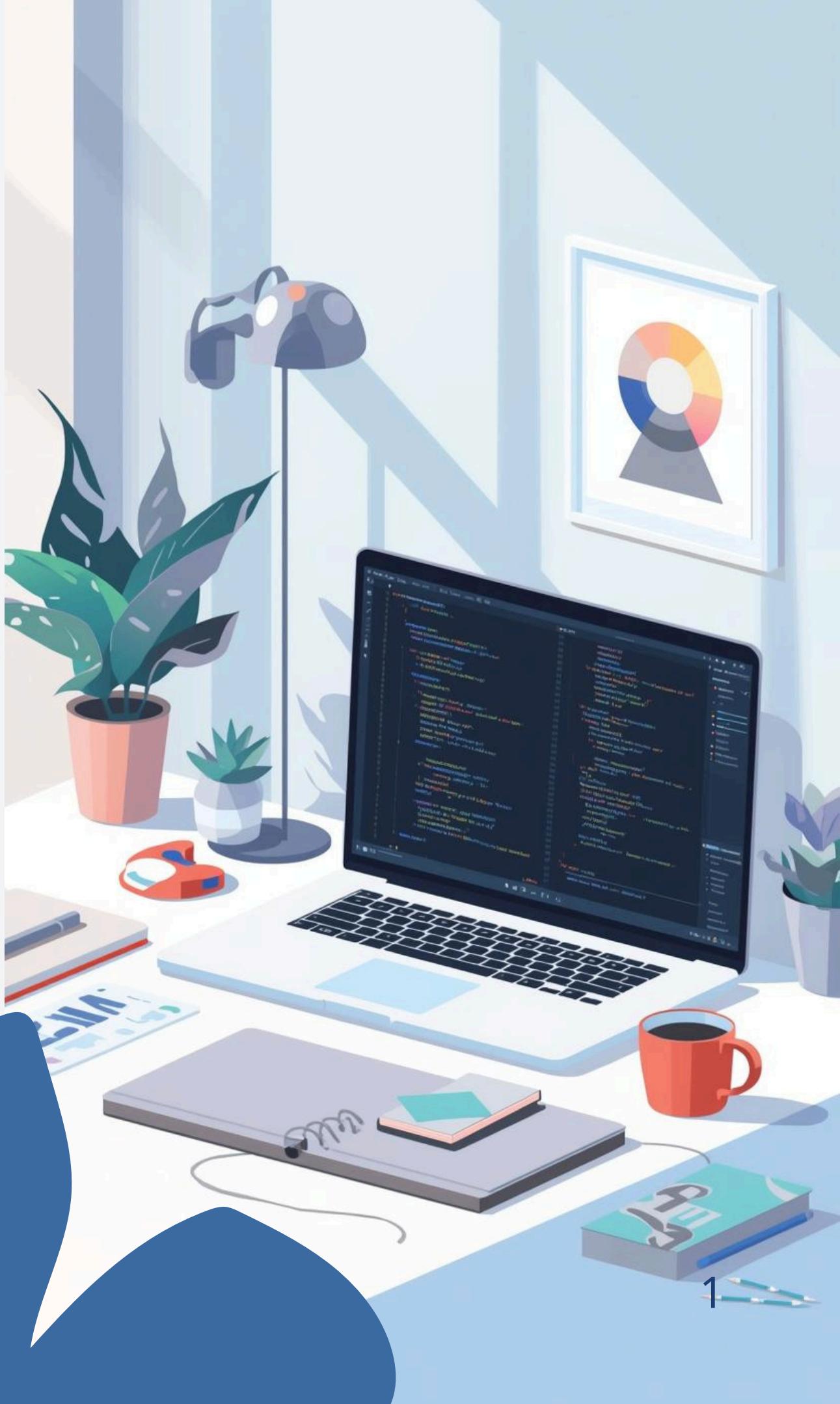


Online Blog Portal

PRESENT BY: GROUP 05

PRESENT TO: NGUYEN TRI HAI, PH.D

CLASS: 251_72ITSE40803_01



Project Overview

ONLINE BLOG PORTAL

The online blog portal aims to simplify content sharing through an intuitive platform. Key objectives include enhancing user engagement, secure access, and efficient content publishing. Technologies used are Spring Boot, Spring MVC, and React.ts, PostgreSQL as database.

PROJECT GOAL

Provides core features: Create posts, Edit, Delete, Categorize posts, and Comments. Ensures intuitive user interface and good navigation experience.

TARGET AUDIENCE

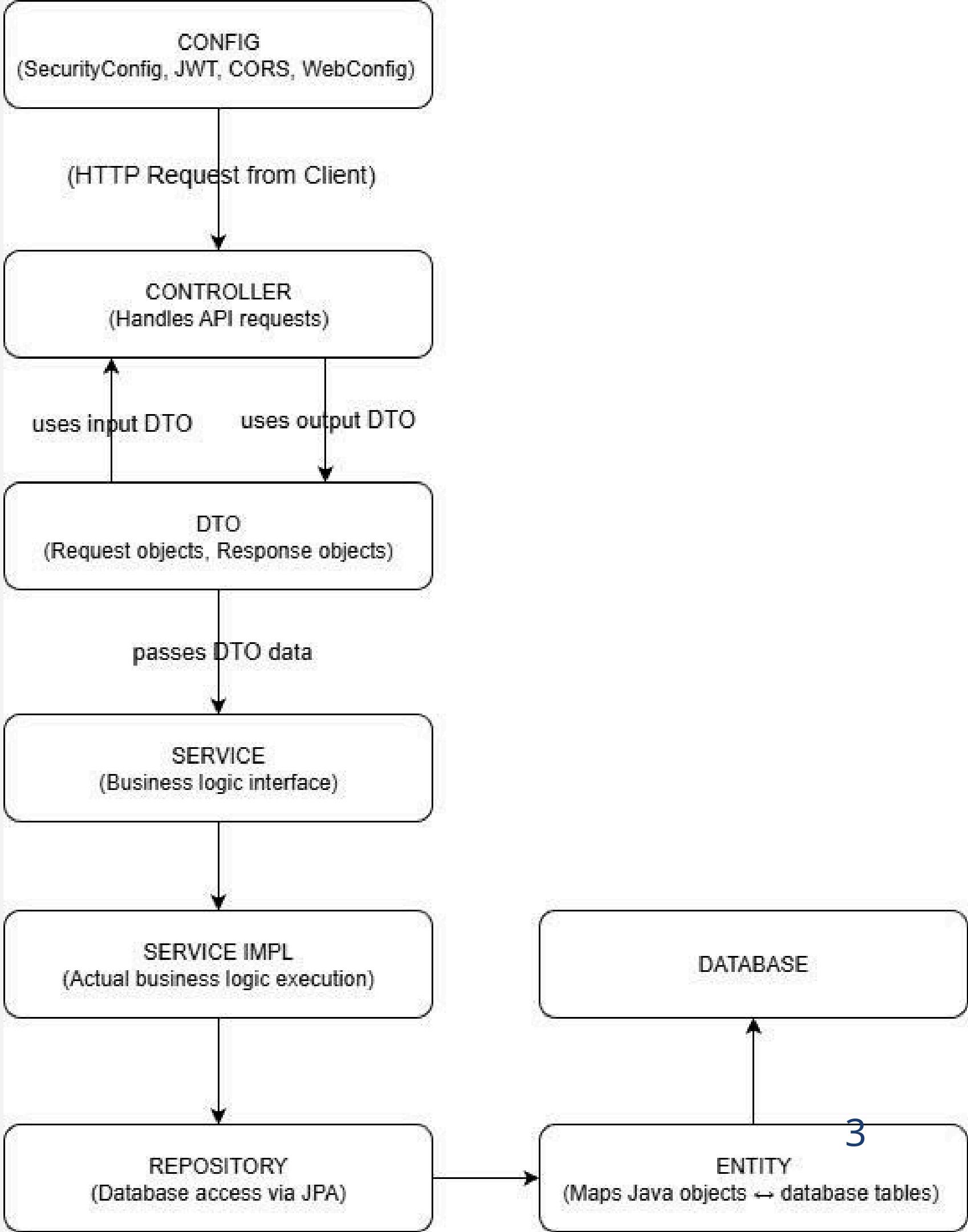
Author: The user has registered and been granted write permission.

Reader: Public or registered user (not author).

System Architecture of the Blog Portal

STRUCTURING WITH CLARITY

This architecture diagram illustrates the **three-layer structure**: Controller, Service, and Repository, emphasizing the organized approach for effective management.



Core Features and Functionalities

ESSENTIAL CAPABILITIES

The blog portal includes several key features:

- **CRUD operations** for managing posts and comments.
- **User authentication** and role-based access control.
- A robust **RESTful API** for seamless integration.

Key Functionalities in CRUD Operations

CREATE

Enables users to publish new blog posts easily.

READ

Allows users to view and engage with existing content.

UPDATE

Users can edit their posts for improved accuracy.

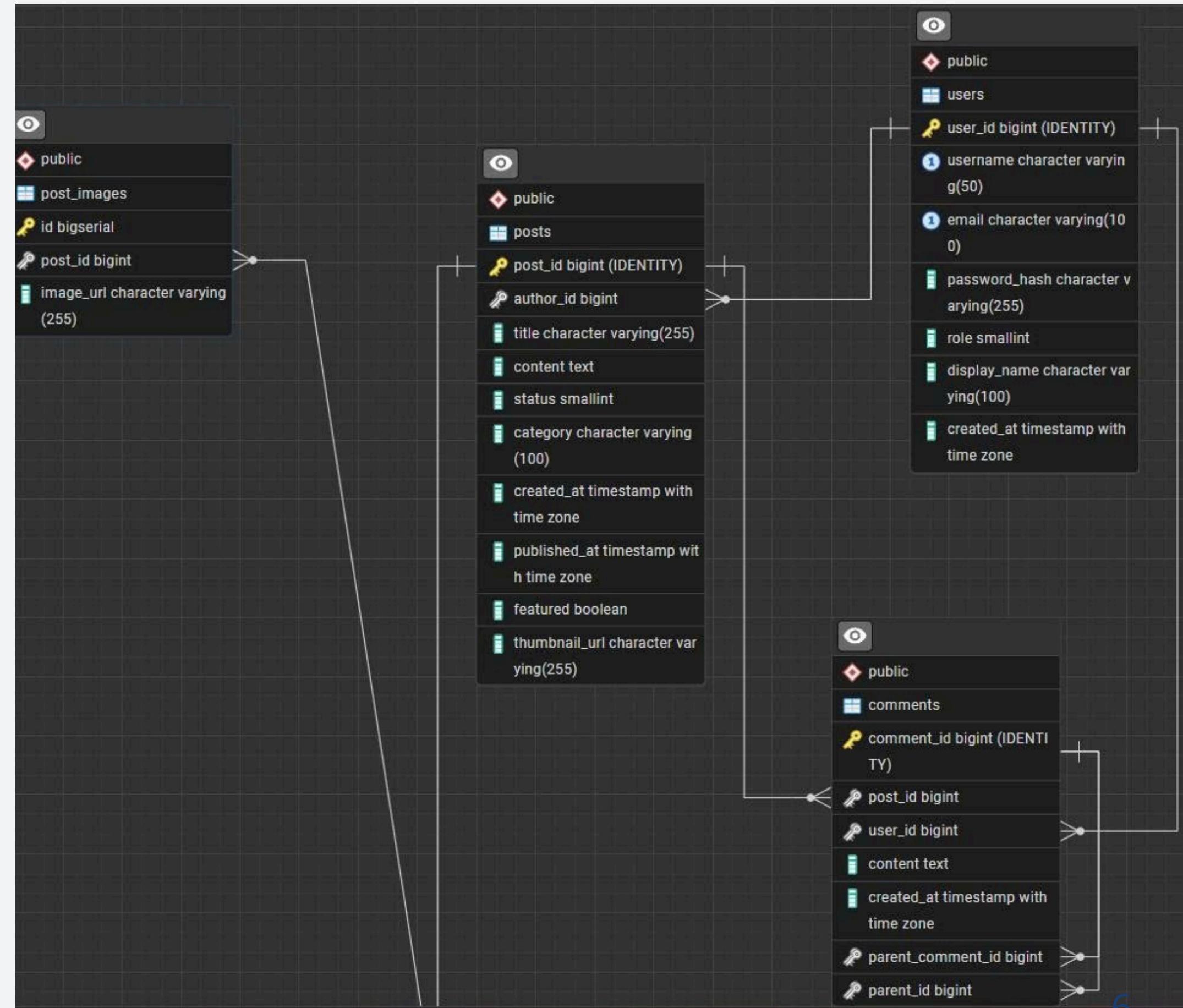
DELETE

Users can delete their posts

Database Design for the Blog Portal

STRUCTURING DATA EFFECTIVELY

The **Entity-Relationship Diagram** outlines key tables, relationships, and attributes essential for managing users, posts, comments, and categories effectively.



User Interface: Engaging Visual Design

FUNCTIONS

Main Page

- Presents a collection of user posts accompanied by thumbnails.

Login/Register

- Streamlines access for users to the blogging platform.

Profile Page

- Clearly displays user information along with their posts.

Create Post

Enables users to effortlessly share new content.

Security Measures for the Blog Portal

PROTECTING USER DATA

To ensure the safety of our blog portal, we implement several **key security measures**:

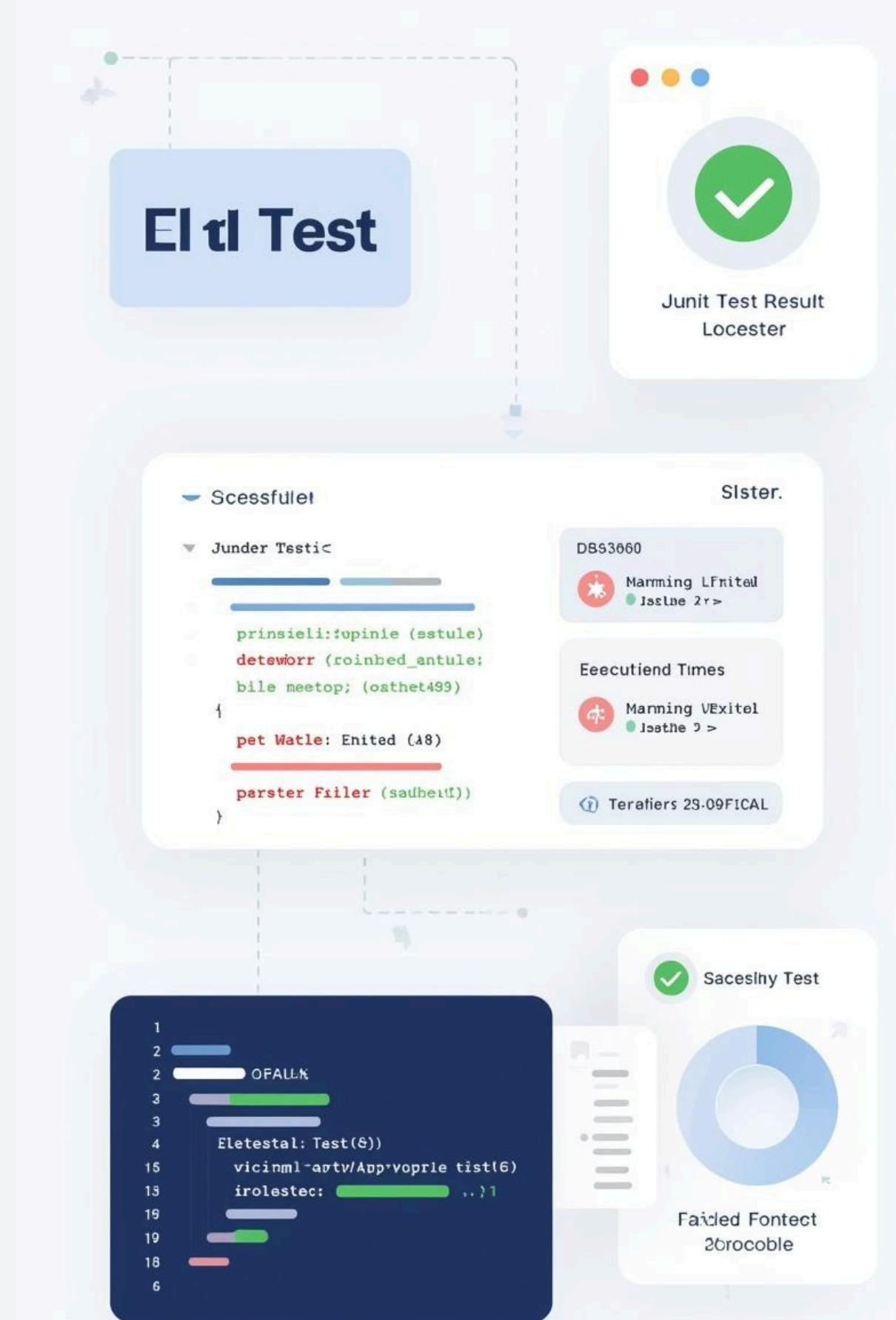
- Username/password authentication
- Role-based access control
- Password hashing with BCrypt

Testing and Quality Assurance in Action

ENSURING PROJECT RELIABILITY

Rigorous testing was performed using Postman to verify that all backend API endpoints work correctly and securely under various scenarios.

This process ensures our Java Spring Boot blog portal delivers consistent, predictable, and safe behavior, especially in authentication-protected routes.



Challenges Faced During Development Process

PROBLEM-SOLVING STRATEGIES

Challenge

The frontend does not save the token after login → the interceptor has no token to send → the backend does not receive the authorization header → the user has no permission to perform CRUD operations.

Solution

After login, the frontend must store the token correctly.

The interceptor will automatically read the token and attach it to every request → the backend can authenticate → CRUD operations work normally.



Summary and Next Steps

FUTURE ENHANCEMENTS

The project has completed the core blog functions, running stably and meeting the set goals. Although there were some errors with tokens and images, the team has handled and improved the system. This is a good foundation for further development in the future.

Future enhancements may include:

- Scalability improvements
- Richer UI/UX designs
- Mobile responsiveness
- Additional features like social sharing integration

Evaluation

Members	Contribute (%)
Pham Le Duy Bao-2374802010043	20%
Nguyen Hoang Tien-2374802010494	20%
Truong Quoc Danh-2184802015000	40%
Ngo Khai Luan-2374802010295	20%