

## Project Scheduling Activity

1. Working in with a group of 3 or 4 students create a schedule for building the ATM system assuming the estimated size is 4000 LOC, the estimated person months using Basic COCOMO semi-detached is 14.3 person months and the estimated duration is 6.3 calendar months, the recommended team size is 2.25 developers but you will be using 4 developers to try to finish implementation in 4 months.
2. List the deliverables for the project.

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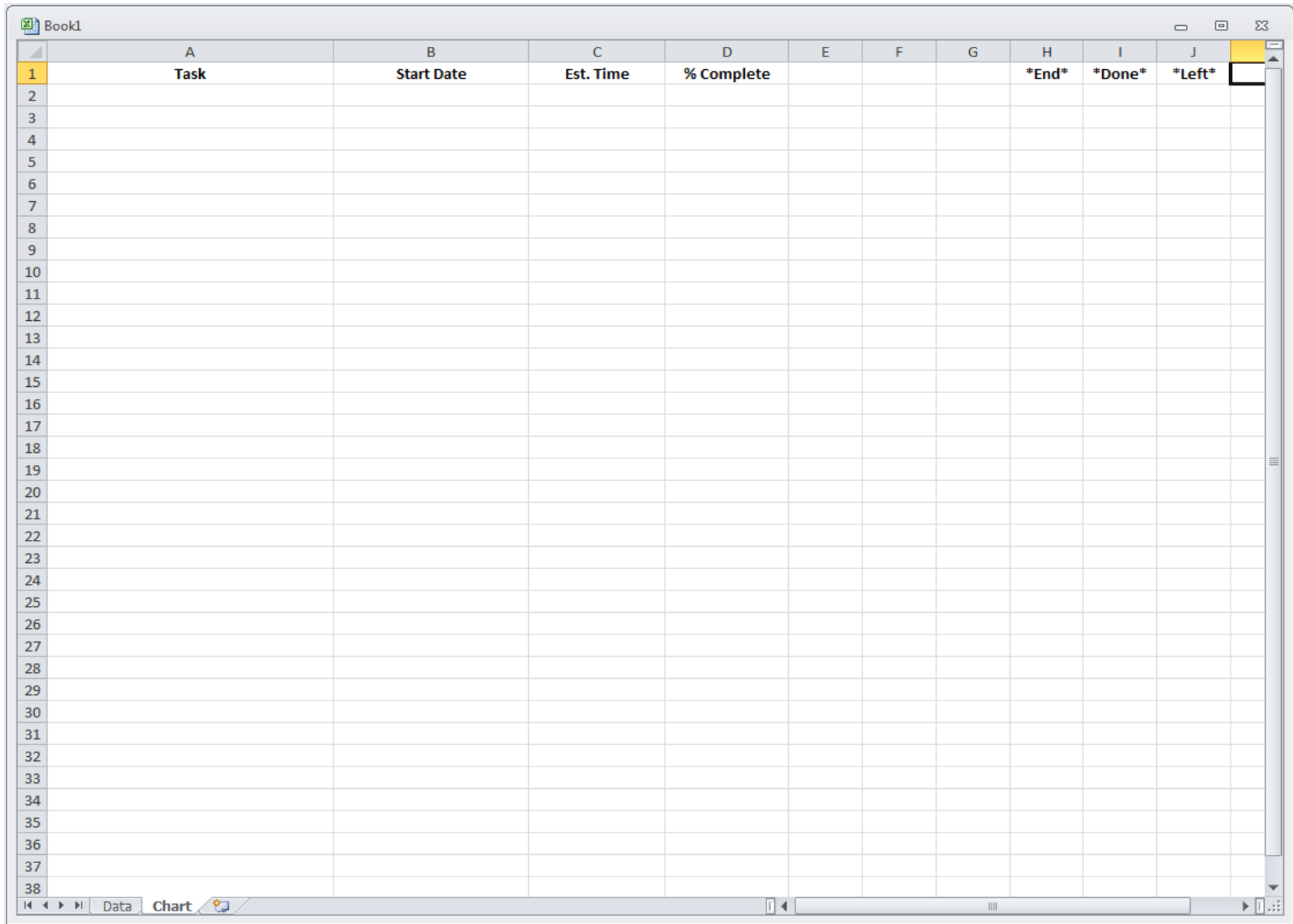
3. Select a process model and define the milestones for the project in terms of activities and deliverables required to make use of the process model.

4. Create the work breakdown structure and divide the project into phases and steps (e.g. sprints if you are using scrum).

5. Assign durations to each activity in your work breakdown structure. Use the following as guidelines.

- 02-03 % planning
- 10-25 % requirements analysis
- 20-25 % design
- 15-20 % coding
- 30-40 % testing and debugging

# Project Scheduling Activity



The image shows a screenshot of an Excel spreadsheet titled "Book1". The spreadsheet is set up for project scheduling with the following columns and rows:

	A	B	C	D	E	F	G	H	I	J
1	Task	Start Date	Est. Time	% Complete				*End*	*Done*	*Left*
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The spreadsheet interface includes a title bar "Book1", a ribbon with "Data" and "Chart" tabs, and a status bar at the bottom.

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6. Create an activity graph for the project based on your work breakdown structure.

7. Compute the critical path for at least one phase of your project (e.g. sprint, use case, etc.) using your activity graph.

$EST(START)$  always = 0,  $EFT(START)$  always = 0,  $LST(START)$  always = 0,  $LFT(START)$  always = 0.

$EFT(I) = EST(I) + DUR(I)$ .

$EST(I) = \max(EFT \text{ of all predecessors})$ .

$LST(I) = LFT(I) - DUR(I)$ .

$LFT(I) = \min(LST \text{ of all successors})$ .

$LFT(FINISH) = LST(FINISH) = EST(FINISH) = EFT(FINISH)$ .

Critical path is all nodes with Slack = 0.



