



Course Code : CSE 404

Course Title : Software Engineering and ISD Laboratory

Project name : Bus ticket booking management system

Experiment no: 11

Experiment name: Application of Gantt chart and PERT for your Project scheduling

**Submitted To**

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Part: Gantt Chart for Online Bus Ticket Management System.

Creating a Gantt Chart for the Online Bus Ticket management system project can help you visualize the timeline and dependencies of the various task and activities involved. Below is a simplified Gantt Chart for this project.

Project Timeline:

The project is estimated to span several months with specific tasks and duration as follows:

(1) Project Initiation (5 days): This phase involves defining the project's scope, objectives and initial requirements.



(ii) Requirements Gathering (10 days): Detailed functional and non-functional requirements will be collected to guide system development.

(iii) System Design (15 days): The architecture, database schema and user interface will be designed during this phase.

(iv) Deployment (40 days): The actual development of the online bus ticket management system, including both frontend and backend components.

(v) Security Implementation (10 days): Security measures such as encryption and authentication, will be implemented to protect user data.

(vi) Paypal Integration (15 days): Integration with payment gateways like Paypal and credit card processing will be completed.

(vii) Testing (20 days): Rigorous testing, including unit, integration, and user acceptance testing, will be conducted to identify and resolve any issues.

2 (viii) User Registration and Authentication (10 days):

This phase involves implementing user registration, login functionality and password recovery.

(ix) Reporting and Analytics (15 days): Tools for analyzing booking trends and revenue will be developed.

(x) Documentation (10 days): Comprehensive user manuals and technical documentation will be prepared.



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11) Quality Assurance (25 days)

Ongoing quality assurance efforts, including code reviews and testing will ensure system quality.

12) Deployment (5 days)

The system will be deployed to a production server, and the production environment will be configured.

13) Training (Ongoing)

Staff and users will receive training on how to use system effectively.

14) Marketing and Promotion (Ongoing)

Strategies will be developed to attract users to the platform.

15) Maintenance and Support (Ongoing)

Continuous system maintenance and technical support will be provided to ensure smooth operations.

## # Critical Path

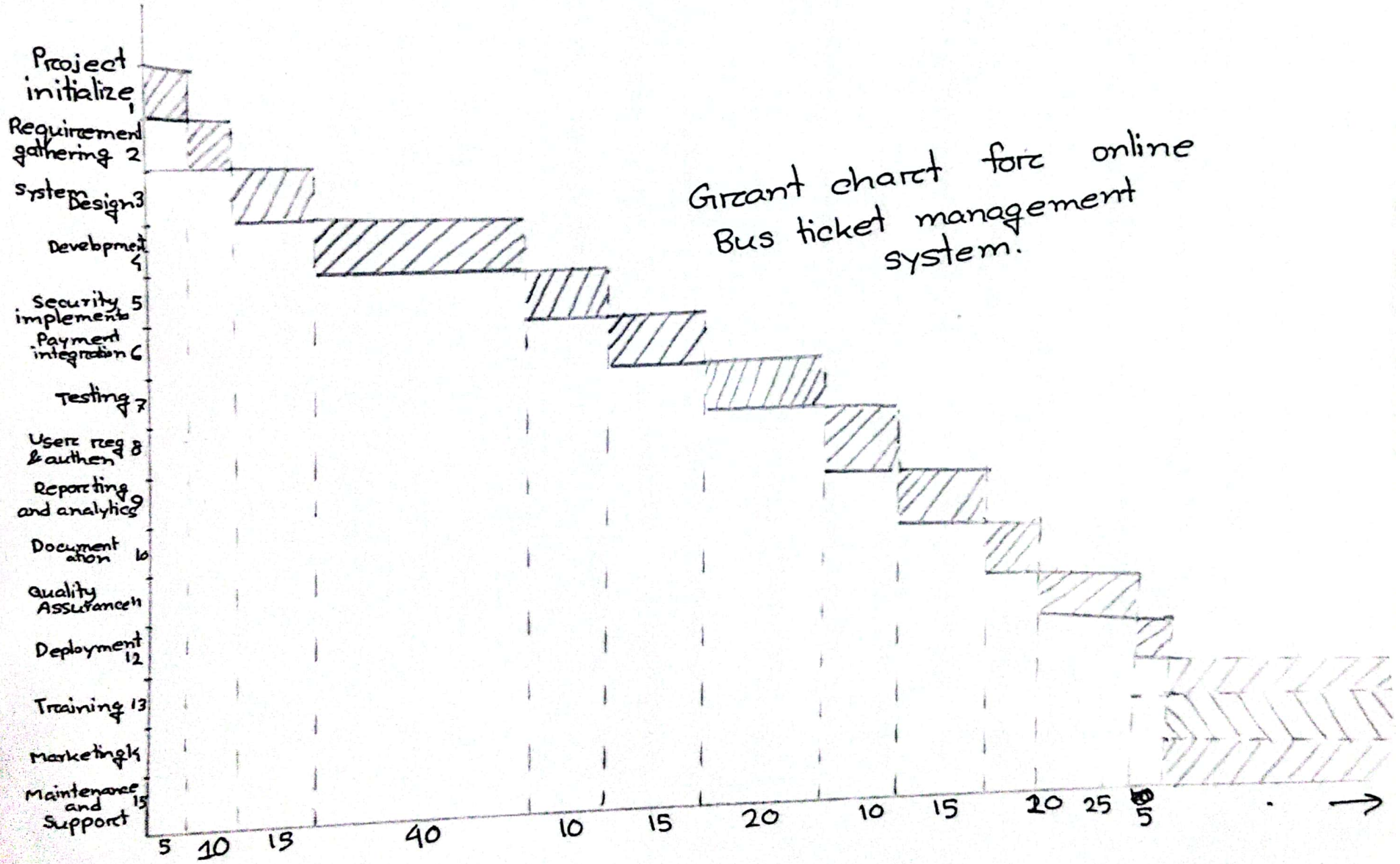
The critical path for this project includes tasks such as

- Requirement gathering
- System Design
- Development
- Testing
- Quality Assurance and
- Deployment.

Any delays in these critical path/tasks will directly impact the project's completion date.

The Gantt chart for online bus ticket management system is given below -

Gantt chart for online  
Bus ticket management  
system.



time in days



## PERT chart

A PERT chart is a diagram of projects timeline and milestones. It visually maps out an entire project so you can easily see milestones, timelines and who is responsible for what. PERT stands for Program Evaluation and Review Technique.

Creating a PERT (Program Evaluation and Review Technique) chart for an online bus ticket management system project involves defining the project's tasks, their dependencies and the estimated durations. Here's a simplified PERT chart for this project.

1. Project Initiation
  - Duration: 5 days
2. Requirements Gathering
  - Duration: 10 days.
3. System design
  - duration: 15 days.



#### 4. Development

- Duration: 40 days
- Dependency: system design.

#### 5. Security Implementation

- Duration: 10 days.
- Dependency: Development

#### 6. Payment Integration

- Duration: 15 days.

#### 7. Testing

- Duration: 20 days.
- Dependency: Security Implementation, Development

#### 8. User Registration and Authentication

- Duration: 10 days.
- Dependency: Payment Integration, Security Implementation

#### 9. Reporting and Analysis

- Duration: 15 days
- Dependency: Development.

#### 10. Documentation

- Duration: 10 days.

#### 11. Quality Assurance

- Duration: 25 days.
- Dependency: Development, Testing.

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### Experiment no-11:

#### 12. Deployment

- Duration : 5 days
- Dependency: Quality Assurance, Security Implementation

#### 13. Marketing and Promotion

- Duration: Ongoing

#### 14. Maintenance and support

- Duration: Ongoing

In this PERT chart:

- Each task is represented as a node
- Arrows indicate task dependencies, with the arrow direction showing the flow from predecessor to successor tasks.

The PERT chart for online bus ticket management system;

