

# Project Report: Reddit-like App

(ref photo is attached below)

## ***Technologies Used:***

The Reddit-like app is built using a modern tech stack to ensure efficiency and scalability:

FastAPI: A modern, fast (high-performance), web framework for building APIs with Python 3.7+.

Peewee: A simple and lightweight Object-Relational Mapping (ORM) for Python, used to interact with the PostgreSQL database.

PostgreSQL: A powerful, open-source relational database system, chosen for its reliability and scalability.

React: A JavaScript library for building user interfaces, providing a flexible and efficient way to create interactive and dynamic front-end components.

Redux: A predictable state container for JavaScript applications, enabling the management of the application's state in a consistent and scalable manner.

## ***Database Schema:***

The database schema consists of three main tables:

Users Table (users): Contains user information with a UUID primary key, name, email, and password.

Posts Table (posts): Stores information about the posts, including a UUID primary key, user\_id, title, content, creation timestamp, and likes\_count.

Comments Table (comments): Manages comments with a UUID primary key, post\_id, parent\_id (for nested comments), user\_id, content, and creation timestamp.

## **List of APIs and Their Functionalities:**

POST /create\_user:

- Creates a new user with the provided name, email, and password.
- Returns the user ID.

GET /get\_user:

- Retrieves user information based on email and password.
- Returns user ID and name.

POST /create\_post:

- Creates a new post with the provided user\_id, title, and content.
- Returns the post ID.

POST /create\_comment:

- Creates a new comment with the provided post\_id, parent\_id, user\_id, and content.
- Returns the comment ID.

POST /like\_post:

- Increments the likes\_count of a specified post.
- Returns a success message.

GET /list\_all\_posts:

- Retrieves a list of all posts with their IDs, titles, content, and likes\_count.
- GET /get\_post:
- Retrieves a specific post along with its comments.
  - Returns post details and a nested structure of comments.

### **Conclusion:**

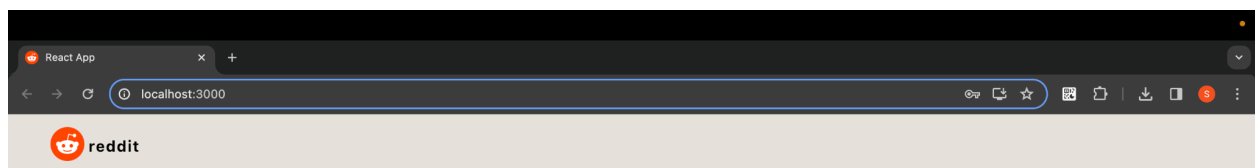
The Reddit-like app showcases the integration of FastAPI, Peewee, React, Redux and PostgreSQL to create a robust and efficient platform for user engagement. With features such as user creation, post and comment management, and the ability to retrieve and interact with posts and comments, the application lays a strong foundation for further development and scalability. The use of modern technologies ensures optimal performance and ease of maintenance.

### **How to run:**

Database: `psql -h localhost -p 5432 -d reddit -U newuser`

Backend: `uvicorn main:app --reload`

Frontend: `npm start`



### CREATE A NEW ACCOUNT

**Username**

**Email**

**Password**

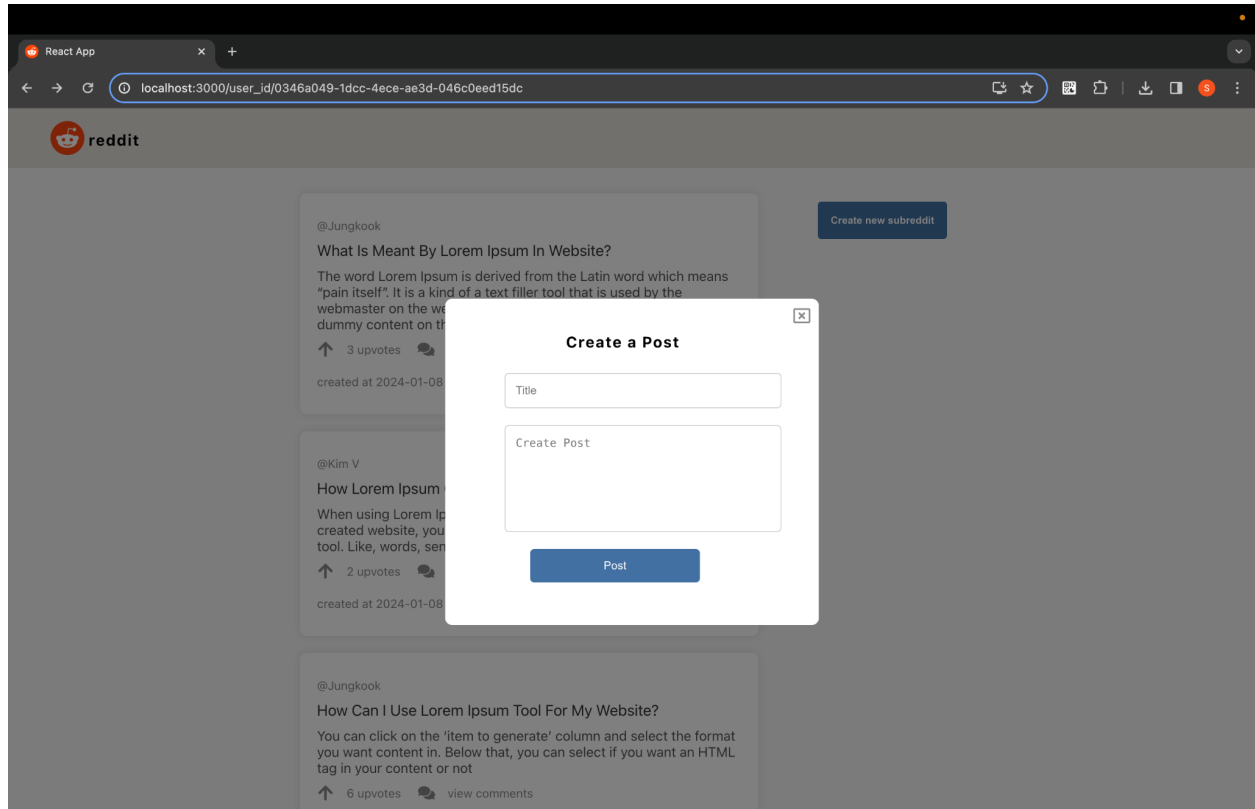
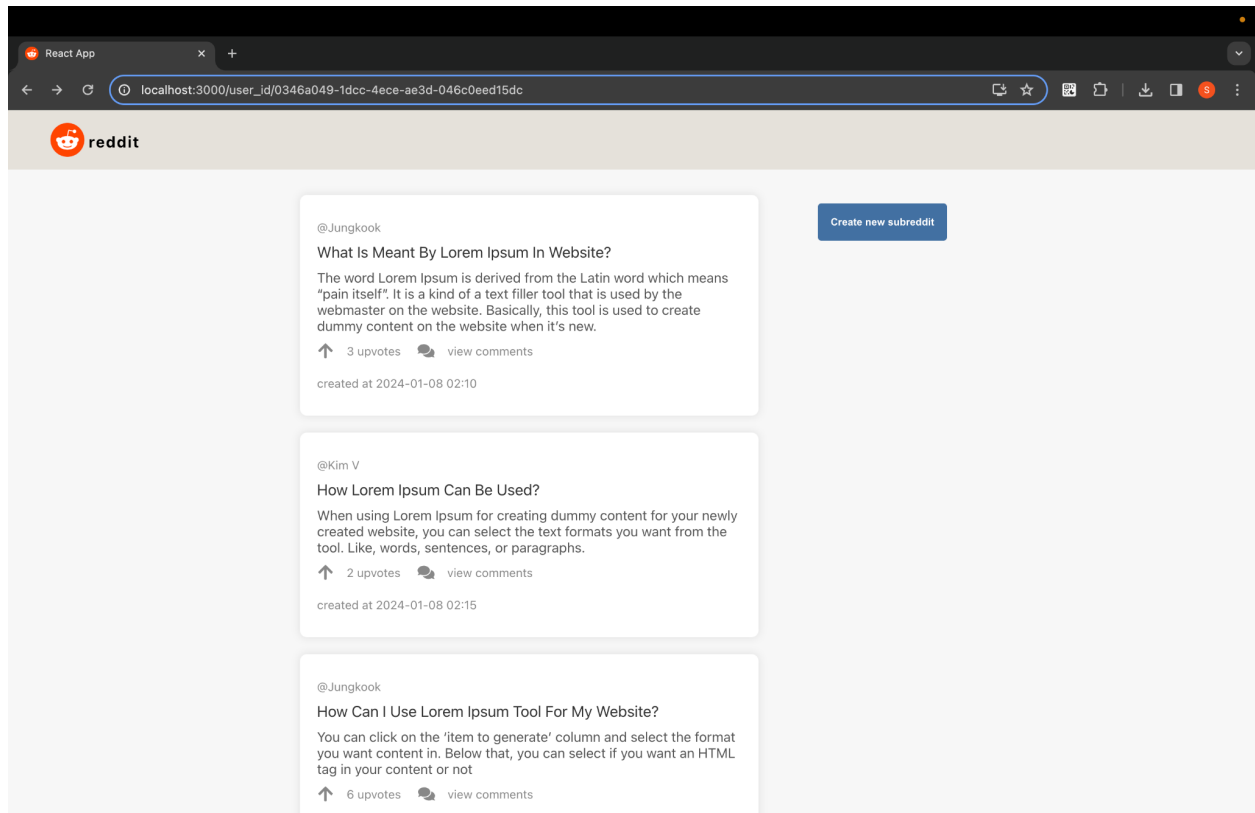
SIGN UP

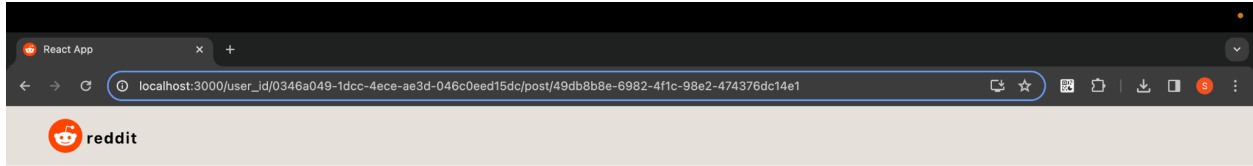
### LOG IN

**Email**

**Password**

LOG IN





@Jungkook

## What Is Meant By Lorem Ipsum In Website?

The word Lorem Ipsum is derived from the Latin word which means "pain itself". It is a kind of a text filler tool that is used by the webmaster on the website. Basically, this tool is used to create dummy content on the website when it's new.

↑ 3 upvotes

Comments:

What are your thoughts?

Submit Comment

**Kim V: Why Lorem Ipsum Is Used?**

↩ Reply

Jungkook: Hi kim v. It helps the designer plan where the content will sit. It helps in creating drafts of the content on the pages of the website. It originates from the Latin text but is seen as gibberish.

↩ Reply