

Exercise 9 – Project management

Tasks:

- 1. In a plan driven development process, you should plan the activities requirements engineering, design, implementation and test in sequence. Requirements engineering takes 6 days, design takes 10 days, implementation 6 days, and testing 10 days again. Draw a GANTT chart (i.e., activity bar chart) for the plan considering that you can start designing and testing already after half of the preceding action is completed.
- 2. For an upcoming development project, you are supposed to plan the project with the help of a GANTT chart (activity bar chart). After identifying the work packages and evaluating the workload you got the information shown in table 1. Because the most employees are applied to other projects as well, you only have them available in small time frames indicated by earliest start.

Tabelle 1: Identified work packages

ID	Package	Earliest Start	Duration	Depends on
P1	Requirements engineering	0d	1d	
P2	Create web design	3d	1d	P1 completed
P3	Set up Webserver	4d	2d	P1 completed
P4	Implement Server	0d	4d	P2, P3 completed
P5	Test Server	10d	5d	P4 started

- a. Transform the table in a GANTT chart
- b. Add the milestones "ready for testing", "design complete" to the diagram.

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3. Have a look at Table 2.

- a. Transform the table in a GANTT chart
- b. Create a Staff Allocation Chart. How many employees do you need to fulfil the project in time if you assume that one employee can only be assigned to one task at a time?
- c. Create another Staff Allocation Chart. This time your available employees are limited to 3. How does this effect your project?

Task	Dependences	Duration (Days)
T1	-	2D
T2	T1	1D
Т3	T1	2D
T4	T2	4D
T5	T2	2D
Т6	T2	4D
T7	T3	4D
T8	T4/T6	3D

Table 2.

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