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Completed the project named as

Phase - 1 - Problem Understanding & Requirements

TECHNOLOGY PROJECT NAME : IBM-FE-Employee Directory with Search

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## 1. Problem Statement :

In large organizations, employees often face challenges in finding the contact details, roles, and departments of their colleagues. Without a centralized employee directory, communication becomes inefficient, and collaboration is delayed. This results in reduced productivity and difficulty in networking across teams.

The **Employee Directory with Search** aims to provide a simple, intuitive, and efficient solution where employees can search, filter, and view essential details of their colleagues instantly. By offering a responsive and user-friendly interface, the directory ensures faster communication and smoother collaboration across the organization.

## 2. Users & Stakeholders :

### Users

- **Employees:** Search for colleagues by name, role, or department.
- **Managers/Team Leads:** Quickly access team details for coordination.
- **New Joiners:** Easily look up seniors, mentors, or team members to connect.

### Stakeholders

- **HR Department:** Responsible for managing employee data and records.
- **IT/Admin Team:** Ensures smooth functioning, maintenance, and integration of the system.
- **Organization Leadership:** 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**

- Header: *Employee Directory with Search* title.
- Top Section: Search bar (text input).
- Left/Top Sidebar: Filters (Department dropdown, Role dropdown).
- Main Section: Employee cards arranged in grid/list.

- **Employee Card Design**


- Profile Photo (optional).
- Full Name.
- Role/Designation.
- Department.
- Contact (Email/Phone).

### Employee Directory with Search


#### Filters

Department


Role ▾




Name  
Role  
Department



Name  
Role  
Department



Name  
Role



Name  
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.