**Project Structure-**

ls -R reddit-clone/

(base) alekhyanaravajhula@Alekhyas-MacBook-Air Desktop % ls -R reddit-clone/

Project Demo.mov cmd internal

README.md go.mod pkg

api go.sum reddit-clone

reddit-clone//api:

v1

reddit-clone//api/v1:

api.go

reddit-clone//cmd:

client cmd engine rest-server

reddit-clone//cmd/client:

main.go

reddit-clone//cmd/cmd:

rest-server

reddit-clone//cmd/cmd/rest-server:

reddit-clone//cmd/engine:

main.go

reddit-clone//cmd/rest-server:

main.go test

reddit-clone//cmd/rest-server/test:

main.go

reddit-clone//internal:

client middleware proto server web

engine models rest simulator

reddit-clone//internal/client:

client.go

reddit-clone//internal/engine:

engine.go

reddit-clone//internal/middleware:

auth.go cors.go

reddit-clone//internal/models:

models.go

reddit-clone//internal/proto:

reddit.pb.go reddit.proto reddit\_grpc.pb.go

reddit-clone//internal/rest:

handlers.go server.go

reddit-clone//internal/server:

server.go

reddit-clone//internal/simulator:

simulator.go

reddit-clone//internal/web:

client.go

reddit-clone//pkg:

config metrics

reddit-clone//pkg/config:

ports.go

reddit-clone//pkg/metrics:

metrics.go

**To start Server-**

go run cmd/rest-server/main.go

After server stated the log is-

2024/12/12 23:52:12 Starting REST server on port :8080

2024/12/12 23:52:12 Starting REST server on port :8080

**To Create new user**

curl -X POST http://localhost:8080/api/v1/users/register \

-H "Content-Type: application/json" \

-d '{"username": "testuser2", "password": "test123"}'

o/p-

{"id":"375d9604a6504c4a6aa1cab702c7877c","username":"testuser2","karma":0,"created\_at":"2024-12-12T23:54:32.990591-05:00"}**%**

Id- 375d9604a6504c4a6aa1cab702c7877c

**To check if user exists**

curl -X POST http://localhost:8080/api/v1/users/register \

-H "Content-Type: application/json" \

-d '{"username": "testuser2", "password": "test123"}'

o/p-

{"error":"username already exists"}**%**

**Login-**

curl -X POST http://localhost:8080/api/v1/users/login \

-H "Content-Type: application/json" \

-d '{"username": "testuser2", "password": "test123"}'

o/p-

{"token":"375d9604a6504c4a6aa1cab702c7877c"}**%**

**Create subreddit**curl -X POST http://localhost:8080/api/v1/subreddits \

-H "Authorization: Bearer <your\_new\_token>" \

-H "Content-Type: application/json" \

-d '{"name": "TechDiscussion", "description": "A place to discuss technology"}'

o/p-

{"id":"a81dec4704451db10af6af72d1be5f6c","name":"TechDiscussion","description":"A place to discuss technology","member\_count":0,"creator\_id":"","created\_at":"2024-12-12T23:58:49.731042-05:00"}**%**

Id- a81dec4704451db10af6af72d1be5f6c

**create post in subreddit**  
curl -X POST http://localhost:8080/api/v1/posts \

-H "Authorization: Bearer <your\_new\_token>" \

-H "Content-Type: application/json" \

-d '{"title": "Welcome to Tech Discussion", "content": "What tech topics interest you?", "subreddit\_id": "<your\_new\_subreddit\_id>"}'

o/p-

{"id":"d7add8abc7f7b9e614b10382f83a9b24","title":"Welcome to Tech Discussion","content":"What tech topics interest you?","author\_id":"375d9604a6504c4a6aa1cab702c7877c","subreddit\_id":"a81dec4704451db10af6af72d1be5f6c","upvotes":0,"downvotes":0,"comment\_count":0,"created\_at":"2024-12-13T00:01:52.620391-05:00"}**%**

Id- d7add8abc7f7b9e614b10382f83a9b24

"author\_id":"375d9604a6504c4a6aa1cab702c7877c" "

**add comment to post**curl -X POST http://localhost:8080/api/v1/posts/<post\_id>/comments \

-H "Authorization: Bearer <your\_token>" \

-H "Content-Type: application/json" \

-d '{"content": "This is my first comment!"}'

o/p-

{"id":"fb67714b9905646a916c11a5bb3774a2","content":"This is my first comment!","author\_id":"375d9604a6504c4a6aa1cab702c7877c","post\_id":"d7add8abc7f7b9e614b10382f83a9b24","parent\_id":null,"depth":0,"upvotes":0,"downvotes":0,"created\_at":"2024-12-13T00:10:21.882768-05:00"}**%**

If not then o/p is-

{"error":"post not found"}**%**

Id- fb67714b9905646a916c11a5bb3774a2

**Upvote post**

curl -X POST http://localhost:8080/api/v1/posts/<post\_id>/vote \

-H "Authorization: Bearer <your\_token>" \

-H "Content-Type: application/json" \

-d '{"is\_upvote": true}'

o/p-

{"status":"success"}**%**

**Downvote post**

curl -X POST http://localhost:8080/api/v1/posts/<post\_id>/vote \

-H "Authorization: Bearer <your\_token>" \

-H "Content-Type: application/json" \

-d '{"is\_upvote": false}'

o/p-

{"status":"success"}**%**

**Get feed-**curl -X GET http://localhost:8080/api/v1/feed \

-H "Authorization: Bearer <your\_token>"

o/p-

[{"id":"d7add8abc7f7b9e614b10382f83a9b24","title":"Welcome to Tech Discussion","content":"What tech topics interest you?","author\_id":"375d9604a6504c4a6aa1cab702c7877c","subreddit\_id":"a81dec4704451db10af6af72d1be5f6c","upvotes":0,"downvotes":1,"comment\_count":0,"created\_at":"2024-12-13T00:01:52.620391-05:00"}]**%**

**Multiple client Demonstration-**

go run cmd/rest-server/test/main.go

o/p-

(base) alekhyanaravajhula@Alekhyas-MacBook-Air reddit-clone % go run cmd/rest-server/test/main.go

2024/12/12 23:53:24 === Testing Registration and Login ===

2024/12/12 23:53:24 Registration successful

2024/12/12 23:53:24 Login successful, token: 189fc874bfdc9f98a8ed7e47ff8faf34

2024/12/12 23:53:24

=== Testing Subreddit Creation ===

2024/12/12 23:53:24 Created subreddit: TestSubreddit

2024/12/12 23:53:24

=== Testing Post Creation ===

2024/12/12 23:53:24 Created post: Test Post

2024/12/12 23:53:24

=== Testing Comment Creation ===

2024/12/12 23:53:24 Created comment on post: 4fe863b5015da231bb03dcad7ec65f12

2024/12/12 23:53:24

=== Testing Voting ===

2024/12/12 23:53:24 Successfully voted on post: 4fe863b5015da231bb03dcad7ec65f12

2024/12/12 23:53:24

=== Testing Feed Retrieval ===

2024/12/12 23:53:24 Retrieved 1 posts from feed

2024/12/12 23:53:24 - Post: Test Post

2024/12/12 23:53:25

Test completed

(base) alekhyanaravajhula@Alekhyas-MacBook-Air reddit-clone %