Project Title:

Asset Management System for Employee Onboarding

Project Overview:

A web-based application to manage the allocation, tracking, and return of IT assets (laptops, headsets, mice, etc.) assigned to newly onboarded employees. It ensures efficient asset management, real-time tracking, and role-based access for Admin and Employees.

User Roles:

Admin

- Add/edit/delete employee and asset records

- Assign assets to employees

- Process asset returns

- View assignment history and dashboard summary

Employee

- View personal profile

- View currently assigned assets

- Optional: request return/replacement

Core Modules / Pages (10 Total):

1. Login - Authenticate user and redirect by role

2. Admin Dashboard - Summary of assets and employee stats

3. Manage Assets - Add, update, delete asset records

4. Manage Employees - Manage employee records

5. Assign Asset - Assign assets to employees

6. Return Asset - Process and record asset returns

7. View History - Full asset assignment and return logs

8. Employee Dashboard - Profile overview

9. View Assigned Assets - See all current assigned assets

10. Logout - Session end and redirect to login

Technology Stack:

Frontend: HTML, CSS, Bootstrap, JSP

Backend: Java Servlets (JSP + MVC Pattern)

Database: MySQL

Connectivity: JDBC

IDE: Spring Tool Suite (STS)

Server: Apache Tomcat

Database Schema (MySQL):

users - For login authentication

- id: INT (PK), Auto Increment

- username: VARCHAR(50)

- password: VARCHAR(50)

- role: ENUM('admin', 'employee')

employees - Employee records

- id: INT (PK), Auto Increment

- name: VARCHAR(100)

- email: VARCHAR(100)

- department: VARCHAR(100)

- joining_date: DATE

assets - IT asset records

- id: INT (PK), Auto Increment

- name: VARCHAR(100)

- type: VARCHAR(50)

- serial_no: VARCHAR(50)

- status: ENUM('Available', 'Assigned', 'Returned', 'Under Repair')

- purchase_date: DATE

- condition_note: VARCHAR(100)

asset_assignments - Tracks assignments

- id: INT (PK), Auto Increment

- asset_id: INT (FK -> assets.id)

- employee_id: INT (FK -> employees.id)

- issue_date: DATE

- return_date: DATE

- return_condition: VARCHAR(100)

- status: ENUM('Assigned', 'Returned')