

Department of Computer Science, KSKV Kachchh University
External Examination 2025-26,
M.Sc. IT-2 & M.Sc.CA&IT-8

ODD

AJP

Design and develop a **dynamic web application** using **JSP, Servlets, and JDBC** that allows users to:

- Register into the system
- Login using credentials
- Maintain a session after login
- Redirect to a **Welcome Dashboard**
- Logout securely

Functional Requirements

1. User Registration (JSP) – 5 Marks

Create a page register.jsp with the following fields:

- Full Name
- Email
- Username
- Password

Requirements:

- Use HTML form validation
- Submit data to RegisterServlet using POST
- Store user data in database

2. Login System (JSP + Servlet) – 5 Marks

Create login.jsp:

- Fields: Username, Password

In LoginServlet:

- Validate credentials from database
- If valid → create session
- If invalid → show error message

4. Session Management – 5 Marks

- On successful login:
 - Create session using:
`HttpSession session = request.getSession();`
`session.setAttribute("username", username);`
- Redirect to dashboard.jsp

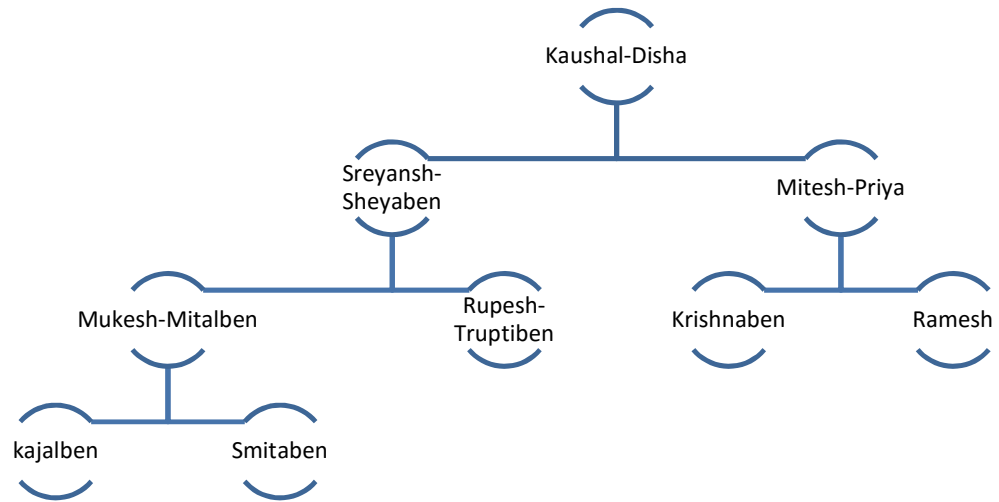
In dashboard.jsp:

- Display:
Welcome, <username>
- Restrict access:
 - If session is null → redirect to login page

5. Logout Functionality – 3 Marks

- Create LogoutServlet:
 - Invalidate session:
`session.invalidate();`
 - Redirect to login page

AI



In this diagram pair of husband wife are mentioned with “Husband - Wife”. For example kaushal-disha.

Create a family tree according to diagram in prolog and find following relations.

- sisters
- brothers
- uncle
- grandmother
- niece

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Even

Develop a dynamic web application using **JSP, Servlets, and JDBC** that allows users to perform **CRUD operations** on user data. Additionally, use **Cookies** to store and display the last logged-in username.

Functional Requirements

1. User Registration Form (Create) – 5 Marks

Create a JSP page register.jsp with the following fields:

- User ID
- Name
- Email
- Username

Requirements:

- Validate all fields (no empty input)
- Submit form to UserServlet using POST
- Store data in database

2. Database Design – 3 Marks

Create a table users:

```
CREATE TABLE users (  
    id INT PRIMARY KEY,  
    name VARCHAR(50),  
    email VARCHAR(50),  
    username VARCHAR(50)  
);
```

3. Display Records (Read) – 4 Marks

Create display.jsp:

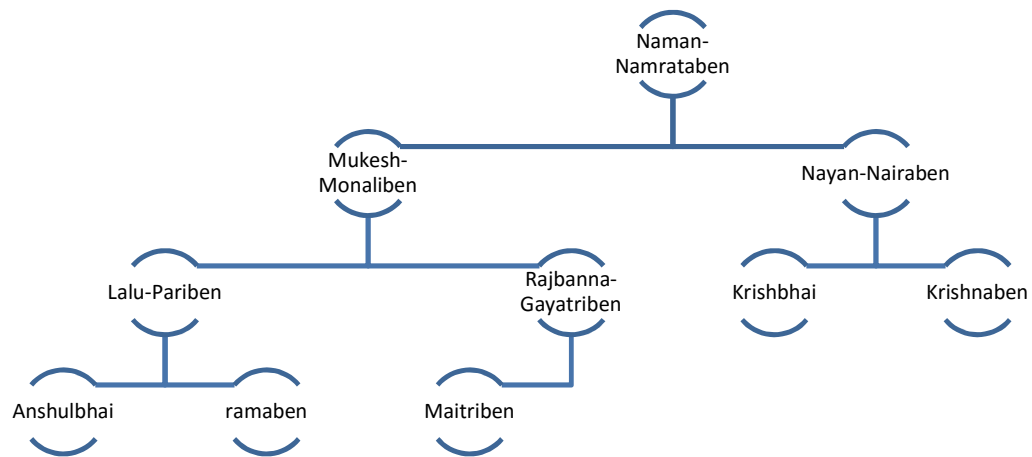
- Fetch all users from database
- Display in table format
- Include:
 - **Edit (Update)** button
 - **Delete** button

4. Update Operation – 4 Marks

- On clicking Edit:
 - Redirect to edit.jsp with pre-filled data
- Update record using Servlet

5. Delete Operation – 3 Marks

- Delete selected user record using Servlet
- Refresh display page



In this diagram pair of husband wife are mentioned with “Husband - Wife”. For example Naman - Namrataben.

Create a family tree in prolog according to diagram and find following relations.

- sisters
- brothers
- uncle
- niece
- grandfather