# CHAPTER FIVE

# IMPLEMENTATION

## 5.1 **Introduction**

The implementation document helps users on how to work with the system. It acts as a user manual and it helps users not to be the system confused with. It includes sample forms and some selected fragment code. It gives the users a brief over view of the system. This document describes the project implementation for developing the web-based R&PMS. The project implements PHP, MySQL and standard HTML.

## 5.2 Hardware and Software acquisitions

For the project implementation; the following Software and hardware tools are used.

### 5.2.1. Hardware Requirements

* Any Desktop or Laptop Computer: for running the system (4 GB RAM)

### 5.2.2. Software Requirements

The different kinds of software we used in the development of the website are:

* Xampp server
* Notepad++
* Browsers (Mozilla Firefox, Google chrome)

## **Language specification and selection strategy**

This project used PHP, CSS, HTML and JS for select the best interface programming technology integrated with xampp server database with a programming language. We choose PHP as server side scripting language because PHP is:

* Clear and easy to understand.
* It runs on many different operating systems.
* Operates much faster than other scripting languages.
* Open source. In general PHP is a widely used open source general purpose programming

language that is especially suited for web development and can be embedded into HTML.

## 5.4 Sample code

## 5.5 Test procedures

The System will be tested using the standard and recommended system testing procedures before directly deploying. We will perform different testing methodologies for its Functionality and meeting users need.

### 5.5.1. Unit Testing

First we will test each unit at each system. Each module of the system can be tested check the working of each classes, methods and attributes of the system. For immediately maintain at which the problem is occurred.

### 5.5.2. Integration Testing

In this testing part, all the modules will be combined together and tested for their combinability with each other and with the systems functionality. If error occurs in combining them, the module with problem will be identified and re combined. All team members perform both units testing and integrated testing during development. Here users cannot involve

### 5.5.3. System Testing

In this testing, the team performs over all functional testing by checking whether it meets the required target or not.

## 5.6 User manual preparation

No more manual preparation is needed for users, because the system developed is not software

and it is not installed on a client computer. After the implementation has been completed, it is

directly hosted on Network (server).

### Training

During the deployment of the system, the project group members will give short time training for

the system users and explaining how the system works and in what way they can manage their

system.

### Installation

For local use, we use xampp server. For online use of the system we install our Database one a

hosting device to make it available for every user.

### Start-up Strategy

The start-up strategy will be buying a domain name, hosting the system and finally available

internet connection.

# CHAPTER SIX

## CONCLUSIONS AND RECOMMENDATION

# 6.1 Conclusion

This project has two phases; the first phase concerned with the analysis phase of the lifecycle, the design phase and the next phase, is about implementation. As the end of the first phase we review that, we have covered in accordance with what we have planned at the beginning. This involved defining the system development methodology identifying resource and cost requirements. The analysis helps us to understand the major functional areas and processes of the system. Through this method, we evaluate the existing system that was done manually. After that, we performed requirements elicitation to discover user and system requirements. This phase consisted of drawing the functional as well as non-functional requirements of the system. Then we have undertaken a major phase in system development process: object-oriented Analysis. Here, we tried to model the new system we proposed using UML diagrams: Use case, sequence, and activity and class diagrams Also, we designed the new system user interface prototyping and implementation.

**6.2 Recommendations**

While doing this project the team has faced different challenges. According to the scope of our project, the team develops web-based system which may lack some functionalities. Because of the many constraints such as time, lack of information, we cannot do full functionality of the systems, but in the future the team believes that this system can be fully operational by having enough time and full information. Next, the team would recommend that further work should be done on the system in order to make the system improvement. Generally, for the next programmer or system developer, our project team members recommend to next add additional languages (e.g. Amharic and other languages), check plagiarism based on content.