

DBMS 2

Assignment Report

a. A short 2-3 para summary of how you built the application

The entire workload of designing and building the web application from scratch was divided among us four based on our areas of expertise, interest and previous experience. The concepts taught in the class were used to design the schemas, implement various frameworks and and set up the middleware.

b. Overall system architecture

Frontend:

Frontend Framework: NextJS

Desing Theme: MaterialUI

Rich Text Editor: React-RTE

MiddleWare:

Axios

Backend:

Consists of:

Models- tables (users, posts, tags, votes, comments) in the database and equivalent models for the ORM.

Controllers- cover various functionalities of the server:

- Login with session creation, signup, authentication
- Fetch data for posts, comments, users etc based on ids
- Search for posts based on parameters such as tags, userids

Routes

c. Programming languages used for different components:

Javascript has been used for frontend and backend.

Next.js framework is used to build the frontend.

Node.js is used to run the backend.

Express.js is used to serve HTTP requests.

Axios is used to send HTTP requests from the client side.

Sequelize is the ORM between backend and database.

Postgres database.

d. Contribution of each group member in the implementation

Rajiv Chitale - Backend models and controllers,

Abhinav Yadav - Frontend using NextJS

Vedant Bhandare - Using sessions and cookies to login, Signing up

Harsh Goyal - DDL, Sequelize transactions