AIM: Use testing tool such as J-Meter, Canoo Web Test

Problem:

J-Meter can be used for purpose of load testing and stress testing.

Procedure:

In this test, application is tested for Normal load and heavy load by adding number of users.

Step 1: Add Users

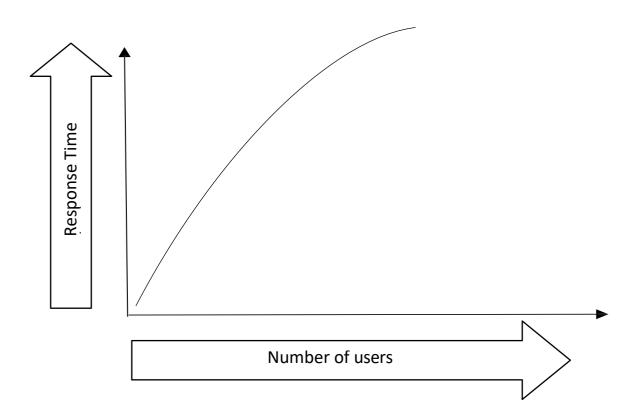
- a. Start J-Meter
- b. Select test plant
- c. Add user group
- d. Add user group to the test plan Let number of users 100 users
- e. Loop Count=10 (No of Time a test is executing)

Step 2: Prepare different test Cases to check performance of system under test.

Step 3: Add graph result

J-Meter will show test result in graphical format.

Step 4: Ram test for different test cases and J-Meter will show the different test result in a graphical format.



AIM: To develop a class diagram

Problem:

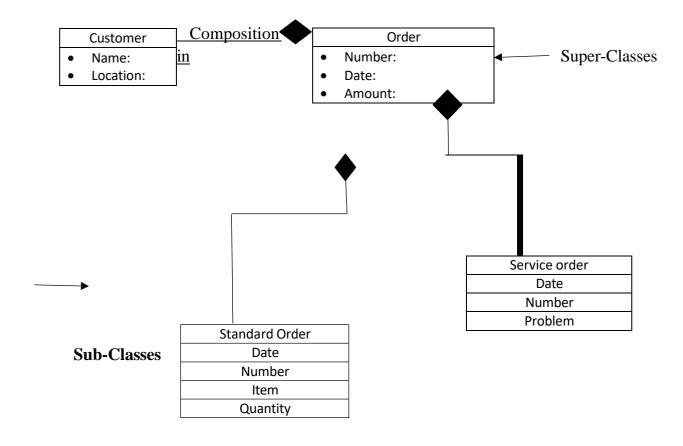
To develop a class diagram for customer an order.

Procedure:

Step 1: Identify different classes, here customer an order are the two classes. They are related with one to-many relationships as one customer may place different orders.

Step 2: Orders can further divide into standard orders and service orders. Here order is super class and standard and service orders are sub-class.

Step 3: Draw a class diagram by showing relationship between different classes.



AIM: Develop DFD Model (level 0 and level 1 DFD) of the problem

Problem:

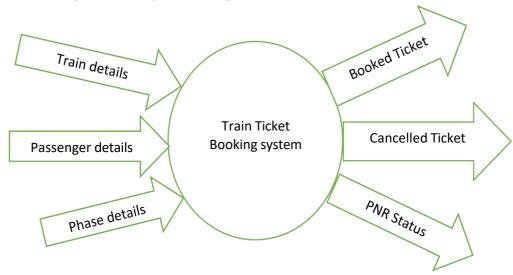
To develop 0-level DFD of a Train Ticket Booking System

Procedure:

Step 1: Write the system in a single bubble.



Step 2: Add all Inputs and Outputs to the system.



Output:

0-level DFD is developed for ticket booking system which shows a basic Data Flow Diagram.

Problem:

(i) Develop level-1 DFD for the Train Ticket Booking System.

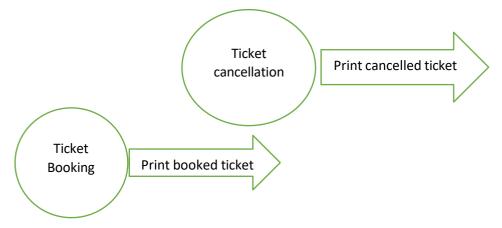
Procedure:

Break activities into details for ex:

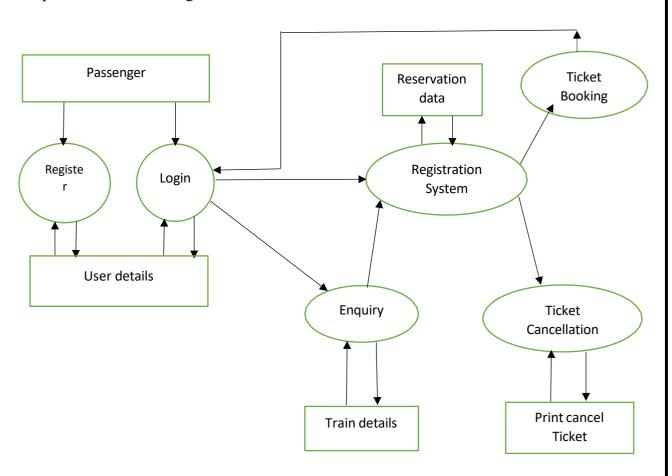
(i) User details can also be defined as a bubble where Input and Output are connected.



Similarly, Ticket Booking and Ticket cancellation can be represented in more details.



The complete level 1 DFD is given below: Print Booked ticket



AIM: Use Gantt Chart/Project as a Project management Tool.

Introduction:

Gantt Chart is a tool for project management used to allocate resources to activities.

Procedure:

A Gantt Chart can be prepared as shown below by showing all activities on a chart with respect to time.

Phase-1	Phase-2	Phase-3	Phase-4	Phase-5
Req. gathering Analysis	Design	Coding	Integrate Test	Deployment
Documentation				

Gannt Chart show scheduling a project with time limits.

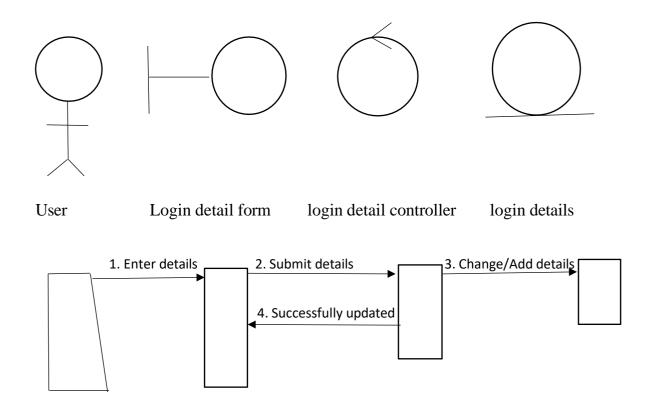
STEP TO CREATE A GANTT CHART

- **Step 1: Identify essential tasks:** like in above case. Req. gathering and analysis, design, coding, testing, deployment are the essential tasks required.
- **Step 2: Identify task relationship:** It shows relationship between task in a project. Some tasks start after one task completes. For example, in above example documentation task is there from start to end.
- **Step 3: Draw chart using a templet:** Create graph of activities/tasks as shown above.
- **Step 4: Measure Chart Progress:** Measure the progress of the chart i.e. everything is moving as per scheduled time or not.

AIM: To develop sequence diagram pf given problem:

Problem:

In sequence diagram all process of a system are represented in a sequence. For example, we have to change our login password to a system the detailed sequence of process will be:



Output:

A sequence diagram which shows the step of a process in a sequence.

AIM:

Take a system, study it's specification and report various bugs: Let's take example of ATM System.

Features to be Tested:

- 1. Validity of card
- 2. Withdraw flow of ATM
- 3. User Authentication
- **4.** Dispense Cash from account
- 5. Verify the balance enquiry
- **6.** Change of ATM PIN

Bug Identified:

Bug ID	Bug Name	
ATM-001	Invalid Card	
ATM-002	Invalid PIN	
ATM-003	Invalid Account Type	
ATM-004	Insufficient Balance Transaction	
ATM-005	Limit Day Limit	
ATM-006	Invalid Money	
ATM-007	Denominations	
ATM-008	Receipt Not Printed	
ATM-009	PIN Change Mismatch	