

Topics:

1. Project
2. Software Project Management Activities
3. Project Management Tools

What is Project?

A project is a group of tasks that need to complete to reach a clear result. A project also defines as a set of inputs and outputs which are required to achieve a goal. Projects can vary from simple to difficult and can be operated by one person or a hundred.

What is software project management?

Software project management is an art and discipline of planning and supervising software projects. It is a sub-discipline of software project management in which software projects planned, implemented, monitored and controlled.

It is a procedure of managing, allocating and timing resources to develop computer software that fulfills requirements.

Prerequisite of software project management?

There are three needs for software project management. These are:

- © Time
- © Cost
- © Quality

It is an essential part of the software organization to deliver a quality product, keeping the cost within the client's budget and deliver the project as per schedule. There are various factors, both external and internal, which may impact this triple factor. Any of three-factor can severely affect the other two.

Project Manager

A project manager is a character who has the overall responsibility for the planning, design, execution, monitoring, controlling and closure of a project. A project manager represents an essential role in the achievement of the projects.

A project manager is a character who is responsible for giving decisions, both large and small projects. The project manager is used to manage the risk and minimize uncertainty. Every decision the project manager makes must directly profit their project.

Role of a Project Manager:

1. Leader

A project manager must lead his team and should provide them direction to make them understand what is expected from all of them.

2. Medium

The Project manager is a medium between his clients and his team. He must coordinate and transfer all the appropriate information from the clients to his team and report to the senior management.

3. Mentor:

He should be there to guide his team at each step and make sure that the team has an attachment. He provides a recommendation to his team and points them in the right direction.

Responsibilities of a Project Manager:

- © Managing risks and issues.
- © Create the project team and assigns tasks to several team members.
- © Activity planning and sequencing.
- © Monitoring and reporting progress.
- © Modifies the project plan to deal with the situation.

Software Project Management Activities

Software Project Management consists of many activities that includes planning of the project deciding the scope of product, estimation of cost in different terms, scheduling of tasks, etc.

The list of activities are as follows:

- © Project planning and Tracking
- © Project Resource Management
- © Scope Management
- © Estimation Management
- © Project Risk Management
- © Scheduling Management
- © Project Communication Management
- © Configuration Management

Project Management Tools

To manage the Project management system adequately and efficiently, we use Project management tools.

Here are some standard tools:

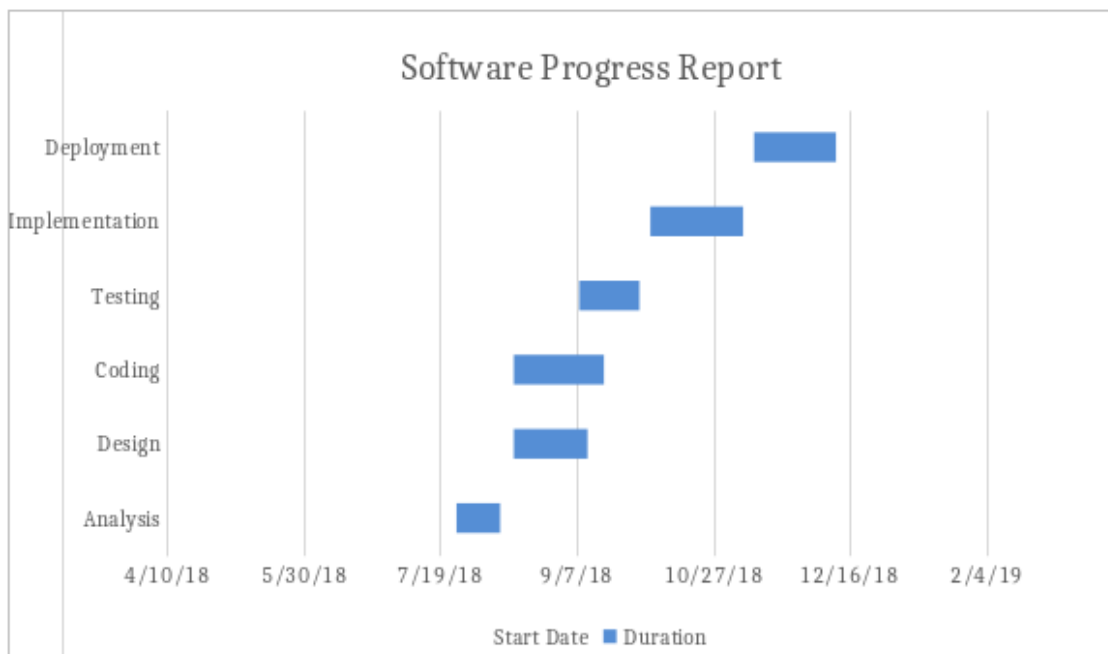
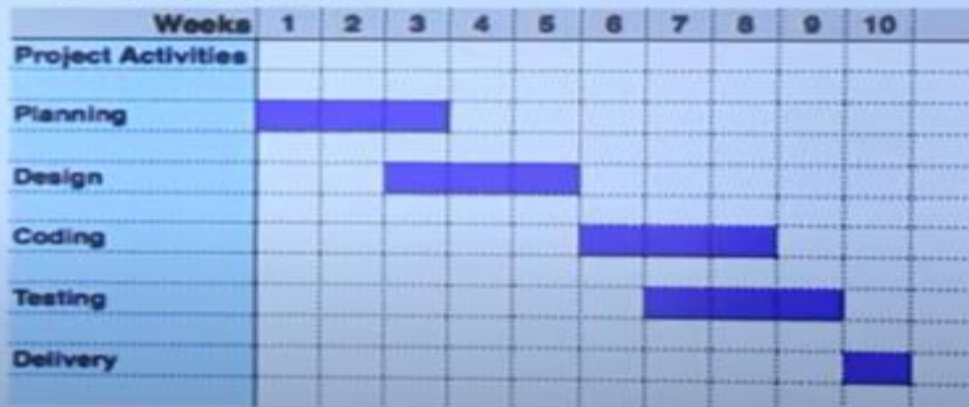
Gantt chart:

Gantt chart first developed by Henry Gantt in 1917. Gantt chart usually utilized in project management, and it is one of the most popular and helpful ways of showing activities displayed against time. Each activity represented by a bar.

Gantt chart is a useful tool when you want to see the entire landscape of either one or multiple projects. It helps you to view which tasks are dependent on one another and which event is coming up.

➤ Gantt Chart

- Gantt chart was devised by Henry Gantt (1917). It represents project schedule with respect to time periods. It is a horizontal bar chart with bars representing activities and time scheduled for the project activities.



PERT chart:

PERT is an acronym of Programme Evaluation Review Technique. In the 1950s, it is developed by the U.S. Navy to handle the Polaris submarine missile programme.

In Project Management, PERT chart represented as a network diagram concerning the number of nodes, which represents events.

The direction of the lines indicates the sequence of the task. In the above example, tasks between "Task 1 to Task 9" must complete, and these are known as a dependent or serial task. Between Task 4 and 5, and Task 4 and 6, nodes are not depended and can undertake simultaneously. These are known as parallel or concurrent tasks. Without resource or completion time, the task must complete in the sequence which is considered as event dependency, and these are known as Dummy activity and represented by dotted lines.

