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SOFTWARE ENGINEERING LABORATORY (203105303) (Experiments)

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Experiment-4

Develop Software project management planning (SPMP) for the specified module.

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Aim: Develop Software project management planning (SPMP) for the specified module.

Objectives: To prepare timeline or schedule of project development based on requirements.

Project Scheduling & Tracking

It is an **action** that **distributes** estimated **effort across** the **planned** project **duration**, by **allocating** the effort **to specific software engineering tasks**

Scheduling Principles

- Compartmentalization
- Interdependency
- Time Allocation
- Effort Validation
- Define Responsibilities
- Define Outcomes
- Define Milestones

Scheduling methods

•Two project scheduling methods that can be applied to software development.

- **Program Evaluation and Review Technique** (**PERT**)
- **Critical Path Method** (**CPM**)

•Both techniques are **driven** by **information already** developed in **earlier project planning** activities:

- estimates of effort
- a decomposition of the product function
- the selection of the appropriate process model and task set
- decomposition of the tasks that are selected

Scheduling methods Cont.

- Both **PERT** and **CPM** provide quantitative tools that allow you to:
  - **Determine the critical path**—the chain of tasks that determines the duration of the project
  - **Establish "most likely" time estimates** for individual tasks by applying statistical models
  - **Calculate "boundary times"** that define a "time window" for a particular task

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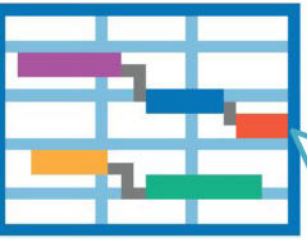
Gantt chart



A **Gantt chart**, commonly used in **project management**, is one of the most **popular** and **useful ways** of **showing activities (tasks or events)** displayed **against time**.

Each **activity** is **represented** by a **bar**; the **position** and **length** of the bar reflects the **start date**, **duration** and **end date** of the activity. This allows you to see at a glance:

- What the various activities are
- When each activity begins and ends
- How long each activity is scheduled to last
- Where activities overlap with other activities, and by how much
- The start and end date of the whole project

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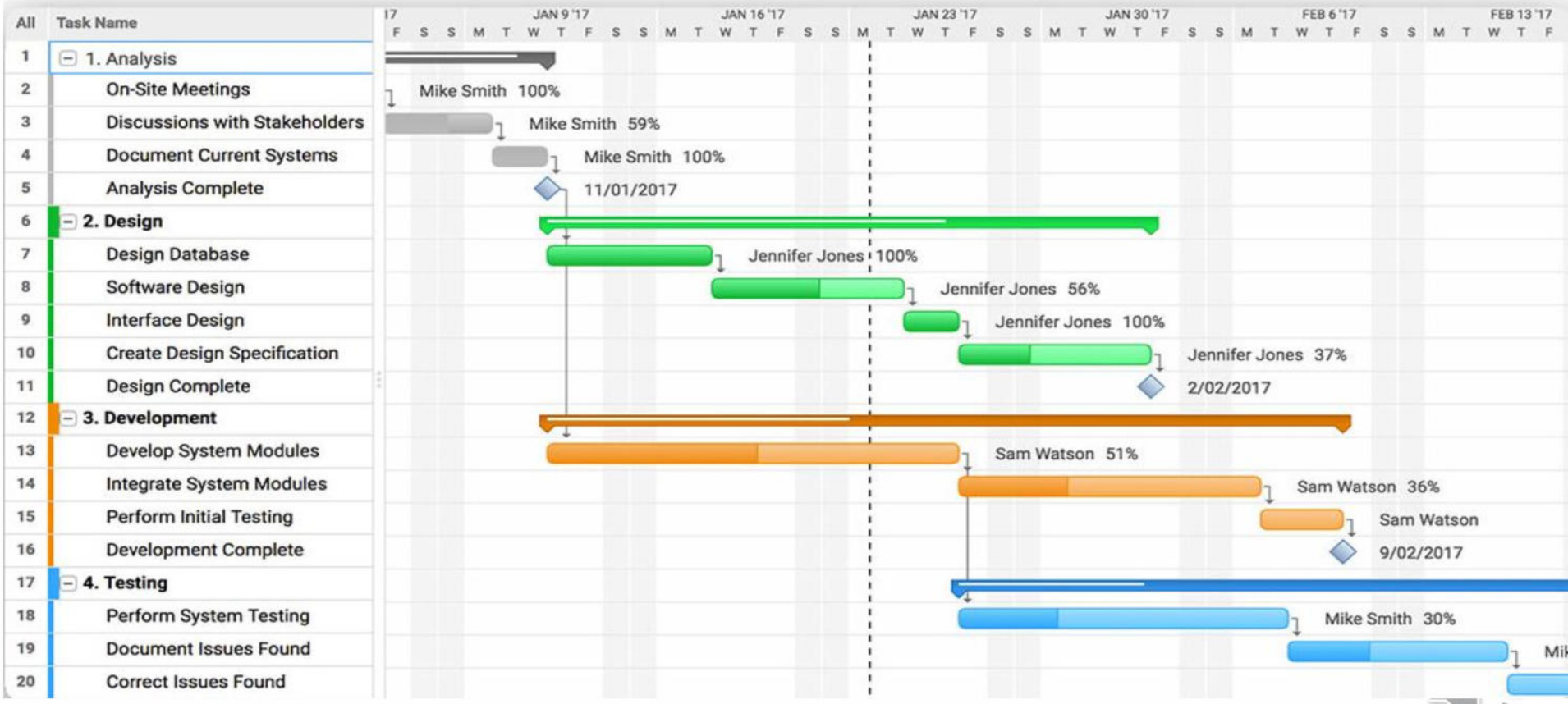
Gantt chart Cont.



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Experiment Demonstration