**EXPERIMENT NO. 4**

**PROJECT SCHEDULING USING PROJECT MANAGEMENT TOOL**

**Aim**

Use project management tool to schedule project plan for University Exam Scheduling

**Description**

1. **Project Summary**
   * 1. **Project Overview**The course scheduling software is meant to create a schedule for university for the first year department, given the preferences of professors and the information on available rooms and timeslots for courses.
     2. **Project Scope**The project scope is primarily to create a schedule and give suitable messages from the given preferences and data given in input files. Getting the data to prepare the input files is out of scope of this system.
     3. **Development Process**We follow the waterfall model of software development as it is simple and small.
     4. **Effort, Schedule and Team:**The team comprises of the following 3 persons:
        + *Total Effort: 2.4 person-months (53 person-days)*
        + *Project duration: 3.5 months*
     5. **Assumptions made:**  
        No major assumptions beyond what is stated in the SRS.
2. **Detailed Effort and Schedule**The phase wise estimates were obtained earlier and given in the book. To summarize the total effort is 53 person-days. Of this the distribution is design: 0.4 (9 days), detailed design: 0.6 (13 days), coding: 1.0 (22 days), and integration: 0.4 (9 days).  
   As the project staff (students) are spending on the project about 1/4th to 1/3 rd of their total time, the durations of the tasks have to be suitably fixed. The overall schedule for the project is given below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Task** | **Estimated Effort (person -**  **days)** | **Start Date (dd/mm/ yyyy)** | **End date (dd/mm/ yyyy)** | **Person** | **Actual Effort (man-**  **hrs)** |
| 1 | System design | 9 | Jan 18 | Feb 1 | A, B |  |
| 2 | Detailed design | 13 | Feb 1 | Feb 28 | A, B, C |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 3 | Coding Input module | 8 | Mar 1 | Mar 31 | A |  |
| 4 | Coding Sched module | 8 | Mar 1 | Mar 31 | B |  |
| 5 | Coding Output module | 6 | Mar 1 | Mar 31 | C |  |
| 6 | Test planning | 3 | Mar 15 | Mar 31 | A, B |  |
| 7 | Testing and integration | 5 | Apr 1 | Apr 15 | A, B |  |
| 8 | Rework and final | 3 | Apr 15 | Apr 25 | A, B, C |  |
| 9 |  |  |  |  |  |  |

The total estimated effort in person-days is: **53**

1. **Team Organization**We will have a small team of three persons A, B, and C. We use a flat team structure of peers, with one person having an additional role of project manager. As C has less time available for the project, work assigned to him is less.  
   The assignment of tasks to them will be maintained in the detailed schedule, a high-level view of which is given above.
2. **Hardware and Software resources required**The only hardware resource required is a workstation with python compiler.
3. **Quality Plan**The quality control process for this project will consist of the following:
   * 1. *SRS Review*: The SRS will be reviewed by a team.
     2. *Design Review:* Design document will be reviewed by the project team.
     3. *Unit Testing:* Each programmer is responsible for Unit Testing his module.
     4. *System Testing:* Will be done according to the system test plan, which will be reviewed.
4. **Risk Management Plan**There are no risks with this project that might need any explicit mitigation.
5. **Project Tracking**Three basic methods will be used for monitoring – project logs, weekly meetings, and reviews. As there is no timesheet system, each project member will record his activity in a project notebook and report the hours for each activity in the meetings.  
     
   Reviews will be held as per the quality plan.

**Conclusion**

Hence, we were able to using a Gantt Chart Designing Tool, design a Gantt Chart which helped us to map our requirements, set deadlines and quickly complete the project with minimal issues on time

