

University of Science & Technology, Bannu



Department of Software Engineering

Final Year Project Proposal

Gym Management Application

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Abstract

Nowadays the Gym owners are so worried about managing the bodybuilders data and facing too much difficulties while collecting fees, giving instructions and store their data – currently they are using hard-book-note which might be lost. As we know that technology is growing immensely in recent years, certain inventions need to be made. People are tired of using hard-Notebook and afraid of losing it, so we got something better for them. We will develop a software application which will help all of the Gym users, owners and in-charges to manage the gym online.

1. Introduction

Every single Gym has thousands plus students; managing of such high level of customer becomes difficult to manage manually using a hard-book-note. The Gym Management App will manage all of the gym activities digitally that are currently being handled by the Gym in-charge(manager) manually using a hard note book. So, in our project we aim to handle all of the Gym activities that are currently being handle manually. Here are the core activities that we will implement in this final year project.

After a successful implementation of this final year project, here are the following benefits.

- Available 24/7 – hard-Notebook is not available 24/7.
- Provide best security – hard-Notebook can be lost – cannot be recovered.
- Reduce cost and time. As what happened with me – already discussed.
- Easy to use – easy to search, navigate and get help etc.

2. Problem Statement

Currently the Gym in-charge collecting fee using a hard-Notebook which might be lost and the owner might do not trust it, because of his/her absence. The owner will see online data of his/her gym from anywhere and anytime. We know data is very important at any organisation, keeping it safe/secure/protected is required, otherwise you will be in loss. Through this software application one can control the whole gym from anywhere anytime without being physical present at the moment. The Gym management make it easy to manage your gym anywhere in the world with a tap of your smart phone. As I searched on the market, but did not find a solution to this problem.

3. Objectives of Project

The main objective of this project is to develop a software application that manages all kind of activities in the gym. The specific objectives of the application are following.

- To collect fee and store in the firebase for real time accessing.
- To manage the bodybuilders.
- To give instructions and important notifications about events or availability.
- To show workouts for all body exercises.
- To promote products(protein).

4. Literature Review

This Software will be developed with the aim of replacing the current manual system into digital system and is supposed to provide an easy access of the resources of the Gym [2]. In this we will do online works only not a manual work.

Gym Management Application provides lots of functions such as data entry of customer keeping records of all the things about customer's fees, plan, and physical fitness which helps to provide good quality of services to customer from Gym manager [3].

We proposed this solution to give an easy hand to GYM author who are fed up with those desktop application with limited features [4].

In gym management system it requires a system which handle the details easily and security according to user. It also requires software which store data about staff and persons [5].

In gym management system it requires a system which handle the details easily and security according to user. The method proposed by [6] has a lack of collecting fee and attendance of the students.

5. Proposed Architecture

In our project, we will be following the Agile Model methodology for implementing this final year project called Gym management.

To make this final year project idea into real, we will be adopting the model proposed by [7] in his study to review manage the Gym. We will be using the same data model for our Gym Management to manage the Gym with some additional activities.

Stages of adopted model

The model adopted by [2] is consist of several phases. They are following.

- 1. Analysis and Planning:** The sprint begins with a sprint planning meeting, where team members come together to lay out components for the upcoming round of work. The product manager prioritizes work from a backlog of tasks to assign the team.
- 2. Design:** The software owner meets with the software development team and introduces them to the requirements outlined in the first step. The group then discusses the sequence for introducing functions and identifies the essential tools – the programming language, syntax libraries, and basic frameworks. They start designing the product in accordance with the approved guidelines.
- 3. Build:** Programmer start to give functionalities to the product according to the designing. They develop the product in accordance with the approved guidelines and design - the programming language, syntax libraries, and basic frameworks.
- 4. Test/QA:** Complete thorough testing and documentation of results before delivery. The programmers test the product from every angle. They also do Alpha(organization) and Beta(user) testing.
- 5. Review:** In this phase the organization review the product and get solicit feedback from the customer and stakeholders and gather information to incorporate into the next sprint/spiral.

6. Launch: Present the working product or software to stakeholders and customers.

The goal of the agile software development life cycle is to create and deliver working software as soon as possible and go back & forth if encounter any change/error. That is why we preferred to Agile over waterfall model which do not provide the facilities of earlier delivery and changes/error fixing at any stage.

Here is the diagram of Agile model.

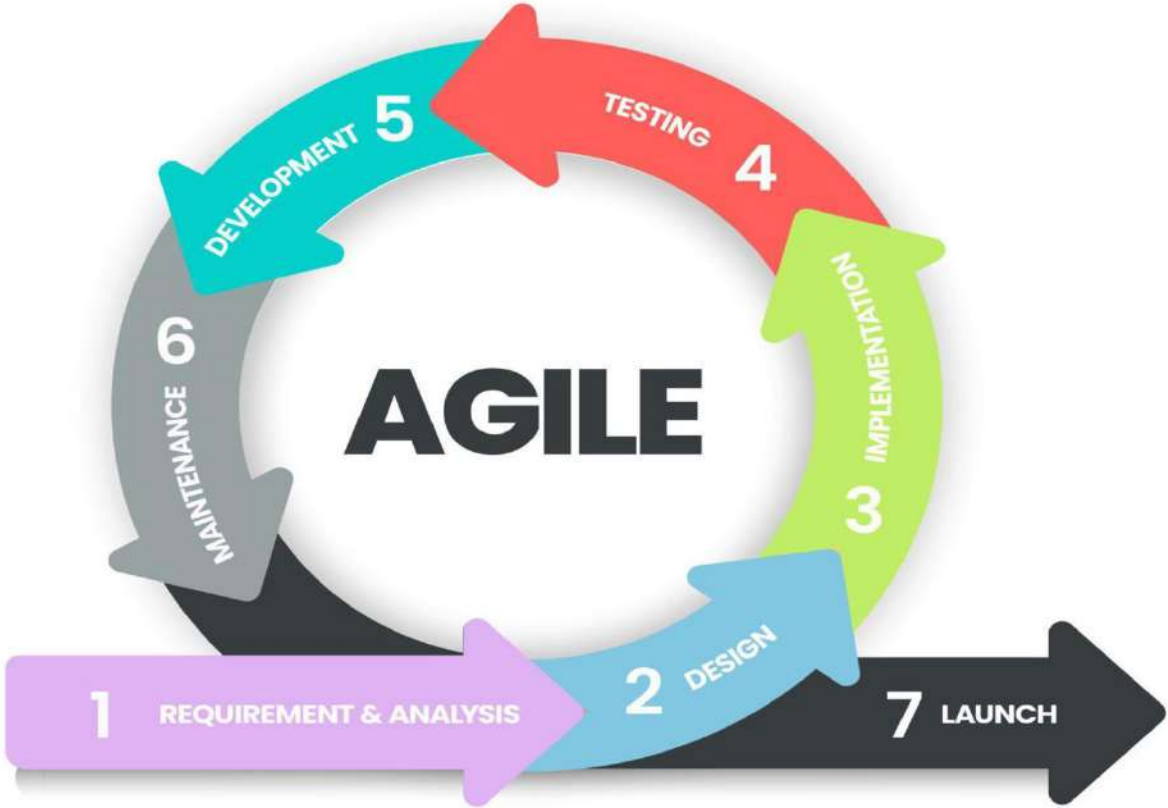


Figure 1

6. Project Schedule Plan

The schedule of the proposed system is:

Collection and Study of literature	Three Weeks
Study of Literature	One Month
Analysis of the Proposed Scheme	One Month
Preparation of Scheme/Model	Three Weeks
Implementation of Scheme/Model	Three Months
Results Formulation	One Months
Final Write-up & Thesis Submission	One Month

7. Project Milestones and Deliverables

Activity	December 2022	January 2023	February 2023	March 2023	Apr - May 2023	Jun - July 2023
Collection of Literature	01 - 23					
Study of Literature		1 - 31				
Analysis of Proposed Scheme			1 - 28			
Preparation of Schemes / Model				1 - 25		
Implementation of Model/Scheme					Apr - May	
Results Formulation						Jun - 1-30
Final Write-up & Thesis Submission						July -1-31

8. Contribution to the Field

This software application idea will be beneficial for Gym owners, who have lack of trust on the gym in-charges and afraid of data loss. After a successful implementation of this final year project idea, the software will used for the Gyms specially to manage the fees, bodybuilders and in-charges.

9. Budget Description

This project requires no cost but if we want to integrate the online payment method then \$700 - \$1k cost is expected that it will cost us to achieve all of this project objectives.

10. References

- [1]. K. Bhanushalia, V. Surejaa, V. Patela, T. Thakera, N. J. J. o. U. S. Doshia, and P. Networks, "DATABASE MANAGEMENT SYSTEM FOR SMART GYM USING IOT," vol. 3, no. 1, pp. 00-00, 2011.
- [2]. P. M. S. KUMARI and K. L. J. T. I. J. Reddy, "GYM Management System," vol. 22, no. 35, pp. 1423-1431, 2019.
- [3]. K. Gamage, "Web based Gym Management System," 2017.
- [4]. H. Shearzi, Z. Abid, M. Bilal, and M. Usman, "Gym management System," University of Management and Technology, 2016.
- [5]. K. Mahima, R. Pooja, W. Niyati, G. J. J. o. A. i. S. E. Lodha, and Testing, "Survey Paper on Gym Management System," vol. 2, no. 3, 2019.
- [6]. "XPLOR" Pamela Joseph and Justin LaChance have developed the app -> Xplor and it is a gym management software. Here is the link to see more about it <https://www.xplortechnologies.com/>
- [7]. "GLOFOX" Scott Kinworthy and Ryan Mueller from F45, talk about how Glofox gym management software has helped grow the F45 brand internationally. Link to see more information. <https://www.youtube.com/watch?v=tHgPzaAAI>

11. Undertaking

The project idea presented in this proposal is of our own. The idea has not been implemented previously.

Signatures of Students

Student 1: Muhammad Farid Ullah. _____

Student 2: Muhammad Yousaf Wazir _____

12. Supervisor Comments

Take recommendation of your supervisor for your project work here.

Supervisor Name

Designation

Signature: _____

13. Final Year Project Coordinator Remarks

Do not write anything here. For official use only.

Signature of Final Year Project Coordinator