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project proposal
TDBC10
Software Engineering

Informal Specification of a Project Planning Tool

General

A central part of the project planning activities is project scheduling. During project scheduling all task and milestones identified are organized in a graph-like structure, the task network (see [Pres 92], 109−113). Ressources are allocated for all tasks. This information can then be used to produce documents to support project tracking and control.

System Overview

The system shall provide a graphical user interface, where the user can build up graph like structures. Each node in this structure represents a task or a milestone of the current project. An edge between two nodes means that the task on the left end must be finished before the task on the right end of the edge can begin.

Each task can be attributed with information like necessary ressources, responsible persons, a time plan, and more if necessary.

For each connected substructure of such a task network (also called activity network) the system can compute and present the following information:

- **Critical Path.** The critical path of the project.
- **Task Time Line** (also called PERT or Gantt chart)**.** A table showing all consecutive activities of a project (see [Pres 92], 115).
- **Project Table.** A table showing all tasks of the project together with important tracking informtion (see [Pres 92], 116).

The system should be able to perform som simple consitency checks, like for example that all responsible persons ar real, that durations must not be negative, etc.

The system shall provide a printing facility to output all the forms. The system may also contain an automatic tracking, reporting, and notifying component which uses e−mail to send around automatically generated e−mails to responsible persons.