**Calendar Reservation System Project**

The Calendar Reservation System project aims to create an easy-to-use platform for making and managing reservations. This app is specifically designed to help businesses, community groups, and individuals, including potential users interested in scheduling and reservation management, organize their scheduling needs efficiently. By offering a range of features, the app ensures that users can handle their reservations smoothly and securely, making the process more convenient.

A standout feature of this app is its powerful search function. This allows users to swiftly find available time slots and resources based on their specific needs, such as date, time, or resource type. By eliminating the need to browse through multiple options, this feature saves users valuable time and enhances their productivity. This is particularly beneficial for large organizations with numerous resources, simplifying the process of finding and reserving suitable options.

Another key feature is the flexible scheduling system. This robust system supports different types of reservations and allows users to customize time slots to fit their specific requirements. Whether booking a conference room, scheduling an appointment, or reserving a community space, users can set the details to match their needs. This adaptability reassures users that the app is versatile and can cater to various purposes, from business meetings to community events.

The app also includes a notification feature that sends reminders and updates about reservations. This helps users stay on top of their schedules and avoid missing appointments. Notifications can be sent through email or in-app alerts, giving users options for how they want to be reminded. Additionally, access control ensures that the app is secure by requiring user authentication and setting permissions. Only authorized users can make or change reservations, protecting the data and providing a personalized experience. Finally, the app can integrate with external calendars and third-party services, such as Google Calendar or Microsoft Outlook. This integration allows users to manage their schedules all in one place, eliminating the need to switch between different platforms and enhancing the app's user-friendliness.

**World Assumptions:**  
Users can access the internet and suitable devices (e.g., computers, smartphones).

Users are familiar with basic calendar functionalities and scheduling concepts.

Users are interested in organizing and sharing their schedules with friends, family, or peers.  
  
**User Requirements:**  
User-friendly interface for easy navigation and interaction.

Ability to create, edit, and delete calendar events.

Options to share calendars with specific individuals or groups.

Pop-up alerts and reminders for upcoming events.

Group scheduling features to view and coordinate multiple users' availability.

Search function to find scheduled events.

Account creation with a password and a recovery question.  
  
**Specifications and Interface Needs:**  
Simple interface for viewing multiple calendars.

Options to add or remove events from the user's calendar.

Functionality to select and display specific shared calendars.

Notification systems such as pop-up alerts for event reminders and updates.

Access control to manage who can view or edit calendar entries.  
  
**Program and Hardware:**  
We are currently in the development phase of the application, using Java and JavaFX with FXML for the front end. We anticipate completing the development by [specific date] and moving on to the testing phase shortly after.

Database management using Firebase with NoSQL for data storage.

We are ensuring scalability and performance to handle multiple users.