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**Proposal Topic**

Digital ANFA

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**Student Name:** Pranaya Pradhan

**London Met ID:** 17030952

**College ID:** np01cp4a170020

**External Supervisor Name:** Shekhar Timisina

**Internal Supervisor Name:** Rohit Pandey

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*I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.*

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# Introduction

Representing ANFA is an efficient way of depicting it in a digital spectrum. Digital ANFA is a final year project proposal. Digital ANFA is the project to develop a Football Application for the Football Association of Nepal. Football is a worldwide popular game. It is popular and played across Europe, Asia, South America and all most every part of the world. There are various tournaments organized in a different part of the world. Football being a worldwide play, it has millions of fans and everyone is not possible to visit a stadium in every game. In order to provide football news there are many numbers of applications and websites like goal.com, All Football, ESPN, Be Soccer and many more (Hindy, 2019). These applications and websites provide information regarding different matches and tournaments such as Premier League, La Liga, Serial A, Bundesliga, Ligue 1, Major League Soccer and so on (V, 2019).

## 1.1. Problem Scenario

ANFA (All Nepal Football Association) is the Football Association of Nepal. ANFA has been organizing various tournaments for the development of football and its activities. These tournaments consist of A Division League, B Division League, C Division League, National League, etc. (ANFA, 2019). In the context of our country, there are several such websites performing their functions in a regular manner, but these websites have not to stand to the expectations of Nepalese Football Fans. In the course of organizing these various tournaments, the Football Association has been facing a lot of problems.

The following are the problems:

1. ANFA does not have any trustworthy medium through which people can get result or information about matches or tournaments,
2. In most of the case, users must look deeply at the website in order to get detail about the tournament which may be a hassle for the users.
3. Similarly, the fans are not able to get information about the match fixtures, result, and table of the competition (Infojiini Consulting, 2019)

## 1.2. Project as a Solution

In order to solve the problem of the FA. A football application for the different tournaments must be organized. This project is a solution to the fans' inconvenience faced by the Nepali Football Fans. In the project, the develop will be showing the detail of at least one tournament. The following are the project as a solution for the above problems:

1. The project will be giving statistics about the match.
2. The project will be providing information about upcoming fixtures in the tournament.
3. The project will be providing the latest news related to the tournament.
4. The project will be giving brief information about the club, players, managers, etc.

# 2. Aims and Objectives

## 2.1. Aims

The main aim of this project is to build a football statistics mobile application for the Football Association which displays the information about the different tournaments organized by the FA where data are updated by the admin in web application.

## 2.2. Objectives

The following are the objectives of the projects:

1. To develop a user-friendly and simple web and mobile application
2. To make a deep research on various sources such as books, journal, reports, the whitepaper, etc. in order to complete the project on time.
3. To develop mobile applications.
4. To fulfill all the requirement of the client.
5. To select and use proper tools for developing the project.
6. To handle the testing of the project.
7. To provide proper document and user documentation about the project to the client.
8. To develop an error-free mobile application and website.

# 3. Expected Outcome and Deliverables

The following are the expected outcome of the project:

1. ANFA does not have a trustworthy medium for providing the details about tournaments, players, clubs, managers, etc. to its fans. They have a website but it’s not able to provide the details quickly. The project outcome is expected to provide brief details about the tournaments, players, clubs, managers, etc. as soon as possible to its fans in the form of mobile applications and websites.
2. With a digital system, the application and website allow ANFA to transfer the way of storing the data from Analog form to Digital form. The expected outcomes are to reduce costs and save the time of the football governing body of Nepal.
3. The outcome of the project is expected to provide benefit to the football governing body of Nepal as well as to the football fans as well as to sports reporter. ANFA gets benefit by providing information to its football fans and supporters. Similarly, football fans will be getting benefit from getting information about their favorite games. By getting detail statistics the sports reporter will be getting the benefit.

The following are the expected deliverables of the project:

1. News Feed: The project is expected to provide the news about the football governing body of Nepal to its users. The section is expected to deliver important news.
2. Competition Fixtures: The project is expected to deliver the fixtures of the competition on a digital platform.
3. Statistics: Details about the match, highest goal score player, a player with the highest assist, the team with the highest goal, the team with a clean sheet, points table are expected to be shown.
4. Clubs, Managers, and Players Section: In this section detail information about the clubs, managers and players is expected to display.
5. Multiple Access: The project is expected to deliver multiple access. They are admin and users. Admin works on web, he/she have the right to update the data on table.

# 4. Project Risks, Threats and Contingency Plans

At the time of project development, there may occur problems that might affect the product. There is a famous saying Prevention is better than cure. It always identifies the potential risk during the development, so that the risk gets prevented. Similarly, it is better to understand the project to identify and avoid potential risks, which may create a negative impact on the development of the project. The following are the problems that may arise during the development process:

1. Unable to get the detail about the fixtures of the upcoming tournament
2. Not able to get detail about the club, players and manager
3. Incorrect Time Estimation
4. No backup of data
5. Performance Problem
6. Unable to fix the bugs

To avoid the above project risks a proper contingency plan to be made to protect the product. During the time of development, if the Football Association is not able to give the detail of fixtures and detail about the team, players, and managers on time. Then an error message will be displayed on that page. A proper time table should be made to set a specific task. The task on the time table should be followed and should complete the task. To avoid data loss, the back-up of data will be stored on Hard drive or cloud services. To avoid data problems, I will be using GitHub. Similarly, proper technologies are to be chosen to avoid performance problems. In the situation where bugs are not fixed, research and consult with the supervisor to solve the bugs. Therefore, other measures can also be taken to make a project successful (CAST, 2017).

# 5. Methodology

To achieve the outcome, many methodologies were considered. Iterative Incremental Model is selected according to the requirement of the project for the development of mobile applications and websites. Iterative Incremental Model is one of the parts of Software Development Life Cycle. In this methodology, a system is constructed with limited features. In every iteration functionality are added. The above process of software development is repeated until the complete product is developed. In the process, the repetition between processes is called iterations. Similarly, a product increment is delivered in every end of the phrase or iteration. In this methodology, the developer can prioritized the requirements before the project execution. Similarly, this methodology deliver product faster as well as clients gets to know the important features earlier. Using this methodology, the client will be getting the product in low cost as well as he/she is able to give feedback to the each increment. One of the merits of using iterative incremental model is that the change in requirement does not affect the project. (Tutorials Points, 2019).

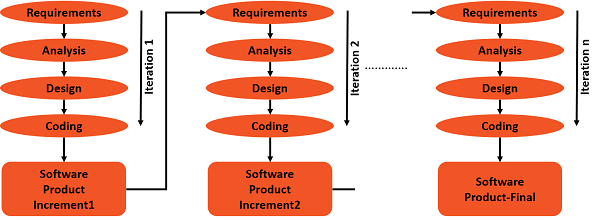


Figure 1 Iterative Incremental Model

(Wisom Jobs, 2019)

# 6. Resource Requirement

The following are the resource requirement for the projects:

## 6.1. Version Control

To access control over bugs and task management. A developer will be using GitHub as a Version Control. Version Control using git is currently proposed as there will be issues regarding plagiarism and collusion.

## 6.2. Programming Language

As there is not any concrete evidence in the programming world that this is the best language for every problem. So, the developer will be doing more analysis on the problem domain and will finalize different languages that will be used to solve different problems that will arise. JavaScript and PHP is most likely to be used by the developer.

## 6.3. Mobile Application

As in the case of mobile application, there are few emerging buzz words in the market namely flutter and react native. Therefore, these technologies will be considered while developing the product. Flutter is most likely to use by the developer.

## 6.4. Web Application

HTML, CSS, JavaScript, and Bootstrap will be used for the development of the web application in the project. Similarly, developer may use the PHP or different framework of JavaScript for the development of web application.

## 6.5. Application Programming Interface (API)

For the development of the project, I will be using API as required for the project.

## 6.6. Database

In order to store the data, Firebase or MySql will be used to store data.

# 7. Work Breakdown Structure

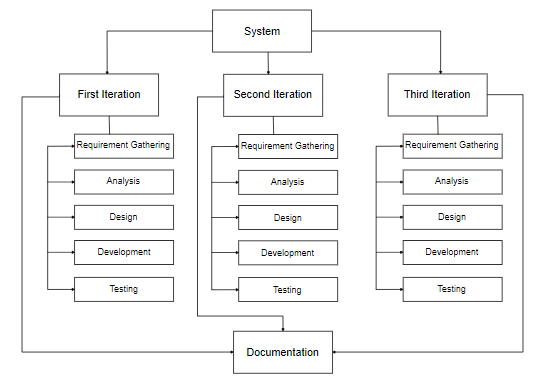


Figure 2 Work Breakdown Structure

# 8. Milestones

The following are the table and graph of milestone with an annotation:

|  |  |
| --- | --- |
| Activities | Weeks |
| Requirement Gathering | 4 |
| Iteration 1 | 5 |
| Iteration 2 | 6 |
| Iteration 3 | 5 |
| Documentation | 4 |

Table 1 Table of Milestones

Figure 3 Milestone

In the above figure, x-axis and y-axis denotes the activities and weeks. The total duration of the project is to the sum of the weeks.

# 9. Project Gantt chart

The following are the diagram of the Gantt chart:

Figure 4 Gantt Chart

In the above figure, the estimated working days are shown in the Gantt chart.

# 10. Conclusion

In order to windup, the following given concept of mobile application and website is the proposal to put in front of ANFA as a final year project. The proposed mobile application and website will be designed for ANFA to solve the complications and drawbacks that ANFA has been facing due to unmanaged activities of the digital spectrum, basically regarding the results and information of tournaments and also individual matches. This project initiates a managed football mobile application and website which will ultimately take Nepali football fans to their desired and wanting football application. The project will follow the iterative model for software development to make the project efficient.

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