CHAPTER 3

METHODOLOGY

3.1 Introduction

In the previous chapter had discussed about the Alzheimer’s disease and applications for managing Alzheimer’s disease. Besides that, we also focus on the existing mobile application for managing Alzheimer’s disease such as Daily Life Activity Tracking Application for Smart Homes, iWander, Environment-Aware System and Smartphone Application for People with Alzheimer’s Disease. In this chapter will going to discuss about the software development methodology in order to complete the research to develop a Helper System for Managing Alzheimer’s People Using Mobile Application. This chapter also wills specific the hardware and software required to complete this research in this chapter too.

For develop a project, it is necessary to have a model or framework of methodology as a guideline to develop within a well-planned systematic process. Normally, the software development methodology or Software Development Life Cycle (SDLC) model as learned before is starting from planning, analysis, design, implementation and end with maintenance. After analysis on the research requirements and SDLC model, the framework of methodology that will be implemented in this research is starting from planning, analysis, design, development, testing and evaluation and end with documentation. These phases be chosen due to the development of this research or project is consider small and not bigger like the project of company that include many peoples in one group. Besides that, the
duration of the development of this project is short and not as long as the project of company.

3.2 Methodology

The framework of the methodology is suitable for develop within short time or period as possible. It consists of six separate phases which are planning, analysis, design, development, testing and evaluation and documentation. Figure 3.1 shows the framework of the methodology, while the Figure 3.2 shows the Gantt chart of the development of project.
### 3.2.1 Phase 1: Planning

In this first phase, discussion of the title and project with supervisor needs to be conducted. During the discussion all the possible current issue or problems and the propose of project will be discuss. Then the objective, scope and purpose of the research on helper system for managing Alzheimer’s people using mobile application are being analyzed after the discussion.

### 3.2.2 Phase 2: Analysis

Firstly the literature review is being study and carried out in this phase. All the requirements are taken from the investigation of the research of the literature review. Alzheimer’s disease is one of the literature reviews that need to be study. It is one of the popular chronic diseases from the older people. The Alzheimer’s disease is one form of dementia and causes by malfunction or die of neurons which function in forming the new memories [19][20]. Besides the investigation of the research of the literature review about the Alzheimer’s disease, VNC architecture or server for