**Non functional requirements**

## ****Product Requirements****

### ****1.1 Efficiency Requirements****

* The system should return **job search results within 2 seconds** on average.
* The application process should **not take more than 3 seconds** per candidate.
* The system should be able to **handle 500+ concurrent users** without performance degradation.

### ****Usability Requirements****

* The software must have an **intuitive user interface** accessible on **desktop, mobile, and tablet devices.**
* Forms should include **real-time validation** to ensure correct data entry.
* The system should provide **a guided workflow** for job seekers and recruiters to enhance usability.

### ****1.3 Performance Requirements****

* The platform must be optimized for **fast load times (less than 2 seconds per page).**
* The database should handle **large amounts of job applications** without affecting response time.
* The system should perform efficiently **even under high traffic.**

### ****1.4 Space Requirements****

* The software should use **optimized database storage** techniques to handle **millions of records.**
* Logs should be archived **after six months** to free up space without losing important historical data.

### ****1.5 Dependability Requirements****

* The system must have **99.9% uptime** to ensure job seekers and recruiters can access it at all times.
* It should implement **automatic failover mechanisms** in case of unexpected downtime.
* The software should have **redundant server backups** to prevent data loss.

### ****1.6 Security Requirements****

* User data must be encrypted.
* The system should implement **two-factor authentication (2FA)** for recruiters and administrators.
* Access to sensitive information should be controlled using **Role-Based Access Control (RBAC).**

## ****Organizational Requirements.****

### ****2.1 Environmental Requirements****

**Technology Stack:**

* Backend should be developed using Java.
* Frontend should use HTML, CSS, JavaScript.
* Databases should be SQL servers.

**Infrastructure & Hardware:**

* The software should be hosted on scalable cloud-based infrastructure.
* Server environments must comply with environmental and sustainability regulations.

**Software Dependencies:**

* Operating system compatibility should include Windows, macOS, and Linux.
* The system should integrate with third-party APIs for background checks and professional certifications.

**Network Requirements:**

* The system should use secure HTTPS protocols for all communication.
* Minimum bandwidth requirements should ensure smooth operation even in remote areas.

**Data Storage and Management:**

* Storage capacity must be sufficient for resume uploads, job postings, and multimedia content.
* Secure backup locations must be identified, with encryption for stored data.

#### ****Integration with External Systems****

* The system must integrate with LinkedIn, government employment databases, and online job boards.
* It should support seamless communication with third-party HR systems and payroll providers.

### ****2.2 Operational Requirements****

* Automated **data backups** should be performed daily, with the ability to recover data within **5 minutes**.
* The system must allow for **seamless updates and patches** without downtime.

## ****External Requirements****

### ****3.2 Ethical Requirements****

* The job-matching algorithm should be **fair and unbiased**, ensuring equal opportunity for all applicants.
* Job postings should be verified to prevent fraudulent listings.
* AI-based job matching should ensure fairness, avoiding biases based on age, gender, ethnicity, or other protected characteristics.
* The system must be transparent about how **candidate recommendations** are made.

### ****3.3 Legislative Requirements****

* All employment contracts and agreements must comply with **regional labor laws.**
* User consent must be obtained before storing **personal and professional information.**

### ****3.4 Safety/Security Requirements****

* The platform should have **protection against cyber threats.**
* Secure login methods should be enforced.

### ****3.5 Accounting Requirements****

* The system should generate **automated invoices** for employers using the platform.
* It must support **secure payment gateways** for job placement fees.

#### ****Usability Requirements****

* The user interface should be intuitive, with accessibility features such as screen reader support and keyboard navigation.
* Mobile compatibility should be ensured with a responsive design for smartphones and tablets.

#### ****Scalability and Performance Testing****

* A testing environment must be set up to simulate increased load and ensure the system scales effectively.
* Performance tests should be conducted regularly to measure response times and detect bottlenecks.