COLLEGE CODE : 9111 COLLEGE NAME : SRM Madurai College for Engineering and Technology DEPARTMENT : B.Tech Information Technology STUDENT NM-ID : 02F2F08915724B084DF4810E4F66DFB5 ROLL NO : 911123205025 DATE : 15-09-2025 Completed the project named as Phase - 1 - Problem Understanding & Requirements TECHNOLOGY PROJECT NAME : IBM-FE-Employee Directory with Search SUBMITTED BY, NAME : T. KISHORE KRISHNA MOBILE NO:95859 71122

1. Problem Statement :

In large organizations, employees often face challengesinfindingthe contact details, roles, and departments of their colleagues.Withouta centralized employee directory, communication becomesinefficient,and collaboration is delayed. This results in reduced productivityanddifficulty in networking across teams.

The**EmployeeDirectory with Search** aims to provide a simple, intuitive,andefficient solution where employees can search, filter, and viewessentialdetails of their colleagues instantly. By offering a responsiveanduser-friendly interface, the directory ensures faster communicationandsmoother collaboration across the organization.

2. Users & Stakeholders :

Users

- EmployeesSearch for colleagues by name, role, or department.
- Managers/Team Leads: Quickly access team details for
- coordination. Easily look up seniors, mentors, or team members to

    NewJoiners:

    connect

- HRDepartment: Responsible for managing employee data and
    Stakeholders records.
- IT/AdminTeam: Ensures smooth functioning, maintenance, and
    integration of the system.
- OrganizationLeadership: Focused on improving collaboration, communication, and efficiency across teams.

3. User Stories

1. As an employee, I want to search for colleagues by name, so that I can quickly contact the right person.
2. As a manager, I want to view team members' details, so that I can coordinate tasks efficiently.
3. As an employee, I want to filter employees by department or role, so that I can easily find relevant colleagues.
4. As a new joiner, I want to see the role, department, and contact of colleagues, so that I know whom to approach for specific needs.
5. As an HR personnel, I want the employee records to remain accurate and updated, so that users always get correct information.

4. MVP Features

- Centralized employee list displaying: Name, Role, Department, Contact Information.
- Search bar for employees by name.
- Filters by department and role.
- Responsive frontend interface (works on desktop, tablet, and mobile).
- Minimalistic UI with employee cards for easy readability.
- Backend/API support for fetching employee data.

5. Wireframes / API Endpoint List

Wireframe Concept (Textual)

- Homepage Layout
  - o Header: *Employee Directory with Search* title.
  - o Top Section: Search bar (text input).
  - o Left/Top Sidebar: Filters (Department dropdown, Role dropdown).
  - o Main Section: Employee cards arranged in grid/list.
- Employee Card Design
  - o Profile Photo (optional).
  - o Full Name.
  - o Role/Designation.
  - o Department.
  - o Contact (Email/Phone).

Employee Directory with Search

Search 🔍

Filters

Department

Role ⌄

Name	Name
Role	Role
Department	Department

Name	Name
Role	Role

API Endpoint List

- GET /api/employees → Fetch all employees.

- GET /api/employees/:id → Get details of a single employee.

- GET /api/employees?name=John → Search employees by name.

- GET /api/employees?department=HR → Filter employees by department.

- GET /api/employees?role=Manager → Filter employees by role.

6. Acceptance Criteria

- The system must allow searching employees by their name.
- The system must allow filtering employees by department and role.
- The employee card must display Name, Role, Department, Email, Phone.
- The application must be responsive across devices (desktop, mobile, tablet).
- Search results should be accurate, fast, and updated.
- The interface should be intuitive, clean, and user-friendly.
- Data should be consistent with employee records maintained by HR.