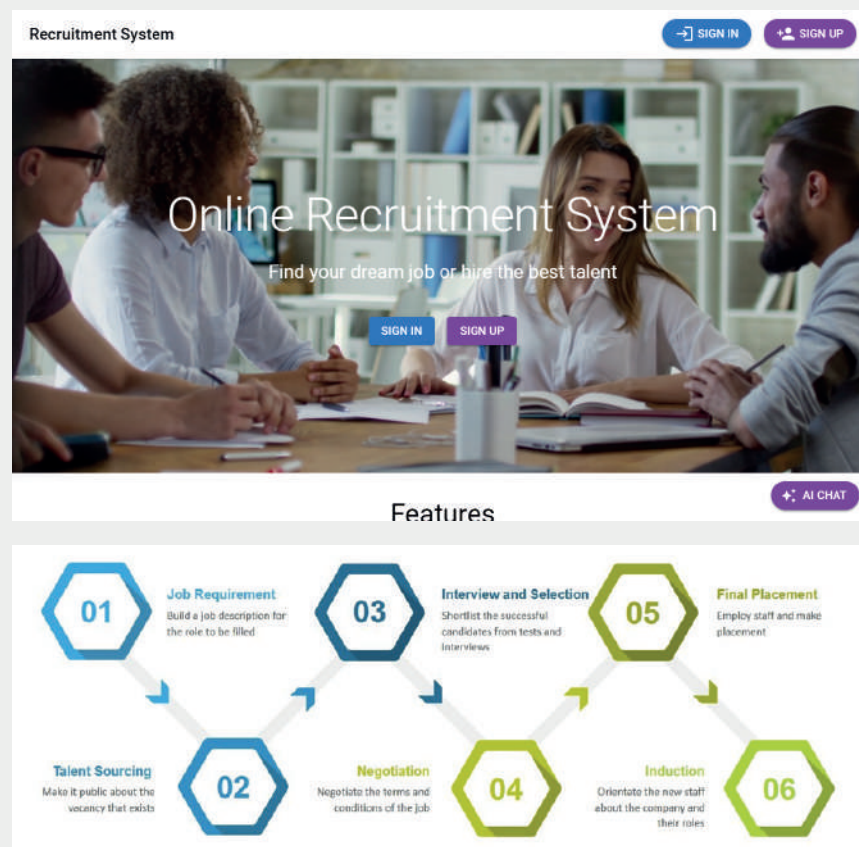


### Abstract

The traditional recruitment process is time-consuming and costly for both job seekers and employers. The online recruitment system solves that problem and aims to streamline and optimize the hiring process. It provides a user-friendly platform for job seekers to search and apply for positions, and for employers to post job openings and manage applications.



### Methodology

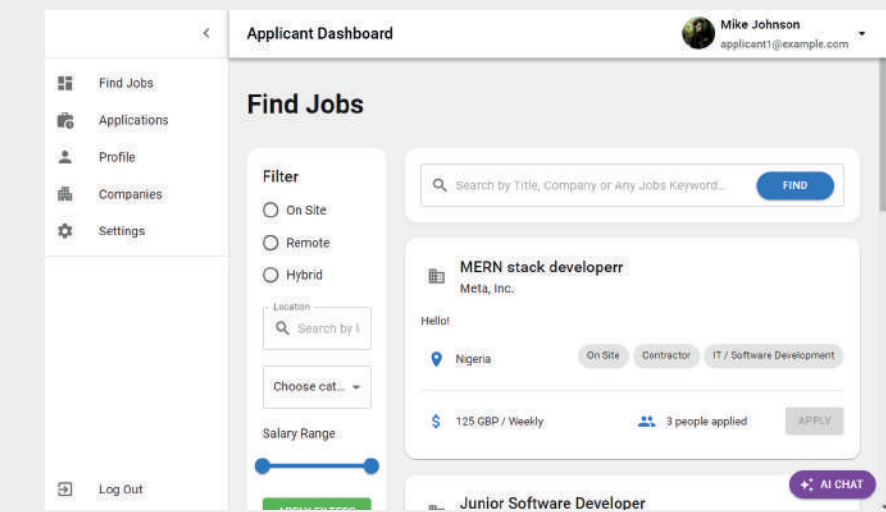
My project follows the Agile software development framework, facilitating adaptive planning, evolutionary development, early delivery, and continuous improvement.

The project's life-cycle consists of several iterative and incremental phases:

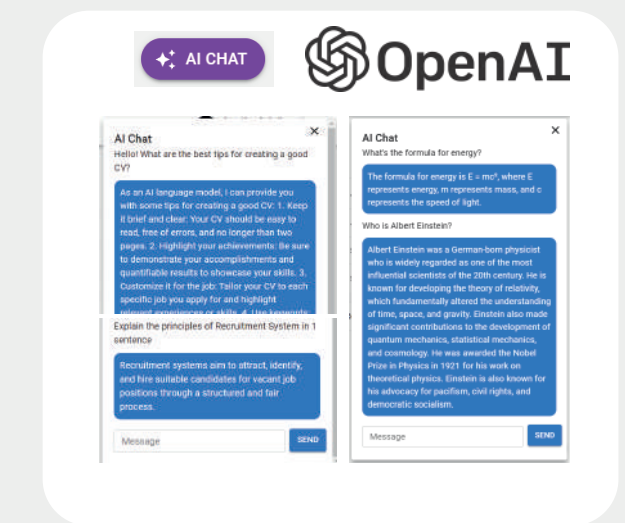
- **Requirement Gathering and Analysis:** The initial stage involved understanding the key features needed in the online recruitment system. User stories and use cases were created to capture these requirements effectively.
- **Design:** Based on the requirements, wireframes and system architecture designs were made. I used UML diagrams, such as class and sequence diagrams, to present the system's logical structure.
- **Development:** The MERN stack is used. Front-end and back-end development occurred simultaneously, ensuring seamless integration. I followed Test-Driven Development (TDD) to ensure code quality and minimize bugs.

### Results

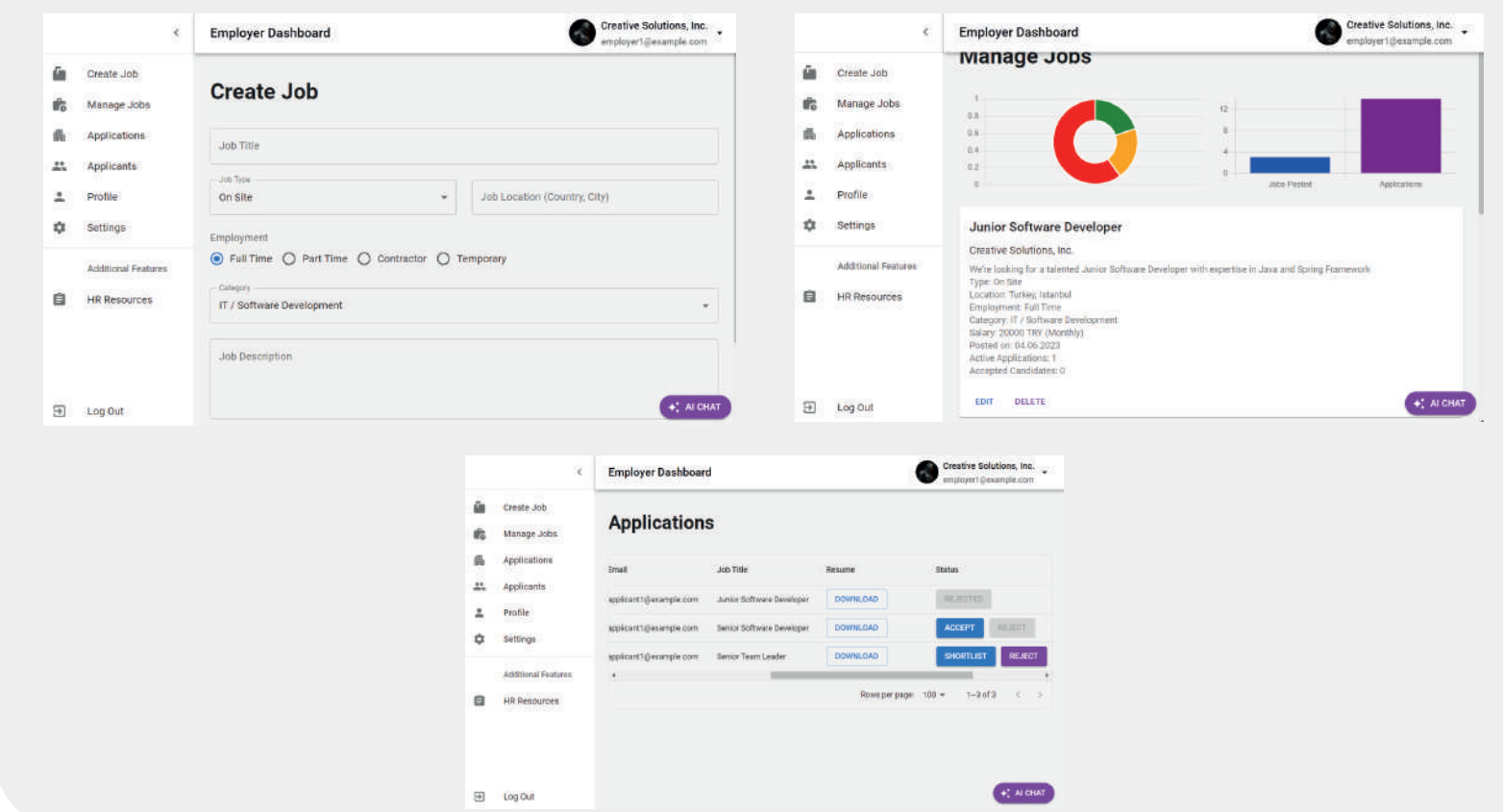
**Applicants** can filter, find and apply for jobs, and much more ...



**AI Chat** feature



**Employers** can post jobs, manage jobs and applications, and much more...



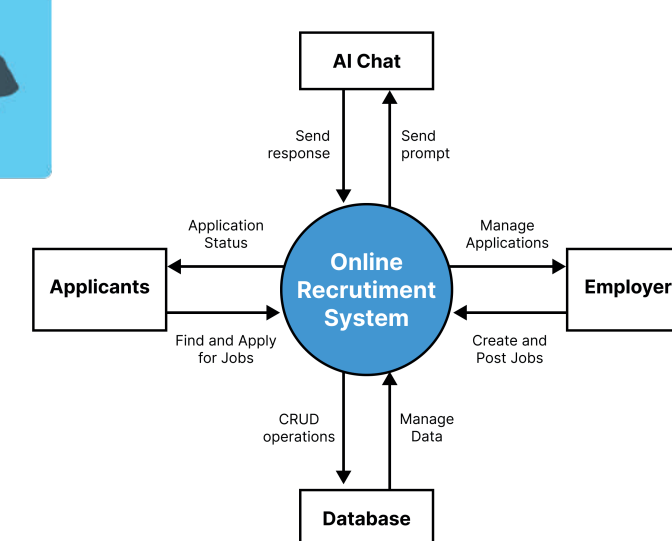
### Tools and Frameworks

The project leverages the power of the **MERN** stack, a potent and modern tech stack comprising four open-source components: MongoDB, Express.js, React.js, and Node.js.

- **Express.js** is a fast web application framework for Node.js. It simplifies server-side logic and accelerates the development process.
- **MongoDB** is a NoSQL database and its flexible for the Online Recruitment System, since it ensures high performance, scalability, and the ease of deployment.
- **React.js** is a JavaScript library, offers a dynamic, responsive user interface, and its component-based structure enhances code reusability and maintenance.
- **Node.js** is a server-side platform built on Chrome's JavaScript runtime. It brings JavaScript to the backend, promoting code reusability and better synchronization with the front-end development.



Online Recruitment System Context Diagram



### Recruitment Process



### Conclusion

Utilizing the MERN stack in my Online Recruitment System proved highly effective, particularly the reusability of React.js components and the flexibility of MongoDB's schema. The Agile methodology provided needed adaptability, though required disciplined project management. For future enhancements, the system could incorporate AI for smart matchmaking, integrate video interviewing, and add multilingual support to expand its global reach. This project highlighted the potential of MERN stack and Agile approach in developing robust, scalable software solutions.