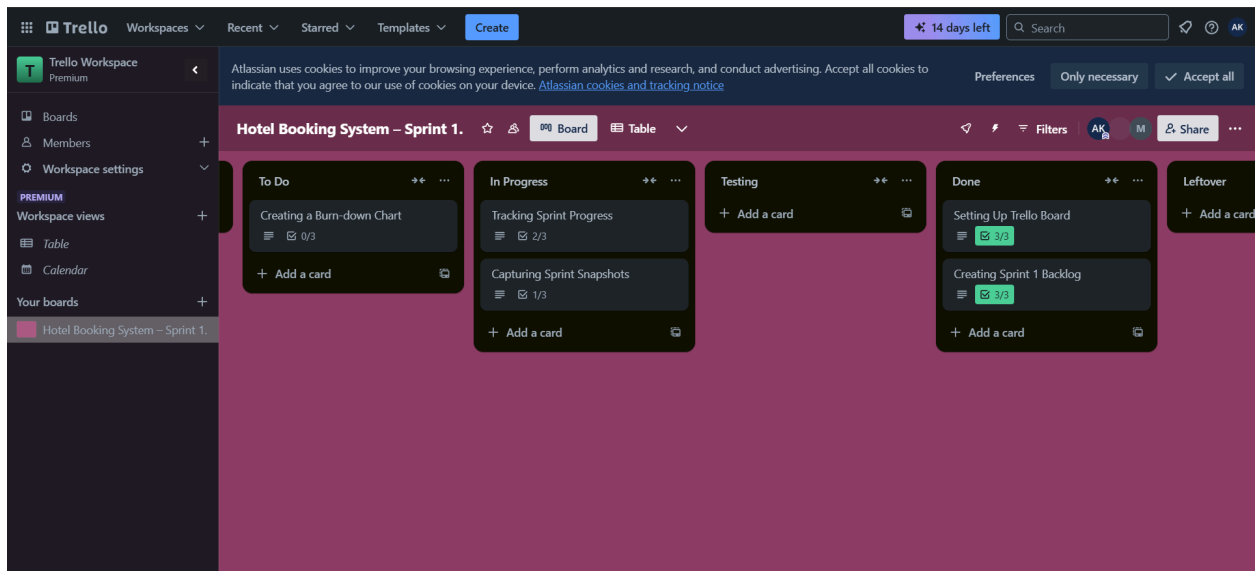
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## **4. Scrum Board (Trello)**

1. **Snapshot 1:** Before sprint start – backlog uploaded.

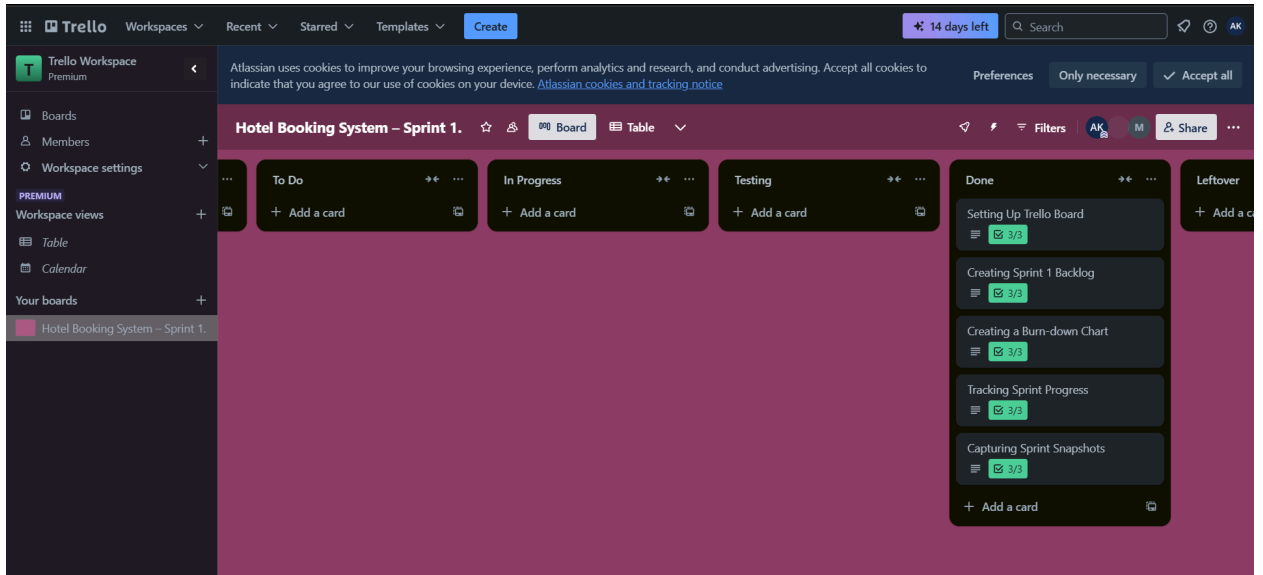


2. **Snapshot 2:** Mid-sprint – 50% of tasks completed.



3. **Snapshot 3:** Sprint end – completed & leftover tasks visible.





## 5. Product Burn-down Chart for Sprint 1

### Planned Tasks and Remaining Tasks

