

Software Project management
Notes - Only for reference

PROJECT SCHEDULING:

- Take any software application with a time module.
- Can it be completed in a single module?
- List the tasks in the application.
- Are tasks dependent or independent?
- Can few tasks be done parallel or serial?

PRINCIPLES OF SCHEDULING:

1. **Compartmentalization:** The project must be compartmentalized into a number of manageable activities and tasks.
2. **Interdependency:** The interdependency of each compartmentalized activity or task must be determined.
3. **Time allocation:** Each task to be Scheduled must be allocated some number of work units (e.g., person - days of effort).
4. **Effort validation:** the project manager must ensure that no more Than the allocated number of people have been scheduled at any given time.
5. **Defined responsibilities:** Every task that is scheduled should be assigned to a specific team member.
6. **Defined outcomes:** Every task that is scheduled should have a defined outcome.
7. **Defined milestones:** Every task or group of tasks should be associated with a project milestone.
A milestone is accomplished when one or more work products has been reviewed for quality and has been approved.

Problem Table:

TASK/Activities/Modules	Duration (Days/Years)	Dependencies/Precedence Relation
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Network of Activities:

Early Start	Early Finish
Late Start	Late Finish

- ✓ First Compute Early start & Early Finish Forward.
- ✓ Then compute late start & Late Finish Backward.

Critical Path:

- Critical path gives you the longest duration.
- Delay in critical path will delay the project schedule.
- Path with zero slack is called critical path.
 - $\text{Slack / Float} = \text{Late finish} - \text{Early Finish}$

Activity	Early Start	Late Start	Early Finish	Late Finish	Slack
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Example:

Task	Time	Dep
A	10	-
B	5	-
C	8	B

A	
0	10
3	13

B	
0	5
0	5

C	
5	13
5	13