



# SportsHub

## Backlog Refinement

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### 1. General Backlog Refinement

#### Initial Project Setup

1. **Initialize Git & GitHub repository**
    - Configure remote repository
    - Establish branch naming conventions (e.g., feature/, bugfix/)
  2. **Set up Notion for task management**
    - Create team workspace
    - Set up Kanban board for backlog, sprint planning, and issue tracking
  3. **Define core technologies for the project**
    - **Frontend:** HTML, JavaScript, React.js
    - **Database:** Firebase Firestore
  4. **Configure the development environment**
    - Set up Firebase project
    - Initialize Firebase services (Auth, Firestore, Functions)
    - Configure GitHub Actions for CI/CD
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#### User Management

5. **Implement user login functionality**
  - Google OAuth login
  - Setup user authentication with Firebase Auth
6. **Develop new user registration form**
  - Fields: First Name, Last Name, Username, Email, Phone Number, Date of Birth
7. **Create user roles and access control**

- Roles: Resident, Facility Staff, Admin
  - Restrict feature access based on roles
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## **User Interface & Navigation**

- 8. Design and build landing/home page (post-login)**
    - Show overview of available facilities
    - Display user role-specific actions
  - 9. Implement global site navigation**
    - Navigation bar and responsive layout
    - Access to booking, reports, and user settings
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## **Facility Management Features**

- 10. Enable facility search functionality**
    - Filter by facility type, availability, or rating
  - 11. Implement booking system**
    - Residents can reserve available time slots
    - View and cancel existing bookings
  - 12. Admin controls for booking approval/blocking**
    - Review, approve, or reject incoming reservations
  - 13. Add rating and feedback system for facilities**
    - 5-star rating with optional comments after use
- 

## **Maintenance & Issue Reporting**

- 14. Allow users to report facility issues**
    - Include facility name, issue type, and description
  - 15. Enable facility staff to manage reported issues**
    - Update issue status: pending, in progress, resolved
    - Provide feedback notes on resolution
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## **Notifications & Extras**

- 16. Display weather updates for outdoor facilities**
    - Use public weather API
    - Notify users of adverse conditions affecting bookings
- 

## **Design & Usability**

### 17. Develop UI components

- Ensure mobile-first responsiveness
- Consistent styling across user roles

### 18. Run regular UI/UX review sessions with stakeholders

- Gather feedback and iterate on mockups and wireframes

## Prioritized Backlogs

Items are grouped into **epics**, sequenced by **value to end users**, **technical dependencies**, and **development flow**. Priorities are labelled as:

- □ **High** (must-have / foundational)

- ☐ **Medium** (important / builds on core)
  - ☒ **Low** (enhancements / polish)
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## Initial Project Setup (☐ High Priority)

1. ☐ **Initialize Git & GitHub repository**
    - Configure remote repository
    - Establish branch naming conventions (e.g., feature/, bugfix/)
  2. ☐ **Set up Notion for task management**
    - Create team workspace
    - Set up Kanban board
  3. ☐ **Define core technologies**
    - Frontend: HTML, JavaScript, TailwindCSS, React.js
    - Database: Firebase Firestore
  4. ☐ **Configure development environment**
    - Set up Firebase project and services (Auth, Firestore, Functions)
    - Configure GitHub Actions for CI/CD
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## User Management (☐ High to ☐ Medium Priority)

5. ☐ **Implement user login**
    - Google OAuth login
    - Firebase Authentication
  6. ☐ **Develop new user registration form**
    - Fields: Name, Username, Email, Phone, DOB
  7. ☐ **Create user roles and access control**
    - Roles: Resident, Staff, Admin
    - Restrict access per role
- 

## User Interface & Navigation (☐ High Priority)

8. ☐ **Build landing/home page (post-login)**
    - Display facilities overview and role-specific actions
  9. ☐ **Implement global navigation**
    - Responsive nav bar with access to booking, reports, user settings
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## Facility Management Features (☐ Medium Priority)

10. ☐ **Enable facility search**

- Filters: type, availability, rating
  - 11. ☐ **Implement booking system**
    - Users can reserve, view, cancel bookings
  - 12. ☐ **Admin booking controls**
    - Approve, reject, or block bookings
  - 13. ☒ **Add rating and feedback system**
    - 5-star rating + optional comments
- 

## **Maintenance & Issue Reporting (☐ Medium Priority)**

- 14. ☐ **Allow users to report facility issues**
    - Facility name, issue type, description
  - 15. ☐ **Staff issue management**
    - Update issue status, add resolution notes
- 

## **Notifications & Extras (☒ Low Priority)**

- 16. ☒ **Display weather updates**
    - Use public API to show weather
    - Alert users about adverse conditions
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## **Design & Usability (☐ Medium to ☒ Low Priority)**

- 17. ☐ **Develop UI components**
    - Mobile-first, consistent styling
  - 18. ☒ **Run regular UI/UX review sessions**
    - Stakeholder feedback and iteration
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## **Sprint Sequencing**

**Sprint 1 (Setup & Auth):** 1–4, 5, 6  
**Sprint 2 (Navigation & Roles):** 7, 8, 9  
**Sprint 3 (Core Booking):** 10, 11, 12  
**Sprint 4 (Maintenance & Feedback):** 13, 14, 15  
**(Notifications & Polish):** 16, 17, 18

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## User stories of Backlogs

Each user story follows the format:

**As a [user/role], I want to [do something], so that [I get value].**

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### Initial Project Setup

## 1. Git & GitHub Repository

- **As a developer,**  
**I want to** initialize a GitHub repository and set branch naming conventions,  
**So that** our team can collaborate using consistent version control.

## 2. Task Management with Notion

- **As a team member,**  
**I want to** manage tasks using Notion with a Kanban board,  
**So that** we can track progress across sprints and backlogs.

## 3. Define Core Technologies

- **As a developer,**  
**I want to** define the core technologies for frontend and backend,  
**So that** we can align the tech stack and start development consistently.

## 4. Configure Development Environment

- **As a developer,**  
**I want to** set up Firebase and CI/CD with GitHub Actions,  
**So that** we can test and deploy changes efficiently.
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## User Management

### 5. User Login

- **As a user,**  
**I want to** log in using Google OAuth,  
**So that** I can securely access my account.

### 6. User Registration

- **As a new user,**  
**I want to** fill out a registration form,  
**So that** I can create an account with personal and contact details.

### 7. User Roles & Access Control

- **As an admin,**  
**I want to** define user roles (Resident, Staff, Admin),  
**So that** users see features relevant to their role.
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## User Interface & Navigation

### 8. Landing/Home Page

- **As a** logged-in user,  
**I want to** see a home page with facilities and quick actions,  
**So that** I can easily interact with the platform.

## 9. Global Navigation

- **As a** user,  
**I want to** use a navigation bar to access features,  
**So that** I can quickly move between pages and settings.
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## Facility Management Features

### 10. Facility Search

- **As a** user,  
**I want to** search for facilities using filters,  
**So that** I can find one that suits my preferences.

### 11. Booking System

- **As a** resident,  
**I want to** reserve facilities for specific time slots,  
**So that** I can plan my visits conveniently.

### 12. Admin Booking Controls

- **As an** admin,  
**I want to** approve or reject booking requests,  
**So that** I can manage fair access to facilities.

### 13. Rating & Feedback

- **As a** user,  
**I want to** rate and review facilities after use,  
**So that** others can benefit from my experience.
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## Maintenance & Issue Reporting

### 14. Report Facility Issues

- **As a** user,  
**I want to** report issues with facilities,  
**So that** staff can address them quickly.

### 15. Staff Issue Management



- **As** facility staff,  
**I want to** update the status of reported issues and add notes,  
**So that** users stay informed about progress.
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## **Notifications & Extras**

### **16. Weather Notifications**

- **As a** user,  
**I want to** see weather updates for outdoor facilities,  
**So that** I can plan around adverse weather conditions.
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## **Design & Usability**

### **17. Reusable UI Components**

- **As a** front-end developer,  
**I want to** build responsive, reusable UI components,  
**So that** the interface remains consistent across devices.

### **18. UI/UX Reviews**

- **As a** product owner,  
**I want to** run regular design reviews with stakeholders,  
**So that** we gather feedback and improve usability.
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