**Project Description: HR CRM System Development for Managing Candidate and Client Relationships**

This document provides a comprehensive overview of a project centered around the development of a Human Resources (HR) Customer Relationship Management (CRM) system, with a primary focus on managing relationships between job candidates and client companies offering specific job positions. The project aims to create a feature-rich backend solution to facilitate seamless interactions between candidates and clients within the HR context, utilizing a range of advanced technologies and frameworks.

Objective:

This project aims to create a strong and reliable backend system for an HR CRM. It's designed to handle the special connections between job seekers and companies looking to hire in the HR field. The system will offer an advanced RESTful API to make interactions and communication between candidates and companies smoother. This will improve HR recruitment and talent acquisition processes.

**Technologies:**

Spring Boot: Employed for efficient application development and streamlined deployment.

MySql: Utilized as the backend database to store candidate, client, and position-related data securely.

Liquibase: Employed for managing database migrations.

JUnit and Mockito: Utilized for creating comprehensive unit tests and generating mock objects.

Swagger: Employed for intuitive API documentation, enabling clear reference and understanding.

AOP (Aspect-Oriented Programming): Implemented for cross-cutting concerns, such as logging and profiling.

JaCoCo: Utilized for measuring code coverage with unit tests.

JWT (JSON Web Tokens): Utilized for secure authentication and authorization mechanisms.

Hibernate and JPA: Employed for seamless database interaction and effective object-relational mapping.

Slf4j: Utilized for advanced logging and event registration within the application.

**Functionality:**

The HR CRM system will encompass a wide array of specialized functionalities tailored to the HR context, enhancing the recruitment and talent acquisition processes. This includes:

Candidate Profiles: Creating, updating, and managing comprehensive profiles for job candidates.

Position Listings: Facilitating the listing and management of job positions offered by client companies.

Application Tracking: Allowing candidates to apply for specific positions and tracking their application status.

Client Engagement: Enabling client companies to review candidate applications and manage the selection process.

Communication Hub: Providing channels for candidates and clients to communicate regarding positions and applications.

**Interconnection:**

A key highlight of the HR CRM system will be the intricate interconnection between candidates and client companies within the HR domain. This will involve linking candidate profiles to relevant job positions and client company listings, enabling a seamless exchange of information and updates specific to HR processes.

**Security:**

Security will be of utmost importance in the HR CRM system, implementing JWT-based authentication and authorization mechanisms. This will ensure that sensitive candidate and client data is accessible only to authorized users, adhering to HR data protection standards.

**Data Seeding:**

To facilitate development and testing, a data seeding mechanism will be implemented to populate the database with sample candidate profiles, position listings, and client company data. This will enhance the evaluation of the HR CRM system's capabilities.

Successful completion of this project will result in a powerful and specialized backend HR CRM system, effectively managing the complex connections between job candidates and client companies in the HR field. The technology and features will be made just for improving HR recruitment. This means making interactions smoother and getting better results for both candidates and clients.

**Data Base Structure**

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| Tables\_in\_mycrmhr |

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| address\_details |

| candidate |

| client |

| communication |

| compensation |

| contact\_details |

| contract |

| databasechangelog |

| databasechangeloglock |

| employee |

| interview |

| roles |

| task |

| user\_details |

| vacancy |

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