## **Project Proposal**

## ARENA-GO

## **Group Members:**

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Project: ArenaGo; Mobile App

- 1. Problem Statement: Our society is tightly knit through sports, with futsals/sports arenas serving as primary gathering spots. Currently, bookings and time slot management for these venues are handled manually via WhatsApp, phone calls, and paper. This leads to numerous conflicts over slots, financial concerns, and disciplinary issues. The fast-paced nature of the world exacerbates the challenges in booking these places. We aim to revolutionize the management culture of futsals with an app that digitizes the entire process, eliminating these obstacles. It's the app every sports enthusiast deserves and longs for!
- 2. Project Scope: Our project will involve the development of a mobile phone app catering to three user entities: admins, owners, and players. Owners, acting as developers, will have comprehensive access to all functionalities, allowing them to manage multiple futsal under a single user account. Key features for owners include the ability to add and manage time slots, set low and high hold amounts to optimize sales, and display facility rules and images. Bookers/users can browse, select, and book futsal, invite sports buddies, search for optimal futsal locations based on various criteria, and modify or cancel bookings. The app will also maintain records and reviews of players, as well as track earnings for futsal owners.
- **3. Tools and Technologies:** The app will be developed using Flutter (Dart) for the frontend, Firebase for backend services, and the Google Maps API for location-based functionalities.
- **4. Review of Similar Existing Projects:** As the idea is unique, there are not many similar existing projects. However, our inspiration draws from Uber for path mapping and from booking.com for booking sports arenas.
- **5. What Makes Our Project Different:** Our project stands out for its unique concept, as there are currently no similar applications available on the market. In terms of features, it incorporates an intelligent pricing mechanism that dynamically adjusts rates to optimize sales. On the user side, it offers the innovative feature of suggesting the optimal futsal location based on the locations of all users within a group, considering factors such as cost-effectiveness, distance, or both.