Development of an Online Job Portal

Project Abstract: This case study describes the development of an online job portal designed to bridge the gap between employers and job seekers. The portal will facilitate job postings, applications, resume management, and communication channels, aiming to streamline the hiring process and enhance job search efficiency.

Objective: To create a comprehensive online job portal that provides robust tools for job search and recruitment, ensuring a user-friendly experience, efficient management of job data, and secure communication.

Technology Stack:

• Frontend:

- Angular for a dynamic and interactive user interface.
- o HTML5, CSS3, and Bootstrap or Tailwind for responsiveness and layout.

• Backend:

- o ASP.NET Core(Repository Pattern) for server-side logic with necessary UnitTesting (Minimum 4)..
- Entity Framework Core for database interactions.
- o Role based JWT authentication for secure login.

• Database:

o SQL Server for relational database management.

Any Additional Features (Recommended)

Modules and Implementation:

1. User Module:

- **Registration/Login:** Separate registration processes for job seekers and employers, with secure login functionality.
- o **Profile Management:** Users can create and edit profiles, including uploading resumes and credentials for job seekers, and company profiles for employers.
- o **Job Search:** A dynamic search module allowing job seekers to find job listings based on various filters like location, job title, and salary range.

2. Employer Module:

- o **Job Posting:** Employers can post job vacancies, specifying details such as job description, required qualifications, and employment type.
- o **Applicant Management:** A system to review applications, shortlist candidates, and manage interviews.
- Communication Tools: Tools to facilitate direct communication with candidates, including scheduling interviews and sending updates.

3. Admin Module:

- o **User Management:** Admins can manage both job seeker and employer accounts, ensuring compliance with portal policies.
- Content Management: Oversight of job postings and advertisements to ensure quality and relevance.
- Reporting and Analytics: Generation of reports on user activity, job trends, and portal usage statistics.

Project Flow

1. User Registration and Login:

- **Initial Setup:** Users register on the portal by choosing a role (job seeker or employer) and providing necessary details. The system verifies the information and creates an account.
- Login: Users log in to the portal using secured credentials.

2. Profile Setup:

- **Resume Upload:** Job seekers upload their resumes and other relevant documents. These documents are stored securely in the database.
- **Profile Creation:** Employers create their company profiles, detailing company information, culture, and benefits.

3. Job Posting and Searching:

- **Creating Job Posts:** Employers post job openings with detailed descriptions, using forms that submit data to the server.
- Job Search Functionality: Job seekers search for jobs using various filters.

4. Application Management:

- **Apply to Jobs:** Job seekers apply to jobs through the portal. Applications are stored in the database and are accessible by the respective employer.
- **Review Applications:** Employers review received applications, sort candidates, and schedule interviews through the portal.

5. Interview Scheduling:

- **Interview Setup:** Employers use the portal to schedule interviews. Notifications are sent to candidates through integrated email services.
- **Feedback and Status Updates:** Post-interview, employers update the job application status, which is visible to the job seeker on their dashboard.