Experiment No: 06

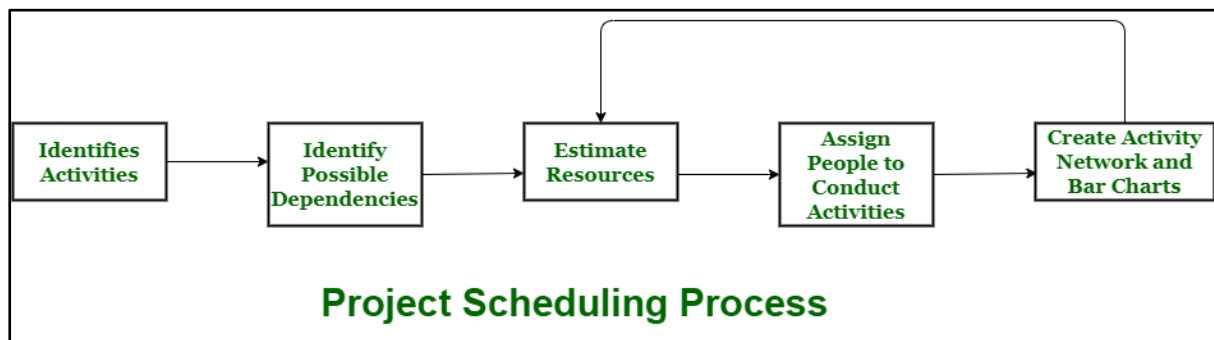● **Aim**: Scheduling and Tracking of the Project.

● **Theory**:

● **Project Name: - The QR CODE SCANNER**

Project Scheduling:

Project-task scheduling is a significant project planning activity. It comprises deciding which functions would be taken up when. To schedule the project plan, a software project manager wants to do the following:

- Identify all the functions required to complete the project.
- Break down large functions into small activities.
- Determine the dependency among various activities.
- Establish the most likely size for the time duration required to complete the activities.
- Allocate resources to activities.
- Plan the beginning and ending dates for different activities.
- Determine the critical path. A critical way is the group of activities that decide the duration of the project.

Project scheduling leads to success of project, reduced cost, and increased customer satisfaction. Scheduling in project management means to list out activities, deliverables, and milestones within a project that are delivered. It contains more notes than your average weekly planner notes. The most common and important form of project schedule is Gantt chart.

Project Scheduling Process
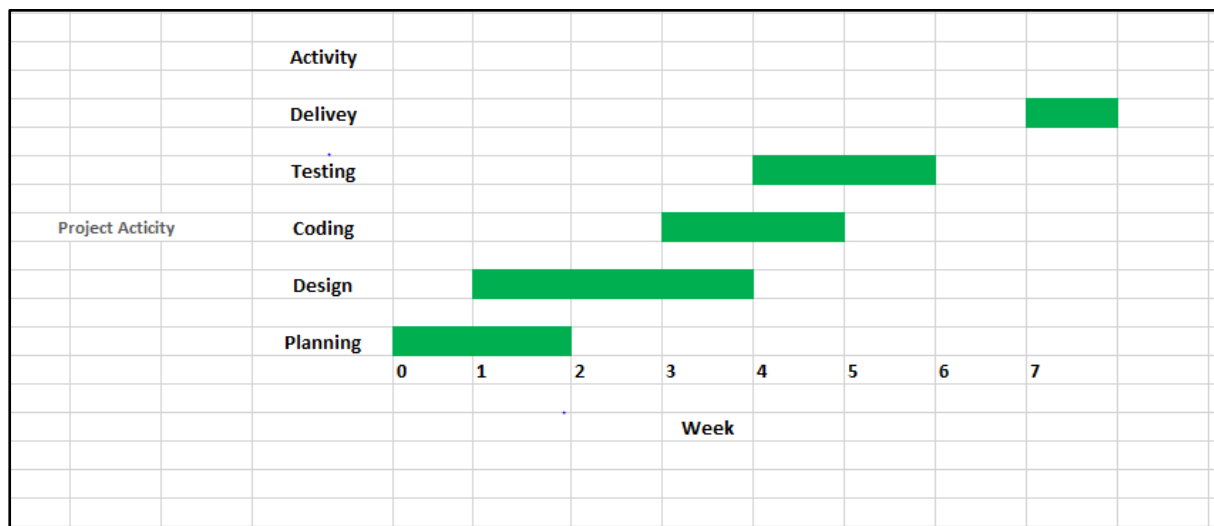
Project tracking:

A project tracking system assists you to recognize all of the tasks that are required to complete your project successfully on time. That is why it is recommended to be deployed during planning phase of a project to control and regulate the allocated resources. It provides a fully automated monitoring, and evaluation system of financial requests by simply tracking planned, actual and modified expenditures to information system accounts. The project tracking system provides a highly-standardized, automated technique of budget and planning management across a diverse group of activities.

Some tools used to schedule and track project

- Gantt Chart
- PERT Chart
- Resource Histogram
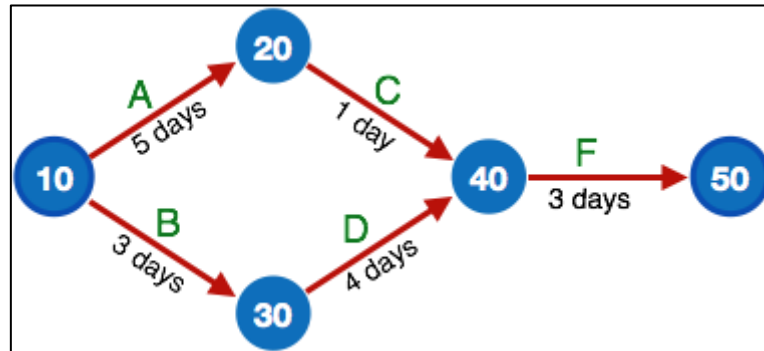- Critical Path Analysis

Gantt Chart:

      Gantt charts 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.
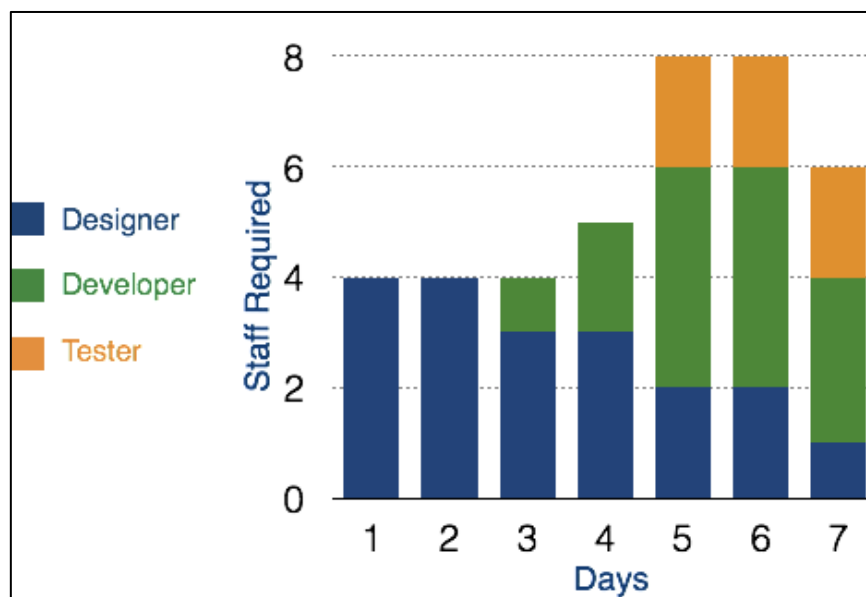

Gantt charts

PERT Chart:

PERT (Program Evaluation & Review Technique) chart is a tool that depicts project as network diagram. It is capable of graphically representing main events of project in both parallel and consecutive way. Events, which occur one after another, show dependency of the later event over the previous one.

Resource Histogram:

This is a graphical tool that contains bar or chart representing number of resources (usually skilled staff) required over time for a project event (or phase). Resource Histogram is an effective tool for staff planning and coordination.

Critical Path Analysis

This tool is useful in recognizing interdependent tasks in the project. It also helps to find out the shortest path or critical path to complete the project successfully. Like PERT diagram, each event is allotted a specific time frame. This tool shows dependency of event assuming an event can proceed to next only if the previous one is completed.

The events are arranged according to their earliest possible start time. Path between start and end node is critical path which cannot be further reduced and all events require to be executed in same order.

Advantages of Project Scheduling:

There are several advantages provided by project schedule in our project management:

- It simply ensures that everyone remains on same page as far as tasks get completed, dependencies, and deadlines.
- It helps in identifying issues early and concerns such as lack or unavailability of resources.
- It also helps to identify relationships and to monitor process.
- It provides effective budget management and risk mitigation

● **Conclusion: -**

We successfully Understanding **Scheduling and various ways of Tracking the Project.**