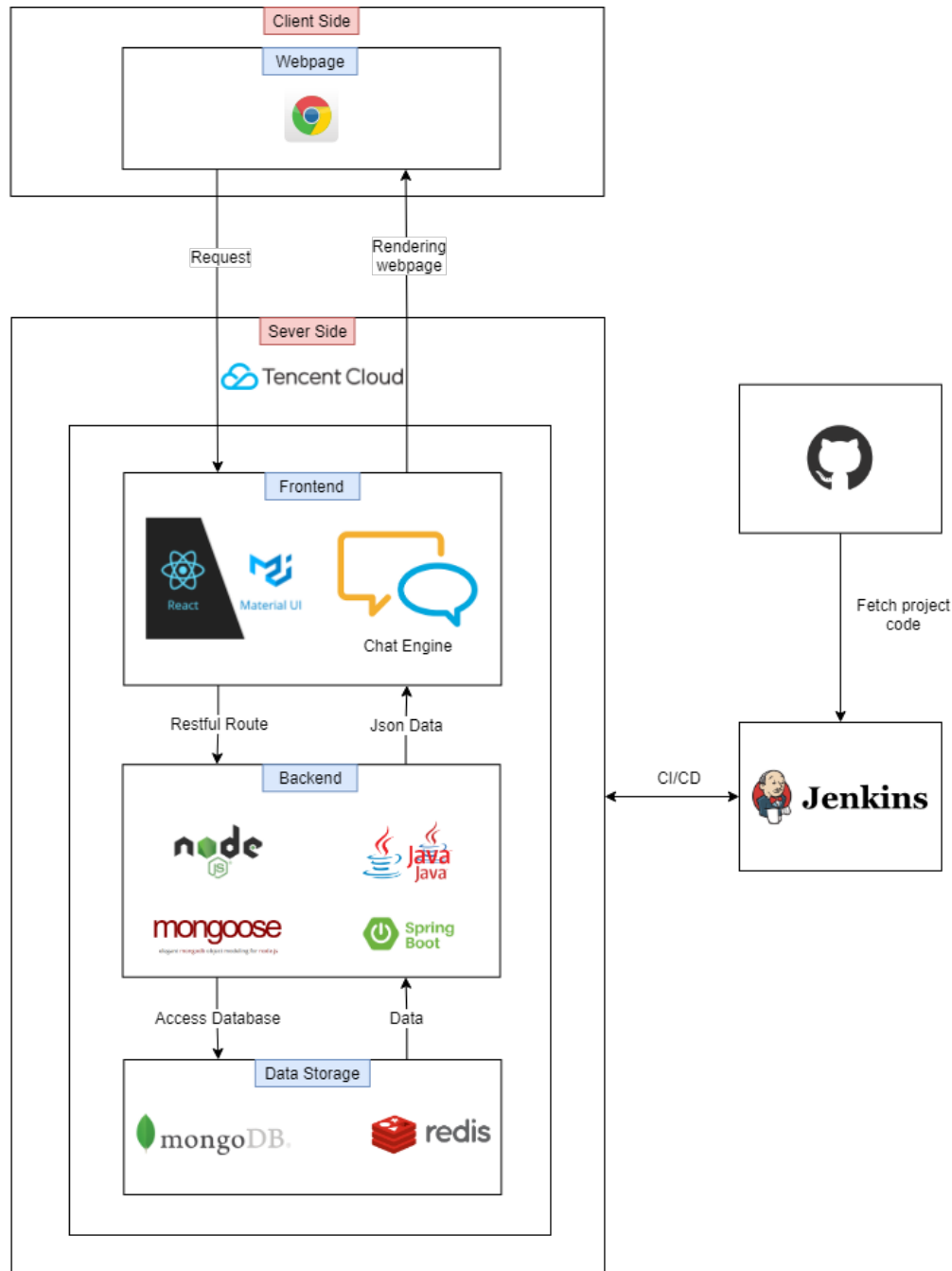


# YB - Architectural Design

## 1. System architecture diagram

The system mainly consists of the front-end, back-end, and database. The backend mainly uses java and NodeJS to build two services respectively, which provide the most important functions of the whole project. The MongoDB database is used as the persistent storage solution, and Redis is also used as the cache database to meet the high availability requirements. The front-end uses react and material UI frameworks, and the front-end is responsible for displaying the interface and calling the API provided by the back-end, as well as the chat service provided by the third-party service. In addition, the entire project uses git and Jenkins to build CICD, automate integration, testing, and deploy the project to the server.

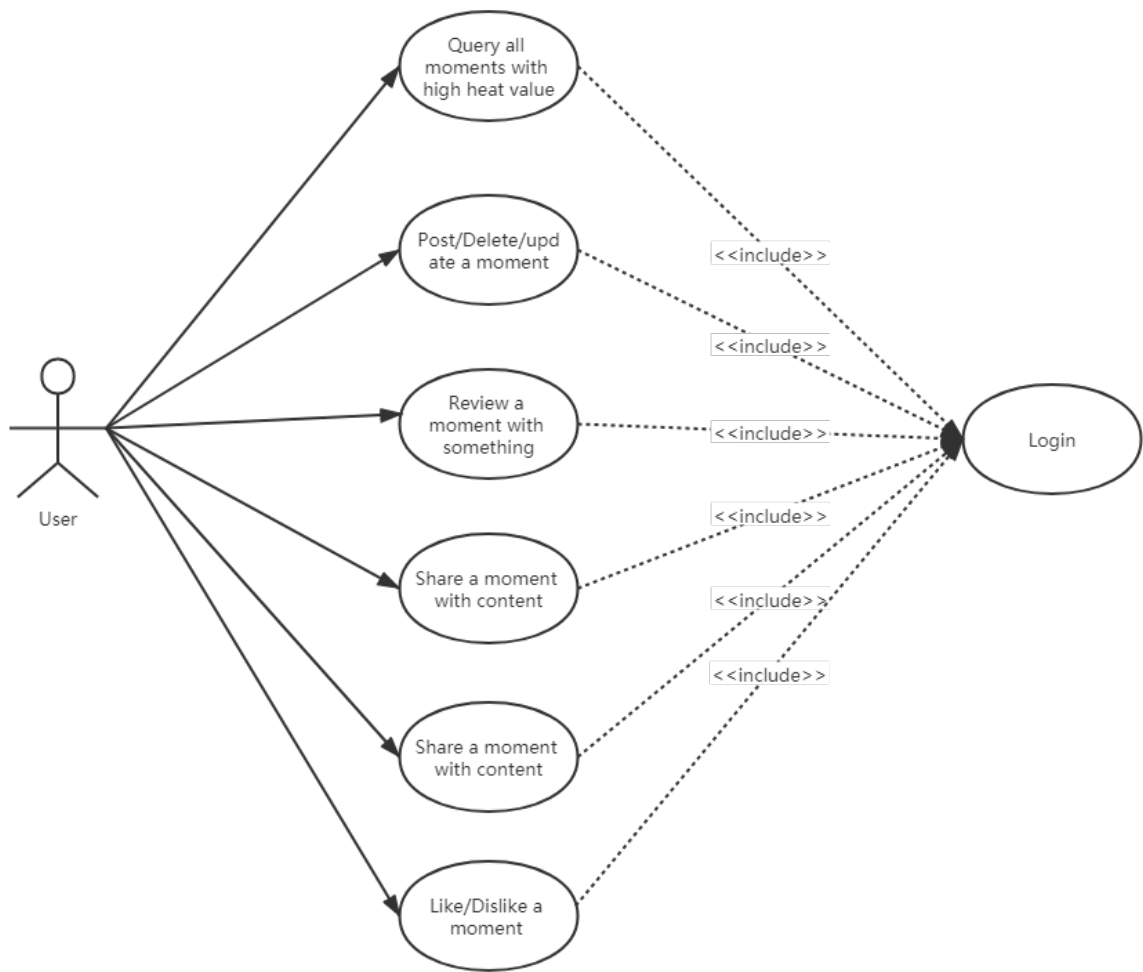


## 2. Class diagram

The class diagram of the system is divided into three parts, the first part is the class diagram of the original project, which is attached as the pdf file called "backendUML.pdf", the second part is the class diagram of the extended project, and the third part is the chat function in the extended project, which will be finished in the next sprint.



The following diagram mainly shows the user case about the moment part of the project.



4. Sequence Diagram

The following diagram shows the sequence diagram about the part of like.

