



Islington college
(इस्लिङ्टन कलेज)

Module Code & Module Title

CS6P05 Final Year Project Computing

Futsal Booking Mobile Application

Student Name: Aadil Ratna Kansakar

London Met ID: 17031232

College ID: NP01CP4A170140

Internal Supervisor: Subeksha Shrestha

External Supervisor: Ishwor Shrestha

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1. Introduction

With over 2.7 billion and growing smartphone users in the world, the mobile app industry is booming. There are no signs of it slowing down in the imaginable future. People use their phones for nearly everything. With over 2.8 million mobile apps available, every need of the user can be fulfilled.

A mobile application is an application software used in smartphones. Most smartphones run on operating system, either Android or iOS. Mobile apps, unlike websites, make use of the features of the mobile devices.

In the context of Nepal, futsal is a booming business. After the introduction of futsal in Kathmandu, many futsal grounds have opened in many various places of Nepal. Futsal mainly attracts the youths who have an interest in sports, especially in football. Since there are not many big football grounds in Nepal, futsal has taken over. There are also not many futsal apps available. The ones that are available are too old or have bad designs and interfaces.

To cater to the needs of youths, a futsal app with information about various futsal grounds in Kathmandu valley is needed. In 2019, a modern app is needed to tend to the needs of the players.

2. Aims and Objectives

The project aims to develop a mobile application which gives information about futsal grounds available for booking as well as sports stores which have futsal equipment available for playing along with map.

- Develop an android application
- Give information about futsal grounds around KTM valley
- Make booking a futsal ground easier
- Give location using map integration

3. Expected Outcomes and Deliverables

The expected outcomes of this project are:

- Book a futsal ground
- Information of futsal grounds will be available in this app
- Map integration within the app helps to know the exact place
- Price on weekdays and weekends are shown
- Opening time and closing time
- Number of grounds
- Discounts and offers
- Events and futsal tournaments
- Set reminder alert
- Notification alert 1 hour before kick off

4. Project risks, threats and contingency plans

Some project risks, threats are

- Two bookings on the same time happening
- Reminder alert not being delivered on time
- Refunds policy if booking is canceled

Some contingency plans are

- Refunds can be collected by going to the futsal ground
- The app store provides ratings for the apps. This will prove very beneficial in making the app better and user friendly.

5. Methodology

Agile Methodology

Agile is a process that allows companies design and build the right product as per the demand of the client. This process helps the company to analyze and improve the product throughout its development.

Scrum is an agile process that is mostly used while managing complex software and product development, using iterative and incremental practices. Scrum process allows companies to adjust smoothly to rapidly changing requirements. This agile process provides better estimation taking less time creating them and also let us be in more control of the project schedule.

The agile process allows for the face to face interactions of customer, software development team, product owner which makes it easier for ideas to be circulated.

6. Resource Requirements

- Android Smartphone
- Android Studio
- Visual Studio Code
- Flutter
- Dart
- MySQL

7. Work Breakdown Structure

#	Task	Start Time	End Time	Description
1	Planning			
1.1	Research	10/22/19	11/07/19	Visit websites and gather information about booking system, frameworks and databases to use.
1.2	Proposal	11/08/19	11/22/19	Prepare a proposal, set milestones for set task to be completed.
1.3	ERD	11/23/19	11/30/19	Make an entity relationship diagram relating all the tables in the database.
1.4	Wireframes	12/01/19	12/14/19	Wireframe of UI design of all features.
2	Execution			
2.1	Requirement gathering	12/15/19	12/17/19	Gather required hardware, download software required for the project.
2.2	Front page design	12/18/19	01/02/20	The main page where information about futsal grounds are available.
2.3	Map integration	01/03/20	01/10/20	Location of futsal ground is shown in maps.

2.4	Customer end design	01/11/20	01/25/20	Login and create account page.
2.5	Booking management page	01/26/20	02/12/20	All the previous and current bookings shown in this page.
2.6	Payment gateway	02/13/20	02/22/20	Payment for booking with Khalti integration.
2.7	Notification alert	02/23/20	03/11/20	Alert about booking an hour before kickoff.
2.8	Testing	03/12/20	04/12/20	Test the app with a select set of users.
2.9	Deployment	04/13/20	04/23/20	Install the app and booking system.
3	Documentation	11/23/19	04/30/20	Create a detailed log and generate a report.

Table 1: Work Breakdown Structure

8. Milestones

- Planning: 12/14/19
- UI design: 01/10/20
- Back end development: 03/11/20
- Testing: 04/12/20
- Deployment: 04/23/20
- Documentation: 04/30/20

9. Project Gantt Chart

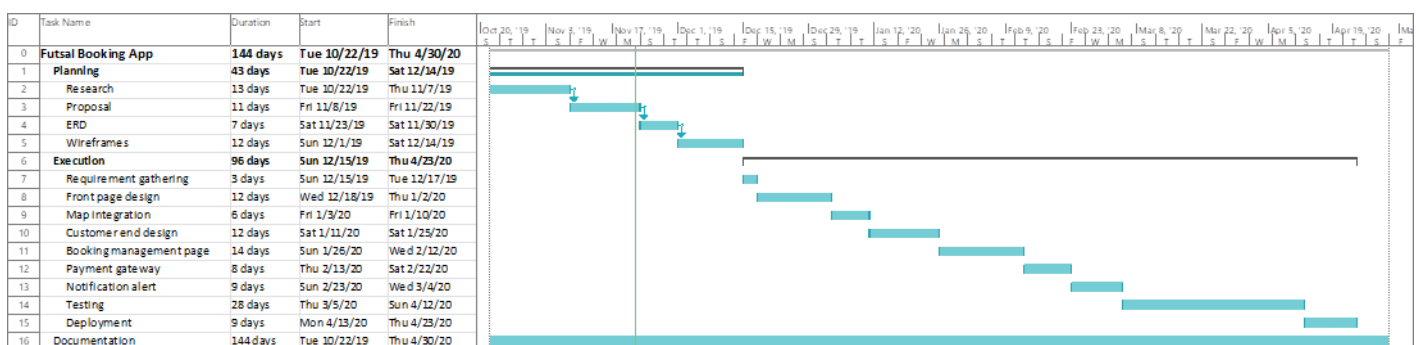


Figure 1: Gantt Chart

10. Conclusion

This project will be very useful in the context of Nepal, where the youths are very interested in playing football. This project will make it easier for them to find out about various futsal grounds, time table and events surrounding futsal in Kathmandu valley.

11. Bibliography

Blair, I. (2019) *Mobile App Download and Usage Statistics (2019)* [Online]. Available from: <https://buildfire.com/app-statistics/> [Accessed 1 November 2019].

Cprime. (2019) *WHAT IS AGILE? WHAT IS SCRUM?* [Online]. Available from: <https://www.cprime.com/resources/what-is-agile-what-is-scrum/> [Accessed 11 November 2019].

Gonçalves, L. (2019) *WHAT IS AGILE METHODOLOGY* [Online]. Available from: <https://luis-goncalves.com/what-is-agile-methodology/> [Accessed 11 November 2019].

Mayank. (2018) *Step by Step Guide for Developing an Online Booking App from Scratch* [Online]. Available from: <https://engineerbabu.com/blog/online-booking-app/> [Accessed 17 November 2019].

Rouse, M. (2019) *What is Mobile Application Development? - Definition from WhatIs.com* [Online]. Available from: <https://searchapparchitecture.techtarget.com/definition/mobile-application-development> [Accessed 1 November 2019].

Yeeply. (2015) *6 security risks in Android mobile application development* [Online]. Available from: <https://en.yeeply.com/blog/6-security-risks-android-mobile-application-development/> [Accessed 1 November 2019].