CHAPTER V

PROJECT MANAGEMENT

This chapter discusses the development and the estimated budget of the system. A project cost serves as a preliminary financial plan for implementation of the system. The system requirements observe the hardware and software specification the information gathered by the team ensures that the objectives and purposes are attainable regarding the system's usability and functionality requirement.

5.1 Project Cost Estimates

In this section, the team identifies the expenses for the development and maintenance of the system. For the development of the system, the team must analyze first the project cost for the project. The group conducts a research and from the company to determine the quality of hardware and software to be used. The team must measure the requirements of the system to understand the overall project cost. The development cost of the system is Php 247,647, and the operating cost is Php 3,000, and the total system budget is Php 250,647.00.

5.2 Project Cost and Benefit Analysis

This section shows the project cost and the cost-benefits analysis and project cost of the system that includes the development cost and implementation cost. The Return of Investment of the system is 69.64%. For the Net Present Value of the system is Php

94,647.34. The Payback Period of the system implementation takes three years and ten months to gain the estimated payback cost.

5.3 Project Schedule

The team requires planning of the system that is necessary to meet the completion of the proposed system ahead of time. A project schedule provides the summary structure of the project. The team must consider a time management in constructing a project. The first phase initiated by the group is the planning phase where the team searched for a company and proposed a system. Then, the team conduct some interview and gather all necessary data that is needed for the system. The second phase is the Analysis phase where the team constructed data flow diagram and prepare and ER-Diagram and data dictionary for the Database design. The third is the Design phase where all the data that the group gathered are converted into a design. In this stage, the team prepares the system proposal functionalities, system prototype construction, and finalization of system prototype. The last step is the implementation phase where the team starts coding to build the system, conduct unit testing, system testing, and prepare for system presentation. The team used different scheduling tools in identifying the time and various activities. The team uses Gantt chart which shows the number of activities that the group undergo. The activities must follow the order of the process from planning, analysis, design, and implementation. It also displays the number of weeks and the range of the required weeks for the project to finish. The number of weeks that the team has to build the system remains in 40 weeks. The PERT Table shows the slack time that helps the team to identify the schedule wherein the team can rest and work together. Two of the activities presented in the PERT table are

having a slack time of 1. The PERT Diagram shows the nodes in a sequence of action which is done by the team. This diagram helps calculate the Critical Path based from the PERT Table.

5.4 Project Resources

In system development, the team considers the following factors regarding identifying the resources to carry out the project tasks. The system cost is part of the project resources discussion that includes the development and implementation cost of the system, software needed, operating cost, expenses and the benefits that the organization can gain. For the development cost of the project, it includes the different hardware equipment to be used.

5.4.1 Software Requirements

The team used WAMP server because it is much compatible with windows operating system. It also allows developing, upgrading the components, and host the website online. The team used the Windows 7 Ultimate 64-bit, Service Pack 1 to run the automated system. The system is a web-based application which uses any version of windows from 7, 8 or 10. The selected software has functionalities that can manage the Apache and MySQL services. The team also uses PHP because it is an open-source application. It has built-in database connection and modules that can connect to database efficiently using PHP. Since most of the websites now are data and content driven, the database is essential to store data. The team uses Bootstrap in creating the website interface. Bootstrap enables the team to utilize the

code in designing the interface, and it's easy to use. It also has responsive web design and the layout of web pages.

5.4.2 Hardware Recommendation

This section is where the team identified the needed hardware peripherals for installation of the system. These hardware components will suit for the functionality and specifications of the system and as well as the convenience of the user. The following are the specified peripherals:

Processor: Intel Core i5-7500 6M up to 3.8 GHz

Memory: 4GB DDR4 Memory

Hard Disk: 500GB HDD, 1TB external HDD

Monitor: 15.6" LED Monitor

Keyboard and Mouse

UTP Ethernet Internet Network Cable and TP-Link Switch

Printer and UPS (Uninterruptible Power Supply)

5.4.3 Staff Requirements and Qualification

This section the project team discusses the staff requirements and qualification system for SEMHCMS. One of the major factors for consideration is the emphasis intended to the users on how they are going to utilize the system. All the users in the organization must undergo training for the necessary skills required in navigating the system to be familiar with the different interfaces and the database environment. The desk officer or the admin must be also familiar with navigating

functionalities such as searching the data of the various patients, encoding, managing the master files and generating statistical reports.

This chapter discusses the development and the estimated budget of the system. It is important to identify the budget proposal of the system to maximize the resources and to avoid unnecessary expenses. Resources are identified to carry out project tasks as well as the system cost which includes the development and implementation cost of the system.