

StackOverflow

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Introduction

For this project, I want to implement a web application for helping all people around the world that are working in the IT industry, by asking questions (e.g. a problem they encountered when developing their application), or/and by helping other by answering their questions. Questions and Answers can be upvoted/downvoted as a form of feedback for their usefulness.

Technologies

The technologies used for this application will be:

- Java with Spring for the Backend of the application
 - React and Angular for the Frontend
 - MySql for the DataBase
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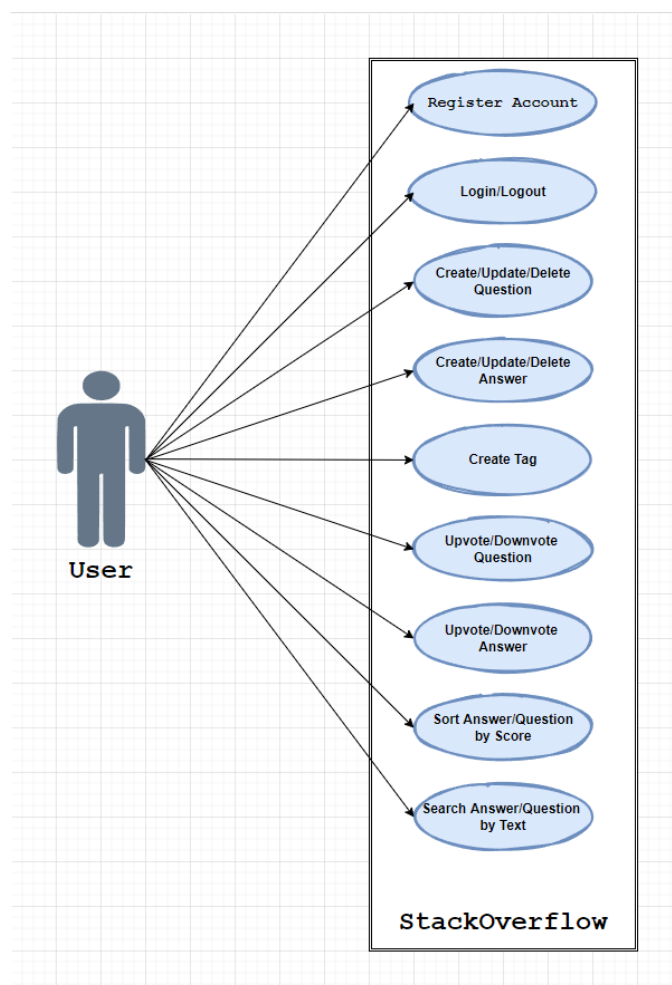
Use Case

Users will be able to:

- **Account:**
 - Register a personal account to use the platform
 - Delete the personal account they registered
 - Login/Logout into the account with the credentials they specified when registering the account
- **Question**
 - Create a question in the application

- Edit/Delete a previously asked question
- Search a question by text
- Sort questions by scores (votes) or by date
- Answer
 - Create an answer in the application
 - Edit/Delete a previously typed answer
 - Search an answer by text
 - Sort answer by scores (votes) or by date

Use Case Diagram

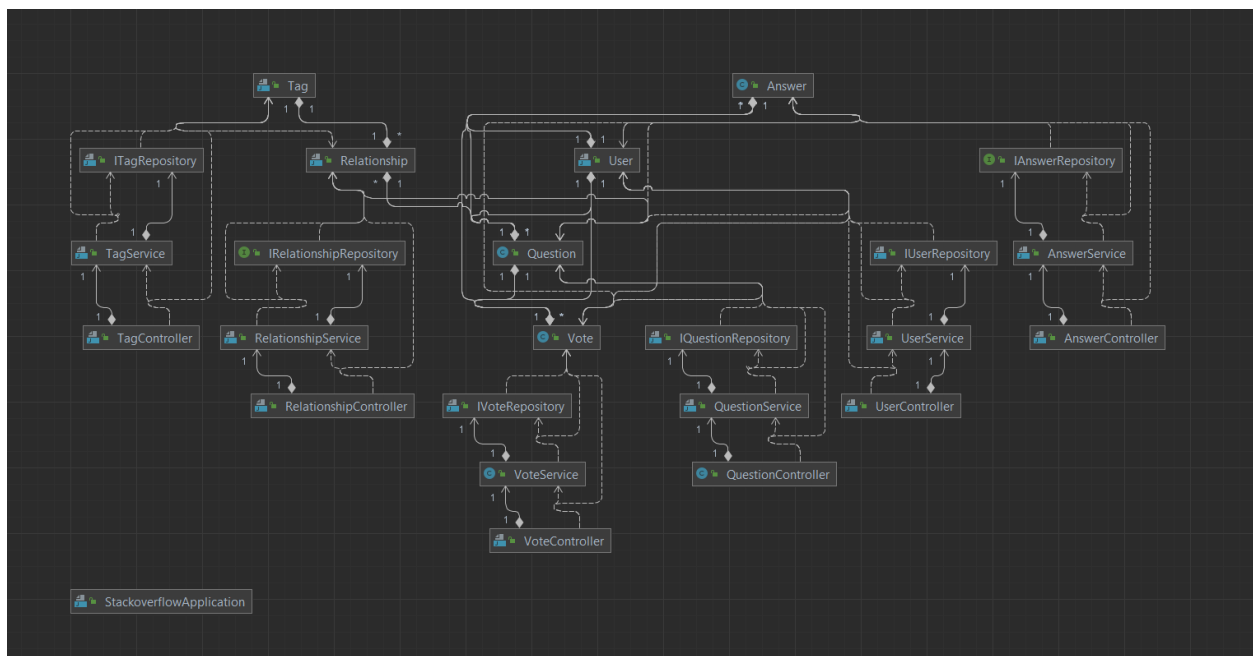


Layered Architecture

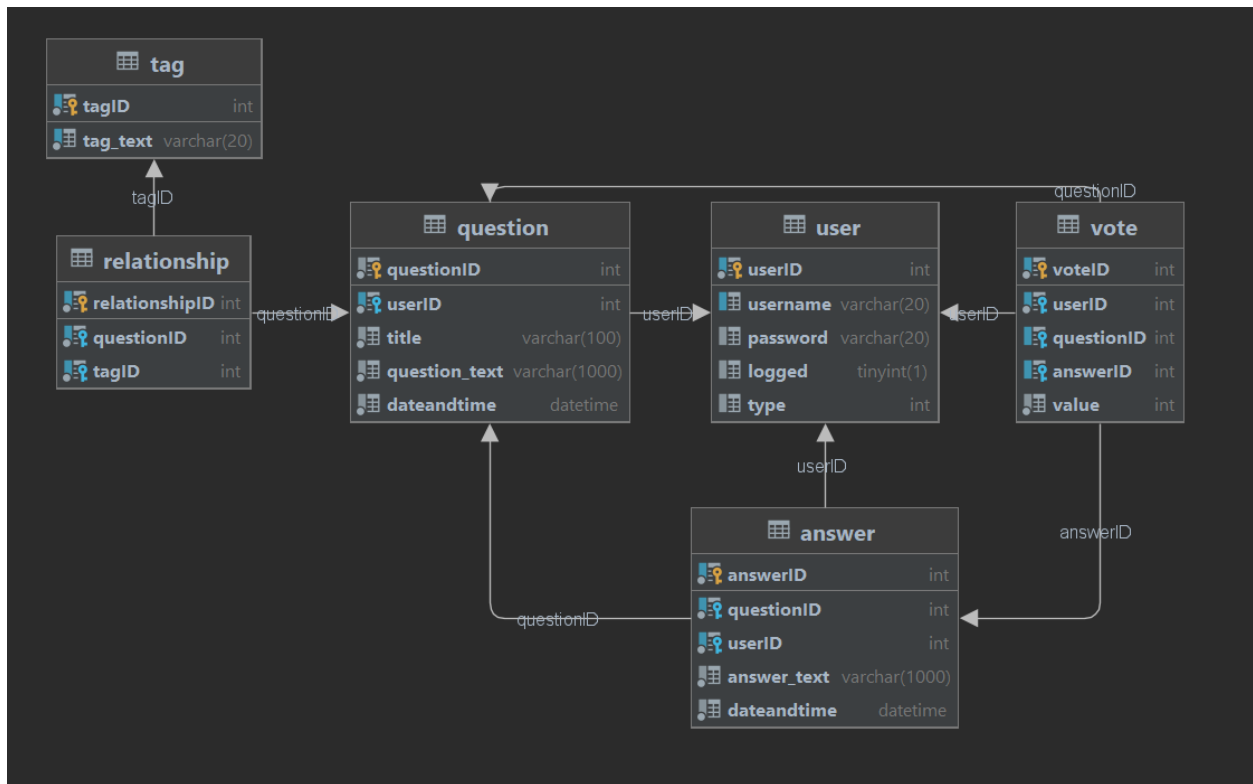
The program will use a layered architecture composed of:

- **Model Layer:** which will contain the entities from the databases and everything related to their representation
- **Repository Layer:** which will contain interfaces used for the implementation of the services
- **Service Layer:** which will contain all the CRUD (Create, Read, Update, Delete) operations for each of the models in the application
- **Controller Layer:** which will contain all the endpoints used in the application implemented by using the services
- **DataBase:** which will store all the Data necessary to the application.

Class Diagram



Database Diagram



Bibliography

- Baeldung: [Working with Relationships in Spring Data REST | Baeldung](#)
- Lab Guidelines + Lectures
- Javapoint: [Spring Boot CRUD Operations - javatpoint](#)