

Lab 8

Aim- To design the workflow diagram for the Railway Reservation System.

A workflow diagram, also known as a workflow chart, is a visual representation of a business process, project, or job in the form of a flowchart. It provides a graphic overview of the process, showing step by step how work is completed from start to finish, and who is responsible for work at each point in the process. Workflow diagrams use standardized symbols and shapes to depict the various tasks and steps needed to complete the process. They are commonly used for project planning, business process mapping, and business process modeling, but can have other applications in industries like manufacturing and engineering.

Workflow diagrams are beneficial to project management because they help team members better understand the task sequences in which they're involved, create better communication between departments, and give teams a firm grasp on what they have to do. Workflow diagrams can also be used to identify and fix weak points within a long-standing process or workflow, and to isolate and repair inefficiencies and eliminate roadblocks.

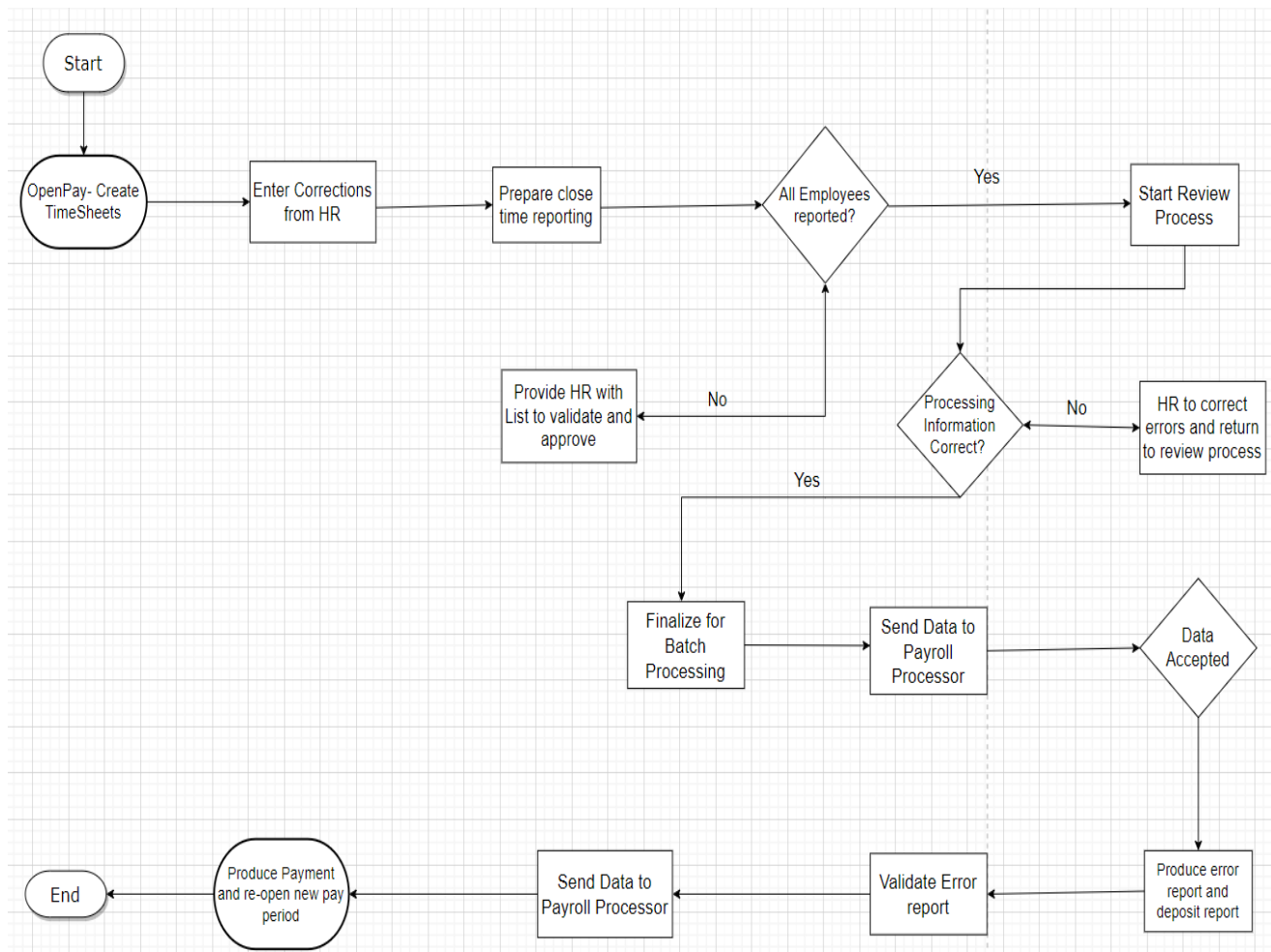


Fig 8.1 Workflow Diagram

Lab 9

Aim- To design Slip chart, Timeline chart and Ball chart for the Railway Reservation System.

Slip chart- is a type of visual progress chart used in project management to show the overall progress of a given project over time. Slip charts are a line graph that plots out tasks, milestones, and events against time, allowing project managers to see which tasks have been completed, if any tasks are slipping behind, or if any tasks are ahead of schedule.

Slip charts are a visual indication of activities that are not progressing to schedule. They are an alternative view of a Gantt chart by providing a visual indication of those activities which are not on schedule. Slip charts are a simple but effective progress report where milestones are plotted on a grid to show when they are scheduled to occur. The more the slip line bends, the greater the variation from the plan.

Additional slip lines can be included at regular intervals, and as they build up, the project manager will gain an idea as to whether the project is improving or not. Slip charts are also used in statistical process control (SPM) to represent how often a process produces parts that fail to meet certain quality standards.

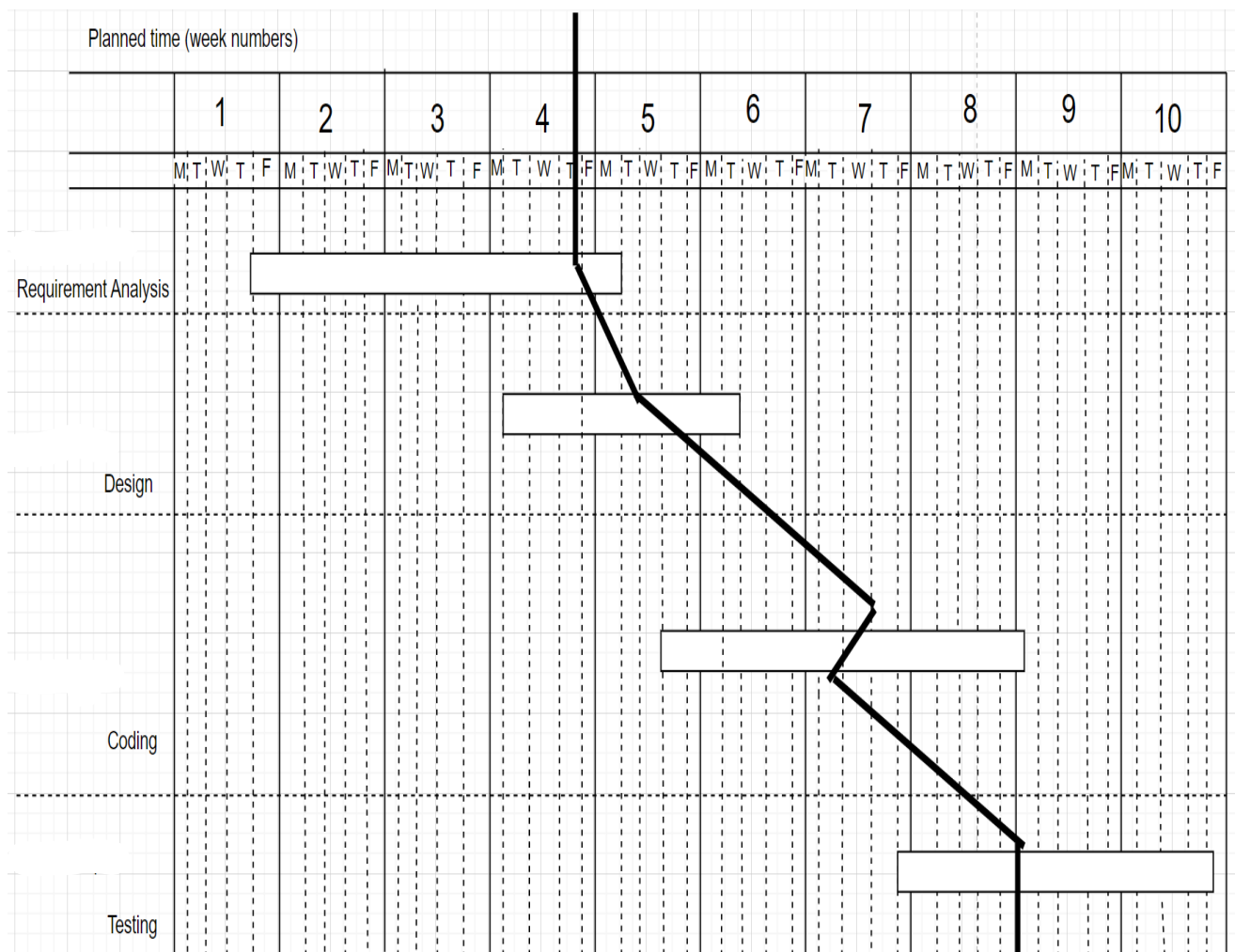


Fig 9.1 Slip Chart for the Railway Reservation System

Timeline chart- is a visual representation of a set of events or processes arranged chronologically. It is a simple yet powerful diagram that can be used to track projects to completion, illustrate historical events, or conceptualize event sequences or processes. Timeline charts typically include dates and descriptions, and some may also include images and headers.

There are several different types of timeline charts available, including event timelines, periodical history timelines, brand historical timelines, and AI growth timelines. Timeline charts are a valuable tool for organizations that need a concise way to visualize a process or event chronologically, and they can help manage complex tasks and ensure they're completed on time.

Some of the benefits of using timeline charts include providing a clear overview of what needs to be done and when, making it easier to allocate resources at the right time, and serving as a decision-making aid for current and future projects.

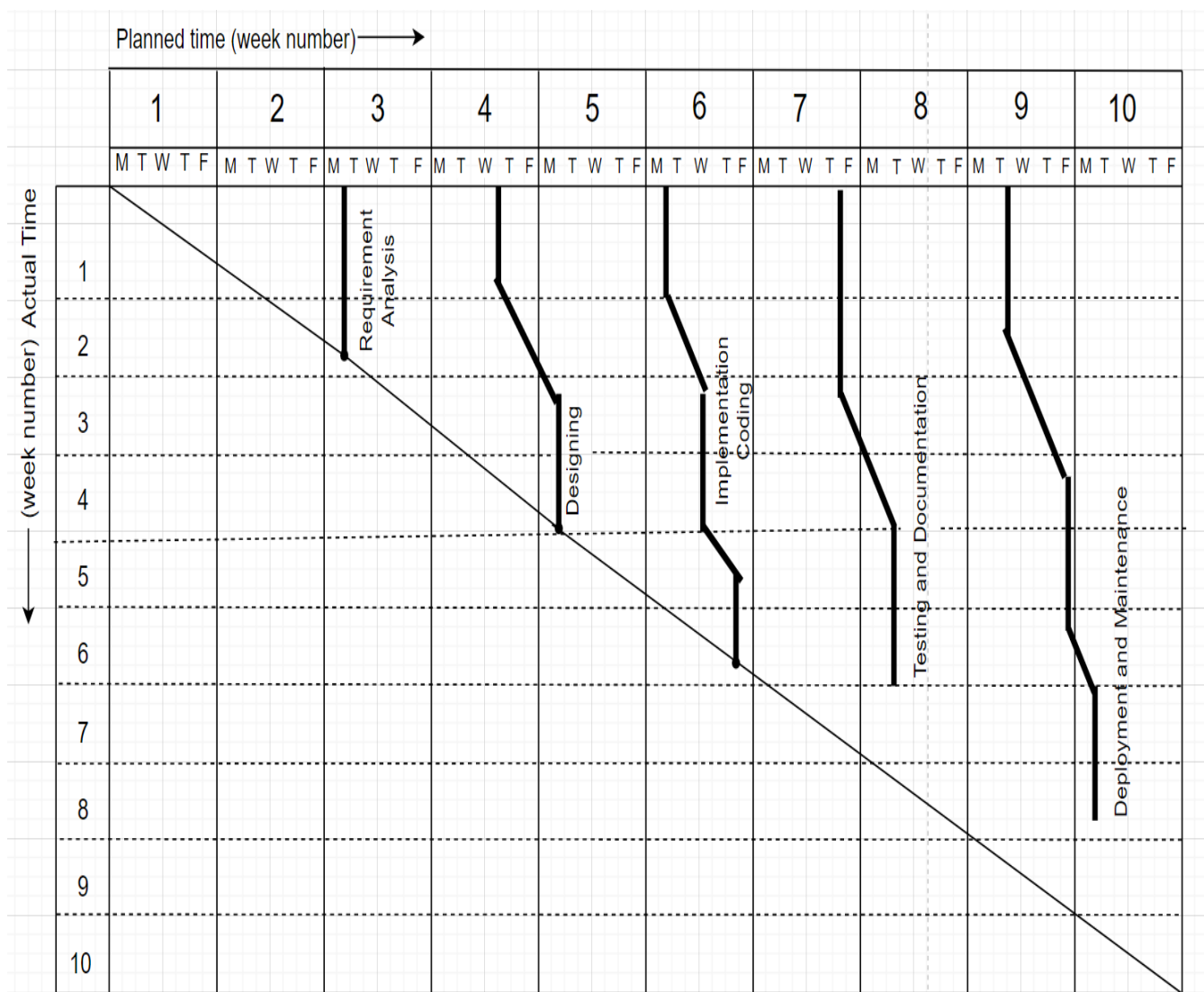


Fig 9.2 Timeline Chart for the Railway Reservation System

Ball chart- also known as a Harvey ball chart, is a type of chart that uses circles to represent data. It is a visual representation of qualitative information such as ease of use, efficiency, safety, taste, or quality. Ball charts circles contain original scheduled dates and the actual dates the activity/event took to complete.

They are also used in project management for project tracking, in lean manufacturing for value-stream mapping and continuous improvement tracking, and in business process modeling software for visualization. In a ball chart, the circles can indicate the start or end of a process, and they can be colored or filled to represent different values or categories. The chart consists of multiple circular shapes, with each colored quadrant representing a certain set of data.

The colored segment usually represents the data or criterion that has been achieved or completed, while the non-colored or blank segment represents the data or criterion to be achieved. Harvey balls are a powerful tool for visualizing different types of data, and they can be used to show different types of data in a single slide or page. However, they may not be the best choice for visualizing large amounts of data, as they can become confusing and difficult to distinguish between each set of data.

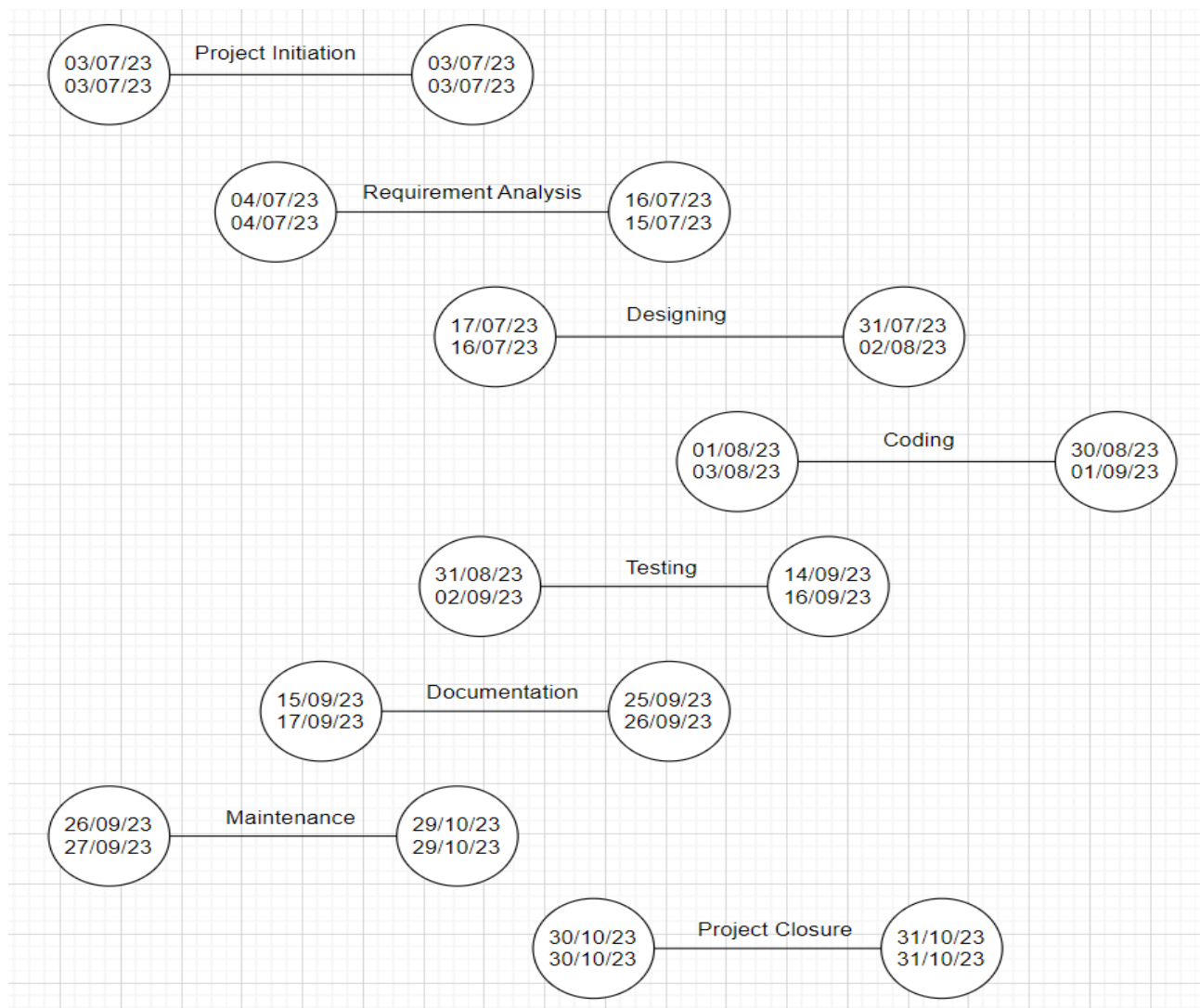


Fig 9.3 Ball Chart for the Railway Reservation System

Lab 10

Aim- Introduction to MS Project.

Theory

Microsoft Project is a project management software program developed and sold by Microsoft, designed to assist a project manager in developing a schedule, assigning resources to tasks, tracking progress, managing the budget, and analyzing workloads.

To start Microsoft Project, click on the Start button, select All Programs, select Microsoft Office, and then select Microsoft Project.

The main screen of Microsoft Project is divided into several areas, including the Ribbon, Backstage View, the work area, and project views.

The Ribbon is a set of tabs and buttons that provide access to the commands and features of Microsoft Project.

Backstage View is a centralized location for managing files and data in Microsoft Project.

The work area is where you create and manage your project tasks, resources, and schedules.

Project views are different ways of displaying your project data, such as Gantt Chart, Task Sheet, and Resource Sheet.

Creating a Project Plan

1. To create a new project plan, click on the File tab, select New, and then select Blank Project.
2. Define the scope of the project, which includes identifying the deliverables of the project and the order in which tasks need to be performed.
3. Determine the time constraints and deadlines for different tasks and for the project as a whole.
4. Identify the resources needed to perform each task and how much each task will cost to accomplish.
5. Use MS Project to schedule tasks and resources consistently and effectively.

Tracking Progress

1. Use MS Project to track information about the work, duration, and resource requirements for your project.
2. Update the project plan regularly to reflect changes in the project schedule, budget, and resources.
3. Use MS Project to analyze workloads and identify potential problems or delays in the project.



Fig 9.1 MS Project Logo

Advantages and Disadvantages of MS Project

Structured project management: Microsoft Project allows project managers to create project schedules, manage project resources, and view project timelines. It also offers interactive views that put together projects, programs, and portfolios for greater visibility.

Improved collaboration: Microsoft Project facilitates teamwork and collaboration among team members. It also allows users to share resources with a common resource pool.

Real-time progress tracking: Microsoft Project offers robust reporting and analysis tools that enable businesses to make informed decisions and achieve their project goals. It also helps in identifying resource over allocations and scheduling conflicts.

Efficient resource allocation: Microsoft Project allows project managers to create different types of resources and assign costs to them. It also helps in forecasting future resources and picking and planning staff resource requirements.

User-friendly: Microsoft Project is a user-friendly software that is easy to learn and use. It has a very basic but sophisticated UI which a project manager can be trained on very easily.

Disadvantages of MS Project

Steep learning curve: Microsoft Project is a complex tool that can take time to learn, particularly if not familiar with project management terminology or best practices. It may require at least two separate tutorials before becoming comfortable with its operation.

High cost: Microsoft Project can be expensive, especially for small businesses or individuals.

Limited integration: Microsoft Project is not always compatible with other software systems, which can create challenges for some users.

Not suitable for agile methodology: Microsoft Project's focus on traditional project management methods may not be suitable for organizations that require more agile and customizable solutions.

In conclusion, MS Project is a powerful tool for project managers to develop and manage project schedules, resources, and budgets. While it can be complex and require training to use effectively, it offers many advantages for those who need to manage complex projects.

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