Real-Time Blogging Application

Mayur Aitavadekar MS Candidate, Computer Science Georgia State University

Motivation:

The primary motive for developing this project is to create backend REST APIs in the Spring Boot framework, which is usable in real-time.

Usage:

The project is available at:

http://blogapp-env.eba-6nhur92i.us-east-2.elasticbeanstalk.com/swagger-ui/index.html

User Requirements:

- 1) Users should create, update, delete and list out posts.
- 2) Users should add, update, and delete comments on posts.
- 3) Categorize the posts according to categories
- 4) A new user should register in the application
- 5) Users should log in to the application
- 6) Users should be able to upload images for each post.

APIs Requirements:

- 1) Login, Register with role-based authentication (admin and normal user)
- 2) Lists out information about all users
- 3) JWT based authentication
- 4) Posts APIs pagination and sorting
- 5) Proper input validation handling for users, posts, comments
- 6) Proper exception handling for invalid inputs and return errors to the client
- 7) Document API information using swagger
- 8) Host the application on a cloud platform

Technologies and Tools:

- 1) Spring Boot
- 2) Maven

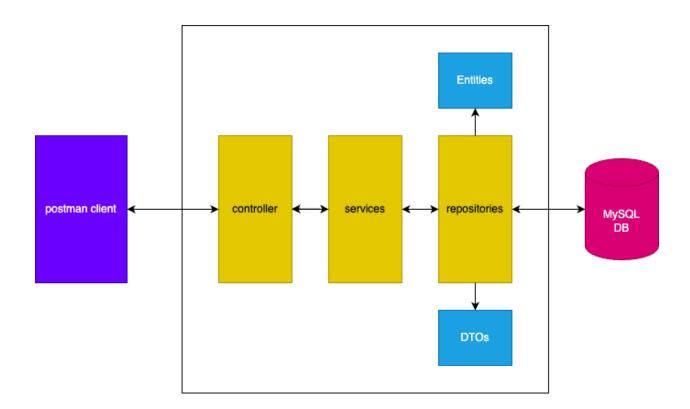
- 3) IntelliJ
- 4) Apache Tomcat
- 5) Spring Security
- 6) Spring Data JPA
- 7) MYSQL
- 8) Postman for API testing
- 9) Swagger for API documentation
- 10) Amazon RDS and Elastic Bean for deployment

Resources:

I have identified 4 resources for the project:

- 1) User resource
- 2) Category resource for different types of posts
- 3) Post resource (a most important source of resource)
- 4) Comment resource for each post

Project Architecture (API flow)



ER - Diagram

The following ER diagram shows the relational mapping of the database.

