May 27, 2022 For PolyHack 22

Prepared by: Sportal Ltd.



PROJECT PROPOSAL

TEAM DETAILS



Programmer & Team Leader
Python/C++/Swift



Programmer and Finances
Python/CSS/HTML



TANUSH CHANGANI
Research & Development
Python/HTML/Digital Marketing



BASIC PROJECT PLAN

We will develop an IoT app that harnesses different IoT technologies to improve the efficiency of the current booking system. This revolutionary mobile application will be the center of all IoT technologies implemented. The app will deliver any service a customer or an administration requires, based on the latest technological advancements made. Through the use of a fully automated booking system, our vision is to minimize the involvement of humans as far as possible.

The application: There will be travel sensing capabilities supported by recommender systems that will alert the user to any nearby sports facilities. An easy-to-use GUI will enable the user to select the specific facility without encountering any inconvenience. HKID Photo Verification can also be integrated into the app if demanded by the Hong Kong Government. As part of the app, customers will be able to chat with administrators in real time if they encounter any difficulties.

BASIC PROJECT PLAN

A customer can formerly book for themselves and for others by paying online. Booking details will be emailed to them and added to their calendar (if they give permission). Should the customer choose to cancel the booking, the cancellation fee will be calculated based on factors including the rate at which the facilities were booked, the rate of cancellation, time remaining until the activity, weather etc. Potential bad weather will be notified to the user through the application.

BASIC IMPLEMENTATION PLAN

IoT in the facility area: The automated attendance system will be integrated into the sports facility area so it can detect whether the person who booked the spot attended or exited. The customer will be granted access to the arena automatically if a booking is found. In case the customer fails to leave the premises within the time allowed, he or she will be notified verbally and via phone notifications. If there are slots available, the time range of the booking will be extended and the customer charged accordingly. All of the following will be done automatically by our integrated technology.