## ● Gantt Chart

Generalized Activity Normalization Time Table (GANTT) chart is a type of chart in which a series of horizontal lines are present that show the amount of work done or production completed in a given period of time in relation to the amount planned for those projects. It is a horizontal bar chart developed by Henry L. Gantt (American engineer and social scientist) in 1917 as a production control tool. It is simply used for graphical representation of schedule that helps to plan in an efficient way, coordinate, and track some particular tasks in a project.

The purpose of Gantt chart is to emphasize scope of individual tasks. Hence the set of tasks is given as input to the Gantt chart. Gantt chart is also known as timeline chart. It can be developed for an entire project or it can be developed for individual functions. In most projects, after generation of timeline charts, project tables are prepared. In project tables, all tasks are listed in proper manner along with start date and end date and information related to it.

Gantt chart represents following things :

- All the tasks are listed in the leftmost column.

- The horizontal bars indicate or represent required time by corresponding particular task.

- When multiple horizontal bars take place at same time on a calendar, then that means concurrency can be applied for performing particular tasks.

- The diamonds indicate milestones.

Advantages :

Simplify Project –

Gantt charts are generally used for simplifying complex projects.

Establish Schedule –

It simply establishes the initial project schedule in which it mentions who is going to do what, when, and how much time it will take to complete it.

Provide Efficiency –

It brings efficiency in planning and allows the team to better coordinate project activities.

Emphasize on scope –

It helps in emphasizing i.e., gives importance to scope of individual tasks.

Ease at understanding –

It makes it easy for stakeholders to understand the timeline and brings clarity of dates.

Visualize project –

It helps in clearly visualizing project management, project tasks involved.

Organize thoughts and Highly visible –

It organizes your thoughts and can be highly visible so that everyone in enterprises can have a basic level of understanding and have knowledge about what's happening in a project even if they are not involved in working.

Make Practical and Realistic planning –

It makes the project planning practical and realistic as realistic planning generally helps to avoid any kind of delays and losses of many that can arise.

Disadvantages :

Sometimes, using Gantt charts makes projects more complex.

The size of the bar chart does not necessarily indicate the amount of work done in a project.

Gantt charts and projects are needed to be updated on a regular basis.

It is not possible or difficult to view this chart on one sheet of paper. The software products that produce Gantt charts need to be viewed on a computer screen so that the whole project can be seen easily.

Applications :

There are several professions, where use of gantt charts is very beneficial. Some of them are given below:

Advertising Manager –

Advertising Managers generally control and supervise the end result of advertising companies, scheduling advertisements in different media, etc.

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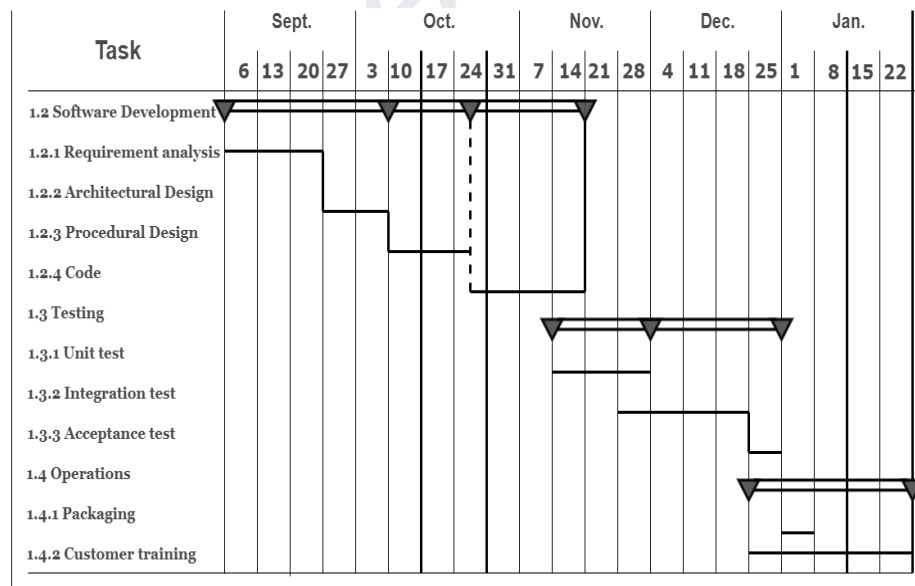CSE DATA SCIENCE

Operations Manager –

Operations Managers generally control and handle resources that are essential for company operations.

Project Manager –

Project Managers generally motivate project teams, collaborate with team members, schedule tasks and complete that on time, and report to stakeholders, etc.

Example :

Nowadays, there are many companies and teams that use Gantt charts to plan, schedule, and execute their projects. Some of them are consulting agencies, manufacturing companies, Marketing teams, Construction companies, etc. Below is an example of Gantt chart:



**Gantt Chart**