Project Management Plan
Case Study 1 (Course Scheduling System)

1. Project Summary

1.1 Project Overview
The course scheduling software is meant to create a schedule for courses in a department, given the preferences of professors and the information on available rooms and timeslots for courses.

1.2 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.

1.3 Development Process
We follow the waterfall model of software development as it is simple and small.

1.4 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

1.5 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 1/3rd of their total time, the durations of the tasks have to be suitably fixed. The overall schedule for the project is given below.

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Estimated Effort (person - days)</th>
<th>Start Date (dd/mm/yyyy)</th>
<th>End date (dd/mm/yyyy)</th>
<th>Person</th>
<th>Actual Effort (man-hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System design</td>
<td>9</td>
<td>Jan 18</td>
<td>Feb 1</td>
<td>A, B</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Detailed design</td>
<td>13</td>
<td>Feb 1</td>
<td>Feb 28</td>
<td>A, B, C</td>
<td></td>
</tr>
</tbody>
</table>
The total estimated effort in person-days is: **53**

### 3. 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.

### 4. Hardware and Software resources required
The only hardware resource required is a workstation with C/C++ compiler.

### 5. Quality Plan
The quality control process for this project will consist of the following:
- **SRS Review**: The SRS will be reviewed by a team.
- **Design Review**: Design document will be reviewed by the project team.
- **Unit Testing**: Each programmer is responsible for Unit Testing his module.
- **System Testing**: Will be done according to the system test plan, which will be reviewed.

### 6. Risk Management Plan
There are no risks with this project that might need any explicit mitigation.

### 7. 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.