CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter also provides a development process such as flowchart, use case diagram and data flow diagram to solve the problem of scheduling invigilators at UMP. Gantt chart too described in this chapter. The GUI design interface is developing for this chapter.

3.2 Flowchart Process

Figure 3.1 below shows the flow chart of the Invigilator System development process. Administrator need to key in bil, name, subject, slot time, category, day, date, room, total chief invigilator and invigilator using graph heuristic. Next, the system will assign to generate schedule to the appropriate parameter. If the constraints are satisfied, the schedule will be printed or else, the condition will be assigned again until satisfied.
3.3 Use Case Diagram Process

A use case diagram is the different types between the users with a system. Then the user is interacting with the system. Administrator is a person who will control and manage the system and update data and do the maintenance of the system. Admin can also generate the load data of schedule and view schedule that has been generated. Chief Invigilator or Invigilator is means staffs who will view load data of schedule for their scheduling invigilator for examination Manage load datasets is allows admin to manage data information such as subjects and lecturers. Input schedule details is administrator key in the load data sets for date, day, time slot, room, total chief invigilator, total invigilator and code subject. Generate schedule for admin to generate
timetable from the input data. This is where the graph heuristic process runs. View Schedule is means for admin to view the schedule such as figure 3.2.

Figure 3.2 Use Cases Diagram for Scheduling Invigilator