**Problem Description**

**Team 12**

1. **Problem Definition**

The project aims to develop a dynamic, user-friendly web application for a Job Portal system. The primary goal of the platform is to bridge the gap between job seekers and employers by providing an efficient online space where both can connect, discover opportunities, and manage applications.

The platform will feature two main user types—**Job Seekers** and **Employers**—with specific roles and functionalities for each. This system will provide a digital space where job seekers can search for job opportunities, apply for positions, and manage their applications, while employers can post job openings, review applicants, and manage the recruitment process. It will also include an **Anonymous Visitor** role that allows users to explore job listings without requiring immediate registration, but limits interactions to browsing only. To access more advanced features such as applying for jobs or managing job postings, users must register and sign in.

The Job Portal system will aim to bridge the gap between the labor market's demand and supply by offering an easy-to-navigate, intuitive interface that streamlines the entire job application process. The platform will be designed to reduce friction in the hiring process, offering features that make job search and recruitment simpler and more efficient for all users involved.

1. **Rationale for Topic Selection**

The decision to develop a job-seeking platform is driven by several reasons.

First, a job-seeking platform is crucial in this digital age for both job seekers and employers, as it streamlines the hiring process and makes it more accessible. An efficient platform can facilitate the matching process, ensuring that the right candidates are connected with the right opportunities. This not only speeds up hiring but also improves the quality of matches, benefiting both employers and applicants.

Second, through developing this platform, a wide range of skills and technologies must be implemented, including database design and management, user authentication, frontend and backend development, and more. These tasks not only challenge our technical abilities but also provide us a great opportunity to apply theoretical knowledge in an application, bridging the gap between academia and real-world scenarios. Moreover, collaborating on this project encourages teamwork and communication skills, essential components in any successful tech endeavor.

Third, this topic is scalable, allowing us to explore different complexity levels and expand the platform's capabilities over time. Besides basic functions, we are excited to add more advanced features like a recommendation system, which will personalize the job search experience and enhance user engagement. This personalization can significantly increase user satisfaction and retention, making the platform a preferred choice for job seekers and employers alike.

1. **Information to Model in the System**

**3.1 User Profiles**

* **Fundamental information:** Basic information such as name, gender, and age.
* **Contact information:** mobile phone numbers and email addresses.
* **Education background:** ①Educational level ②School name and major. ③ Graduation time
* **Work Experience:** ① Company name and job position. ②Start and end time of work.

③ Job responsibilities and work results

* **Skill List:**

① Professional skills(Java, Python, etc.), and a designer's software operation skills.

② Language skills and language proficiency levels.

③ Soft skills, like communication ability, teamwork ability, leadership, etc.

* **Job Intention:** Expected position, expected work location (city, region, etc.), expected salary range.

**3.2 Position information aspect**

* **Basic information:** ①Position name ②Company name ③The popularity, scale, and industry status of a company ④Work location ⑤Job responsibilities
* **Position requirements:** ①Educational requirements ②Major requirements

③Work experience requirements. ④Skill requirements.

* **Salary and benefit information:** ①Salary range. ②Benefits, including five social insurances and one housing fund, paid annual leave, holiday benefits, training opportunities, stock options, etc.

**4. System function**

1. The user registration and login function will provide different role registration and login options for job seekers and recruitment companies, and support quick registration and login through email or mobile phone number.
2. The resume management function allows job seekers to upload personal profile picture, edit and manage personal resumes, including education, work experience, skills and other information, to ensure the real-time update and integrity of resumes.
3. In order to improve job search efficiency, the job search and matching function will provide job search based on location, industry type and other screening conditions, and recommend jobs with high matching degree for job seekers.
4. The recruitment company management function allows the recruitment company to publish job requirements, manage the applicant's resume, view the applicant's information, and follow up the application status.
5. The interview arrangement and communication function will provide both parties with interview time selection and arrangement to ensure the smooth progress of recruitment.
6. Job seekers can apply for positions through the job application management function, view the application status and receive interview notifications, and communicate with the recruitment company in real time.
7. The data analysis and feedback function will provide the recruitment company with data analysis of the resume delivery situation of the recruitment position and the interview feedback, so as to help the recruitment company to provide a more comprehensive judgment.