

## Assignment I

### **Problem Statement: Create Project Plan**

- Specify project name and start (or finish) date.
- Identify and define project tasks.
- Define duration for each project task.
- Define milestones in the plan.
- Define dependency between tasks.
- Define project calendar.
- Define project resources and specify resource type.

**Requirements:** Project Management tools (any one tool from the list given below)

1. Primavera Project Management Software
2. Microsoft Project Management Software
- 3. Edrawmax Project Management Software**
4. Jira Project Management Software

#### **Theory:**

A Software Project is the complete procedure of software development from requirement gathering to testing and maintenance, carried out according to the execution methodologies, in a specified period of time to achieve intended software product.

A Project can be characterized as:

- Every project may have a unique and distinct goal.
- Project is not routine activity or day-to-day operations.
- Project comes with a start time and end time.
- Project ends when its goal is achieved hence it is a temporary phase in the lifetime of an organization.
- Project needs adequate resources in terms of time, manpower, finance, material and knowledge-bank.

Project Management is the presentation of knowledge, skills, tools and techniques to project activities to encounter the project requirements. Project management is proficient through the suitable application and combination of the project management process identified for the project. Project management permits organization to execute projects effectively and proficiently.

A bus reservation system project typically involves several key components to manage the booking of bus tickets, tracking buses, and managing schedules. Below is an outline of information that might be relevant for a bus reservation system project:

### 1. Project Overview

Objective: To design and develop a system where users can reserve bus tickets online, track available buses, and view schedules.

Users:

Admins: Manage buses, routes, and schedules.

Passengers: Search for buses, book tickets, and check reservations.

### 2. Features

User Registration & Login:

Passengers can create accounts to book tickets.

Admins can log in to manage the system.

Bus Schedules:

View available bus routes, timings, and seat availability.

Ticket Booking:

Passengers can select routes and reserve seats.

Payment integration (optional) to allow online payments.

Bus & Seat Management (Admin):

Add, edit, and remove buses from the system.

Manage routes, schedules, and bus capacity.

Reservation History:

Passengers can view past bookings and print tickets.

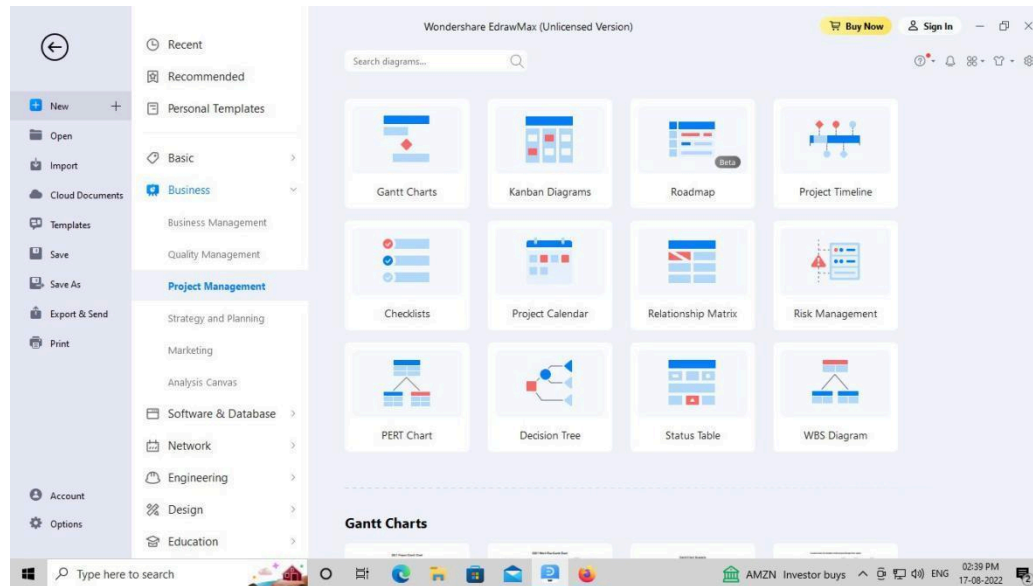
Cancellation & Refunds:

Option for passengers to cancel their tickets and request a refund.

Edraw Max is 2D business technical diagramming software which help create flowcharts, organizational charts, network diagrams, floor plans, workflow diagrams, business charts, and engineering diagrams.

Here is how to use this tool for project management –

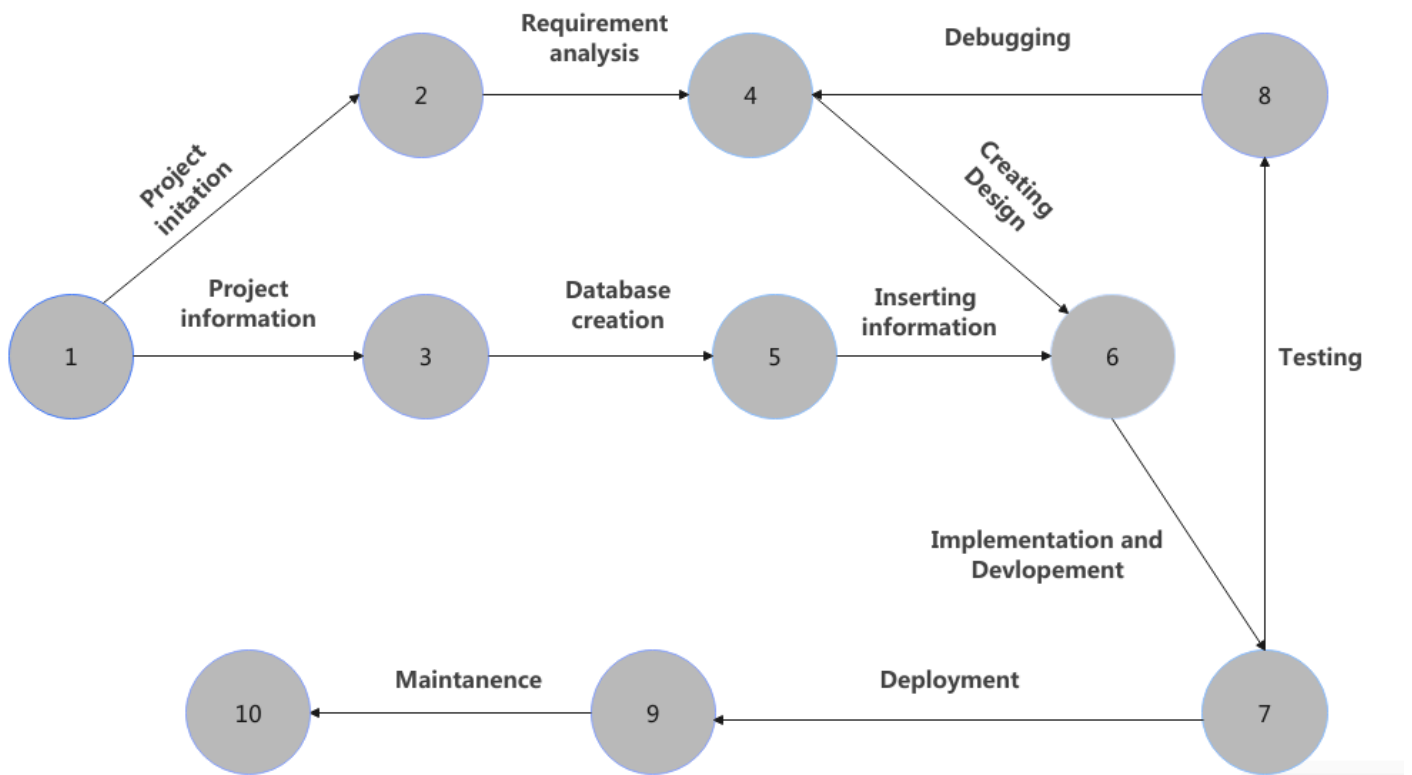
1. Open Edraw Max. Go to Files menu - Business – Project Management Tab. You will see the screen like this:



2. You will get options like Gantt chart, PERT chart etc. Select the chart type.
3. Drag and drop the format as per your requirement and you will get an auto generated table: 4.
5. Fill up the required information. This includes start date, expected and date, resource allocation, weekly status and monthly progress.
6. You can edit and update the Gantt chart as you go on executing your project.
7. For PERT chart, go to File Menu – Business – Project Management – PERT chart.
8. Drag and drop PERT chart template as per your requirement.
9. Create nodes, dependencies, milestones and add schedules on the arrows.
10. The PERT chart screen sample:

## PERT Chart

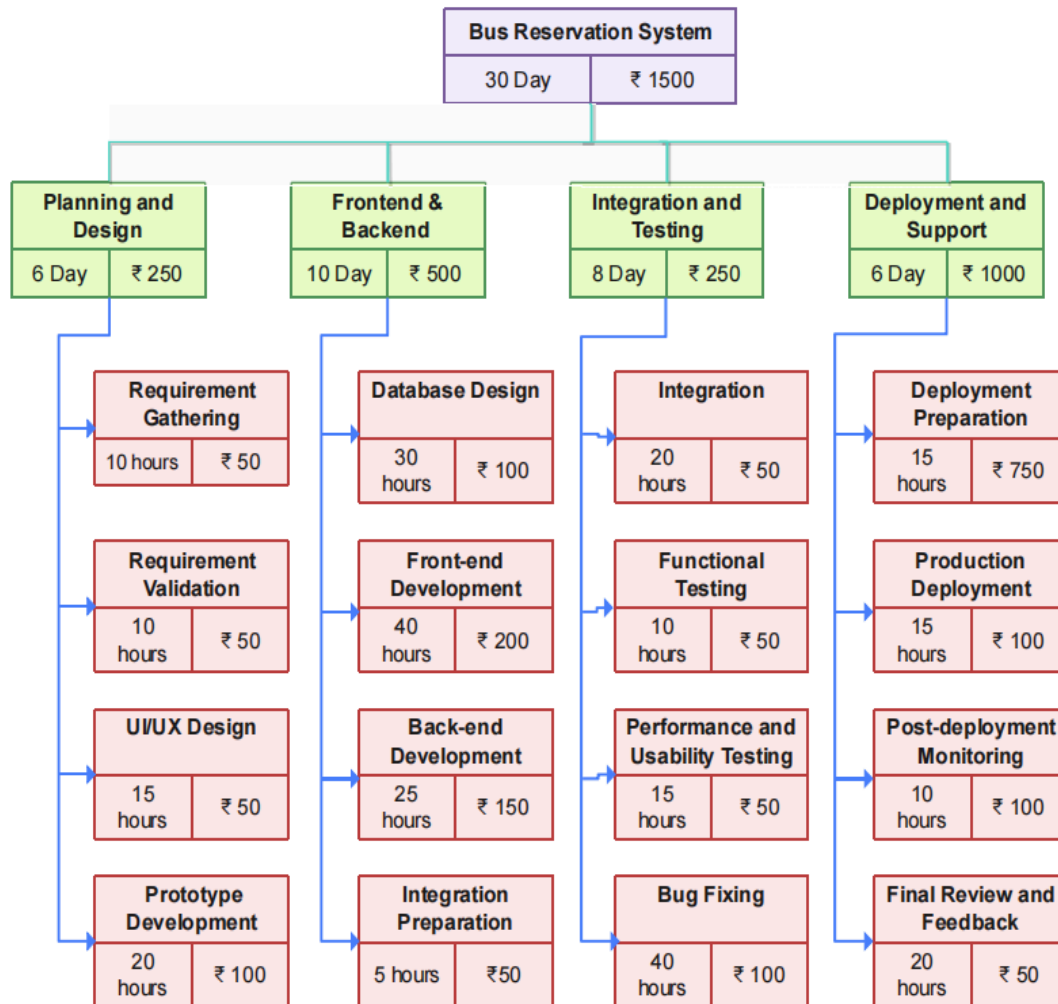
### Bus Resrvation System



## Bus Reservation Platform Development Creation Gantt Charts



01/08/2024						
Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
July 28 	29	30	31	August 1 Requirement Analysis - Stakeholder Meetings	2 Requirement Analysis - Document Requirements	3
4	5 Requirement Analysis - Document Requirements	6 Requirement Analysis - Review and Approval	7 Design UI - Wireframe Design	8 Design UI - Wireframe Design	9 Design UI - Mockup Creation	10
11	12 Design UI - Prototype Review	13 Database Design - Schema Definition	14 Database Design - Schema Definition	15 Database Design - Relationships Design	16 Front-end Development - Layout Creation	17
18	19 	20 Front-end Development - Layout Creation	21 Front-end Development - Component Development	22 Front-end Development - Component Development	23 Front-end Development - UI Testing	24 Back-end Development - Planning
25	26 Back-end Development - Server Setup	27 Back-end Development - API Setup	28 Integration - Front-end and Back-end Integration	29 Testing - Functional Testing, Performance Testing, Acceptance Testing	30 Deployment - Deployment Preparation	31
September 1	2	3	4	5	6	7





**Conclusion:** Software Project Management is very essential for smooth execution of project. It helps to get better outcomes and to provide the best practices in project.

The bus reservation system streamlines the process of booking ticket, managing and schedules, and improving customer experience for both passenger and administrators. The Bus Reservation System effectively simplifies and automates the process of booking bus tickets, managing routes, and tracking passenger information. Through its user-friendly interface and streamlined functionality, it enhances the efficiency of bus operators and improves the overall experience for passengers. The system minimizes manual errors, ensures accurate seat allocation, and offers a convenient way for users to make reservations online. In conclusion, this project demonstrates how technology can transform traditional transportation services into more efficient, accessible, and user-friendly systems.