

Software Project Management II

Master Software Technology Exercise 6: Project Planning

1 Questions to check your knowledge

1.1 Overview

Describe the interrelationship among

- scope,
- work breakdown structure,
- estimates and
- network planning!

What is still missing in this list? A drawing for illustration is welcome.

Calendar staff
resources is missing

1.2 Work breakdown structure

Give a definition of

- a) Work breakdown structure
- b) Deliverable
- c) Milestone
- d) Describe at least 2 representations of WBS!
- e) Explain the 100% rule!

1.3 Critical Path Method

Describe how CPM works, i.e., what is done in each of the 3 steps (forward pass, backward pass, slack calculation).

2 Project Planning & Critical path method (CPM)

For this exercise, again please work in teams of 3-5 students.

2.1 Students' Tablet Project plan

Revisit your Students' Tablet WBS and Estimations along with further rough estimations and extend them to an initial project plan that you staff with your group members as resources. Assume you quit studies (which you sure should not do) as you deem the idea that promising, so you can work full time on the Students' Tablet, and assign proper roughly estimated times to the activities in your plan.

You can use ProjectLibre for the task, either in LVIS (2/433) or USW-Lab (2/505), or on your notebook.

Submit the ProjectLibre file to answer the questions:

- a) When can your tablet hit the market?
- b) What is the critical path in your plan?

2.2 Example extended

Continuing the example, proceed as follows:

- a) Your colleagues explain that there are several public holidays ahead. Thus, you are supposed to change the underlying (standard) calendar in ProjectLibre accordingly.
(1) Saturday 1 May is the first, but no problem this year,

(2) Thursday 13 May the next one, called “Christi Himmelfahrt”.

(3) It is fair to assume that people would appreciate a bank holiday weekend. Nevertheless, you decide that Friday 14 May should be a 4 hours working day.

(4) Monday, 24 May, “Pfingstmontag”, and

(5) Thursday, 3 June, “Fronleichnam”, are the subsequent public holidays you should be taking into account as well.

A hint to our students from abroad: the next public holiday follows on 3 October. Thus, May (and sometimes June) are fairly exceptional.

Observe the histogram for this universal resource (what is the maximum resource level (percentage?)) and then proceed with the resource leveling. You might want to define meaningful priorities for the tasks!

Compare the unlevelled and the final version (after resource levelling) of the plan in ProjectLibre and explain your observations!