Practical 1

AIM : To study the features of MS Project

Introduction To MS Project:

It is a tool or a suit of tools for work efficient project and portfolio management. It has the capacity to help plan, organise and manage resource pools and develop resource esteems.

What is a Project?

A project is an activity to meet the creation of a unique product or service and thus activities that are undertaken to accomplish routine activities cannot be considered projects.

MS Project

Microsoft Project is a project management software product, developed and sold by Microsoft. It is designed to assist a project manager in developing a plan, assigning resources to tasks, tracking progress, managing the budget, and analyzing workloads.
Microsoft Project was the company's third Microsoft Windows-based application, and within a couple of years of its introduction it became the dominant PC-based project management software
It is available currently in two editions, Standard and Professional. Microsoft Project's proprietary file format is .mpp.

HISTORY

'Project' was an MS-DOS software application originally written in Microsoft 'C' (and some assembly) language for the IBM PC. The idea originated from the vision of **Ron Bredehoeft**. This original vision was simple: express the recipe and all preparation for a breakfast of eggs Benedict in project management terms. Mr. Bredehoeft formed Microsoft Application Services (MAS) during the birth of the application and the company later entered an OEM agreement with Microsoft Corporation. Alan M. Boyd, Microsoft's Manager of Product Development, introduced the application as an internal tool to help manage the huge number of software projects that were in development at any time inside the company. Boyd wrote the specification and engaged a local Seattle company to develop the prototype.

The first commercial version of Project was released for DOS in 1984. Microsoft bought all rights to the software in 1985 and released version 2. Version 3 for DOS was released in 1986. Version 4 for DOS was the final DOS version, released in 1986.
Microsoft Project 4.0 was the first to use common Office menus, and the last to support Windows 3.1x, Windows NT 3.1 and 3.5. It was the last 16-bit version.
Microsoft Project 95 was the first 32-bit version and it was designed for Windows 95, hence the name.
Microsoft Project 98 was the first to use Tahoma font in the menu bars and to contain Office Assistant, like all Office 97 applications. It was the last version to run on Windows NT 3.51. Project 98 SR-1 was a major service release addressing several issues in Project 98.[2]
Microsoft Project 2000 was the first to use personalized menus and to use Windows Installer-based setup interface, like all Office 2000 applications. Project 2000 was also the last version to run on Windows 95.
Microsoft Project 2002 was the first to contain mandatory product activation, like Office XP and Windows XP. It was also the last version to run on Windows NT 4.0, 98 (SE) and ME.
Microsoft Project 2003 was the first to contain Windows XP-style icons, like all Office 2003 applications, and the last to run on Windows 2000.

Features

- Project creates budgets based on assignment work and resource rates. As resources are assigned to tasks and assignment work estimated, the program calculates the cost, equal to the work times the rate, which rolls up to the task level and then to any summary tasks and finally to the project level.
- Resource definitions (people, equipment and materials) can be shared between projects using a **shared resource pool**. Each resource can have its own calendar, which defines what days and shifts a resource is available.
- Each resource can be assigned to multiple tasks in multiple plans and each task can be assigned multiple resources, and the application schedules task work based on the resource availability as defined in the resource calendars.
- All resources can be defined in label without limit. Therefore, it cannot determine how many finished products can be produced with a given amount of raw materials.
- The application creates critical path schedules, and critical chain and event chain methodology third-party add-ons also are available.
- Schedules can be resource leveled, and chains are visualized in a Gantt chart. Additionally, Microsoft Project can recognize different classes of users. These different classes of users can have differing access levels to projects, views, and other data.
- Custom objects such as calendars, views, tables, filters, and fields are stored in an enterprise global which is shared by all users.

Project Management Basics

Project management focuses on planning and organizing a project and its resources. This includes identifying and managing the lifecycle to be used, applying it to the user-centered design process, formulating the project team, and efficiently guiding the team through all phases until project completion.

Value of Project Management

Through proper project management, you can assure that the purpose/vision and goals of the project are maintained, all while supporting the audiences' tasks and objectives. Additionally, you avoid risks and effectively and efficiently use your available resources. It also helps the team members to understand their responsibilities, the deliverables expected, and the schedule everyone needs to follow to complete the project on time and within budget.

Areas within Project Management

The Project Management Institute (PMI) has identified nine areas of knowledge within project management:

1. integration management
2. scope management
3. time management
4. cost management
5. quality management
6. human resource management
7. communication management
8. risk management and
9. procurement management

Building a Team and Encouraging Communication

Depending on your project needs, the size of your team and the roles needed may vary. Keep in mind that members on your team may fulfill one role or may fulfill many.

Regardless of the size of the team, it's important to identify how the team will communicate and collaborate with one another. This includes discussing upfront:

- Planned/ regular meetings
- How formal they will be
- Whether meetings will be held in-person, virtually, or both
- How the team will share and collaborate on documents
- Where documents will be stored and how they will be version controlled
- Workflow for decisions and approval

Software design stages

Software life cycle models describe phases of the software cycle and the order in which those phases are executed. Each phase produces deliverables required by the next phase in the life cycle. Requirements are translated into design. Code is produced according to the design which is called development phase. After coding and development the testing verifies the deliverable of the implementation phase against requirements. The testing team follows Software Testing Life Cycle (STLC) which is similar to the development cycle followed by the development team.

There are following six phases in every Software development life cycle model:

1) Requirement gathering and analysis: Business requirements are gathered in this phase. This phase is the main focus of the project managers and stakeholders. Meetings with managers, stakeholders and users are held in order to determine the requirements like; Who is going to use the system? How will they use the system? What data should be input into the system? What data should be output by the system? These are general questions that get answered during a requirements gathering phase. After requirement gathering these requirements are analyzed for their validity and the possibility of incorporating the requirements in the system to be development is also studied.

Finally, a **Requirement Specification document** is created which serves the purpose of guideline for the next phase of the model. The testing team follows the **Software Testing Life Cycle** and starts the Test Planning phase after the requirements analysis is completed.

2) Design: In this phase the system and software design is prepared from the requirement specifications which were studied in the first phase. System Design helps in specifying

hardware and system requirements and also helps in defining overall system architecture. The system design specifications serve as input for the next phase of the model.

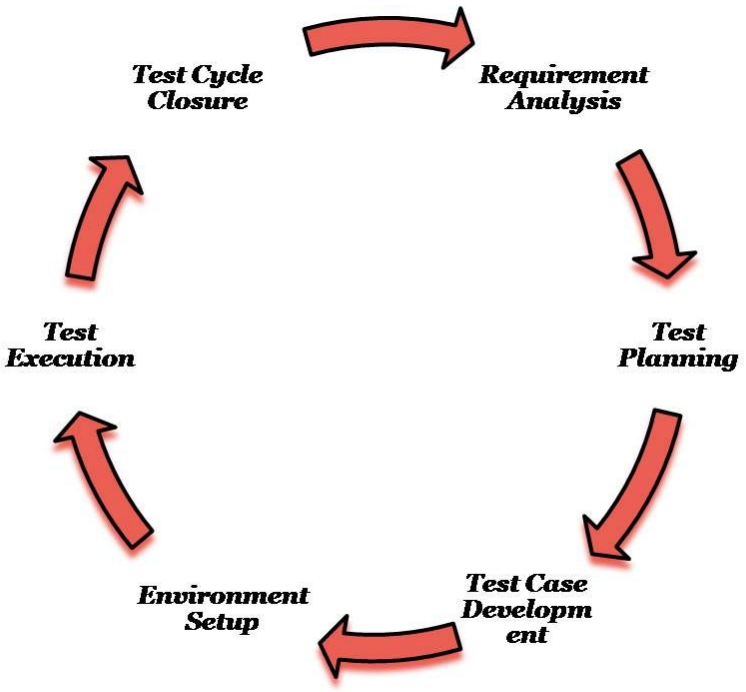
In this phase the testers comes up with the Test strategy, where they mention what to test, how to test.

3) Implementation / Coding: On receiving system design documents, the work is divided in modules/units and actual coding is started. Since, in this phase the code is produced so it is the **main focus for the developer**. This is the **longest phase** of the software development life cycle.

4) Testing: After the code is developed it is tested against the requirements to make sure that the product is actually solving the needs addressed and gathered during the requirements phase. During this phase all types of functional testing like unit testing, integration testing, system testing, acceptance testing are done as well as non-functional testing are also done.

5) Deployment: After successful testing the product is delivered / deployed to the customer for their use.As soon as the product is given to the customers they will first do the **beta testing**. If any changes are required or if any bugs are caught, then they will report it to the engineering team. Once those changes are made or the bugs are fixed then the final deployment will happen.

6) Maintenance: Once when the customers starts using the developed system then the actual problems comes up and needs to be solved from time to time. This process where the care is taken for the developed product is known as maintenance.



What Is Microsoft Project Used For?

The Microsoft Project is used mainly for the project management in industries because of the following:

- Progression of tasks
- Workers' hours and salaries
- Costs of equipment and supplies
- Keeping progress on schedule
- Budget overruns

Practical 2

AIM : Use MS Project, Open Project and Tables to draft the project

Versions of MS Project

Editions

Project is available in two editions, Standard and Professional; both editions are available either as 32 or 64 bit options. The Professional edition includes all the features of the Standard version, plus more features like team collaboration tools and ability to connect to Microsoft Project Server.

Project 2010

Microsoft Project 2010 includes the Fluent user interface known as the Ribbon.

Interoperability

Microsoft Project's capabilities were extended with the introduction of Microsoft Office Project Server and Microsoft Project Web Access. Project Server stores Project data in a central SQL-based database, allowing multiple, independent projects to access a shared resource pool. Web Access allows authorized users to access a Project Server database across the Internet, and includes timesheets, graphical analysis of resource workloads, and administrative tools.

User controlled scheduling

User-controlled scheduling offers flexible choices for developing and managing projects.

Timeline

The timeline view allows the user to build a basic Visio-style graphical overview of the project schedule. The view can be copied and pasted into PowerPoint, Word, or any other application.

SharePoint 2010 list synchronization

SharePoint Foundation and Project Professional project task status updates may be synchronized for team members.

Inactive tasks

helps experiment with project plans and perform what-if analysis

The Team Planner view

The new Team Planner shows resources and work over time, and helps spot problems and resolve issues.

Project 2013

What's new in Project 2013 includes new Reports section, better integration with other Microsoft products, and appearance of user interface items:

Reports

A Reports section is added to the ribbon for pre-installed reports. Project 2013 includes graphical reports so that you can create graphical reports and add clipart without having to export data to another program. For example, the Burndown reports show planned work, completed work, and remaining work as lines on a graph. Project 2013 adds pre-installed ability to compare projects, do dashboards, and to export to Visual Reports.

Trace task paths

This feature allows you to highlight the link chain (or 'task path') for any task. When you click on a specific task, all of its predecessor tasks show up in one color and all of its successor tasks show up in another color.

Sharing

Project 2013 improves the sharing and communication features of its predecessors in multiple ways without leaving Project. With Lync installed, hovering over a name allows you to start an IM session, a video chat, an email, or a phone call. You can copy and paste content to any of the Microsoft Office suite. You can sync content to Sharepoint or a SkyDrive to share without going through Project and Project Online provides an online project management web app that has all of the functionality of Project 2013 and can be accessed from any web enabled device.

Project 2016

Project 2016 adds a new Reports section, backwards-compatibility with Project Server 2013, better integration with other Microsoft products, and improved appearance of user interface items:

Timeline

Allows user to customize views to have multiple timeline bars and custom date ranges in a single view.

Resource Agreements

Gives features for resource planning coordination between Project Manager and Resource Manager.

Office 2016 style theme and help

Uses the new Office query 'tell me what you want to do'.

Backwards compatibility with Microsoft Project Server 2013

The transition of enterprises from one version to the next may be eased by this product being able to interact with the earlier version of server.

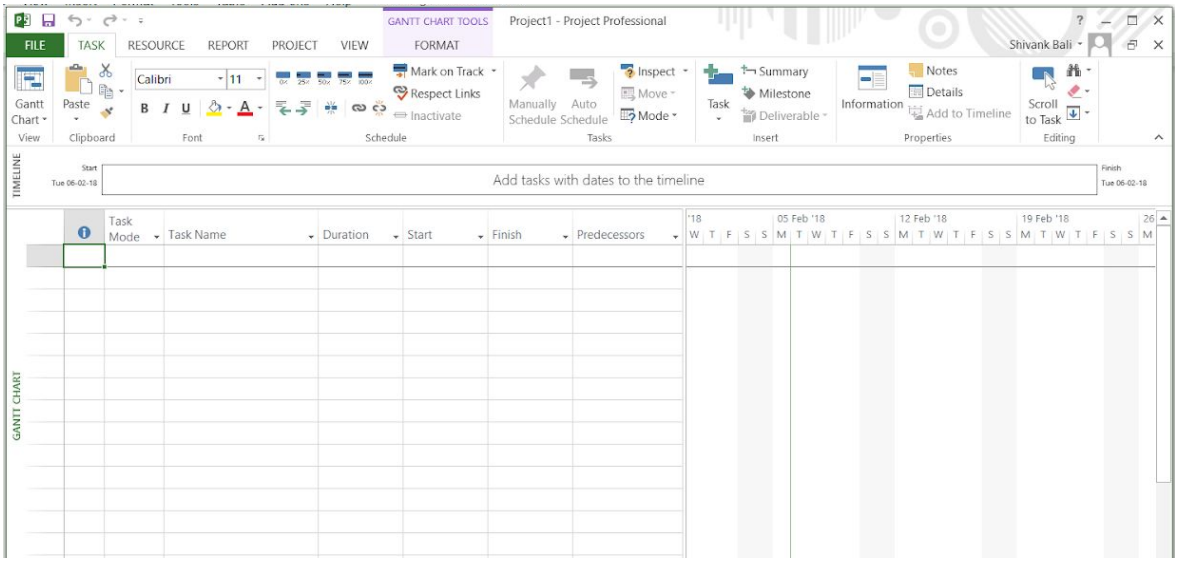
How to open MS Project

Steps to start the MS Project

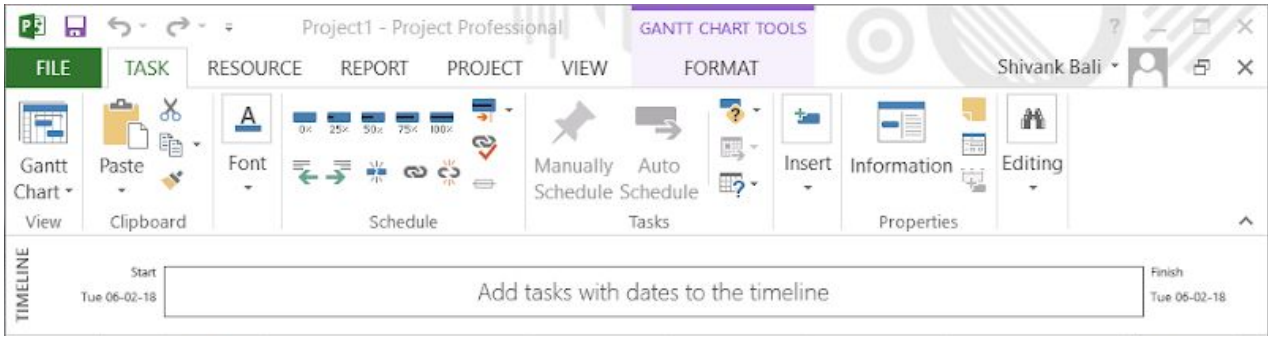
1. Click on the start button
2. Then click on the All Apps
3. Then open the Microsoft office folder
4. There will be the MS Office project
5. Click on the icon to start the MS Project

Using MS-project:

1. Click on MS-project icon
2. File option
3. Save
4. Write name of project
5. Click ok
6. Save the file as of .mpt extension



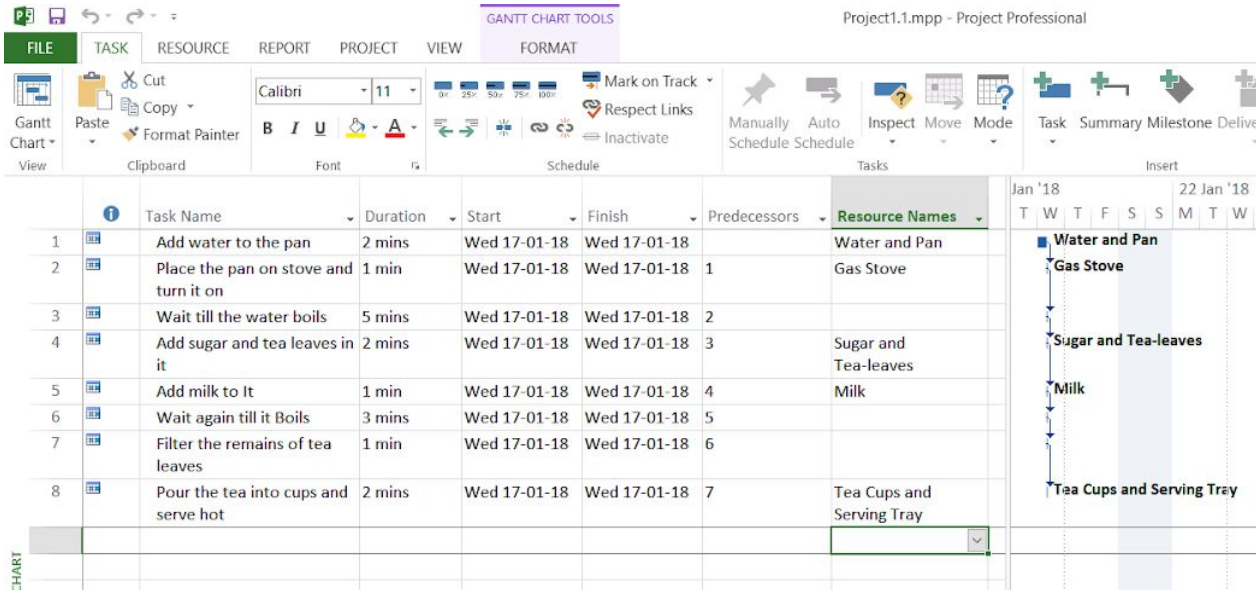
Toolbar of MS Project



Tools to be used in MS-project:

1. Activity name tool
    - Duration(days/hours/mins)
    - Start date or end date
    - Predecessors
    - Resource
2. Gantt chart tool/ bar tool
    - inventory
    - introduction

Tea Preparation



	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Add water to the pan	2 mins	Wed 17-01-18	Wed 17-01-18		Water and Pan
2	Place the pan on stove and turn it on	1 min	Wed 17-01-18	Wed 17-01-18	1	Gas Stove
3	Wait till the water boils	5 mins	Wed 17-01-18	Wed 17-01-18	2	
4	Add sugar and tea leaves in it	2 mins	Wed 17-01-18	Wed 17-01-18	3	Sugar and Tea-leaves
5	Add milk to It	1 min	Wed 17-01-18	Wed 17-01-18	4	Milk
6	Wait again till it Boils	3 mins	Wed 17-01-18	Wed 17-01-18	5	
7	Filter the remains of tea leaves	1 min	Wed 17-01-18	Wed 17-01-18	6	
8	Pour the tea into cups and serve hot	2 mins	Wed 17-01-18	Wed 17-01-18	7	Tea Cups and Serving Tray