# SWE 573 Final Report

Git: https://github.com/altanborali16/SWE573-AltanBorali

Git Tag: https://github.com/altanborali16/SWE573-AltanBorali/releases/tag/v0.9

#### **HONOR CODE**

Related to the submission of all the project deliverables for the Swe573 2024 Spring semester project reported in this report, I Altan Boralı declare that:

- I am a student in the Software Engineering MS program at Bogazici University and am registered for Swe573 course during the Spring 2024 semester.
- All the material that I am submitting related to my project (including but not limited to the project repository, the final project report, and supplementary documents) have been exclusively prepared by myself.
- I have prepared this material individually without the assistance of anyone else with the exception of permitted peer assistance which I have explicitly disclosed in this report.

Name

Signature

Altan BORALI 20/05/2024

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## Overview

In this report we will talk about SWE 573 Final Delivery.

## **Test Users**

Username: Uskudarli / Password: 1234Username: altan16 / Password: 1234

By using "docker-compose up --build" you can use the project. With that an initial database will be created. You can check <u>Deployment</u>.

As in my project configuration database, backend and frontend are in the same container I had difficulties to deploy on a live system.

You can check video of how to use project.

# Software Requirements Specification

#### Infrastructure

Backend: DjangoFrontend: React

Database: PostgreSQL
Code IDE: VS Code
Database IDE: PgAdmin
Docker: Docker Desktop

# **Functional Requirements**

## Login & Register

- Users shall be able to sign up the website.
- Username shall be unique.
- Users shall be able to login with correct username and password.

#### **User Roles**

There are three types of users: Owner, Moderator, and User.

- Owner: Has all authorizations of a Moderator and User.
- Moderator: Has all authorizations of a User.

#### **Owner**

- Owner shall be able to create new community.
- Owner shall be able to select community page as public or private.
- Owner shall be able to add/remove moderators.
- Owner shall be able to add co-owners.
- Owner shall be able to remove follower.
- Owner shall be able to add/remove posts.

#### Moderator

- Moderator shall be able to add/remove post.
- Moderator shall be able to add/remove user from community.
- Moderator shall be able to stop discussions.

#### User

- User shall be able to enter or send requests to community.
- User shall be able to follow another user.
- User shall be able to post on following community pages.
- User shall be able to unfollow user and community page.
- User shall be able to create a community page and become owner of that page.

• User shall be able to accept to be moderator request and become a moderator.

# **Status**

# **Project**

#### **Closed Features**

- Database tables with relations created.
- Register
- Login
- Create community with default template.
- Create template.
- Create post from template.
- Search
- Subscribe a community.
- Unsubscribe a community.

#### **Partly Closed Features**

- User roles on community (Moderator is missing)
- Private community (Selection of private is implemented (database and creation) but no effect on community page)

# **Open Topics**

- All moderator topics are missing. Manager and relation is created on backend and database but no implementation on frontend.
- As private community functionality is not fully implemented, join request to a community is not implemented.
- · Comment on post is missing.

# **Deployment**

For the deployment of project, there is no url. You can either use local building steps or with docker.

To use it with docker, after downloading repository to your local you need to run "docker-compose up –build" and database, backend and frontend will be created with initial database.

Also, from the link you can see how to build your docker environment and local build.

## **User Manual**

You can access user manual also from the wiki page.

# Login & Register

First page is the login page as shown below.

# **COMMUNITY PLATFORM**

Username			
Password			
Login			
Register			
<u>kegister</u>			

If user does not have an account user should press "Register" button and it will directs user to the register page as shown below.

# COMMUNITY PLATFORM

Username			
F 1			
Email			
Password			
Register			
<u>Login</u>			

User should fill the fields if any field is empty user will get an error message.

If username is already taken user also gets an error message.

If everything is fine user will direct to the login page.

On login page user should enter username and password credentials.

If they are correct user will direct to the home page if not user receive an error message.

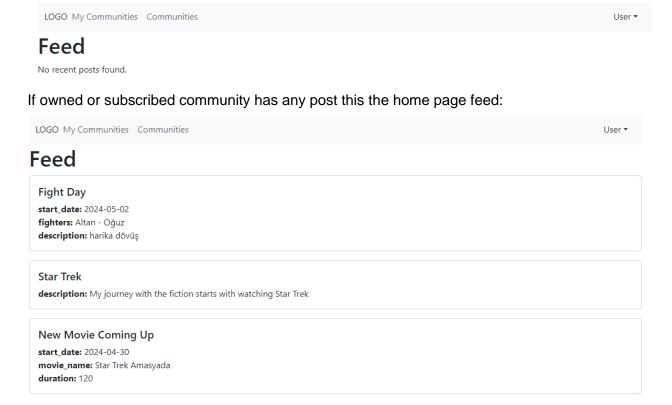
# **Home Page**

In home page user meets with navbar:

- LOGO: On click user directed to the home page
- My Communities: On click user directed to the communities where user is the owner
- Communities: On click user directed to all communities
- User: Is a dropdown
  - Logout: On click logs out and directed to the login page.
  - o User Profile: On click user directed to the user profile.

On home page: If user has no communities and any subscribed communities that means there is no posts that user can view. If user has community or subscribed any community, but if those communities does not have any posts that means there is no post user can view.

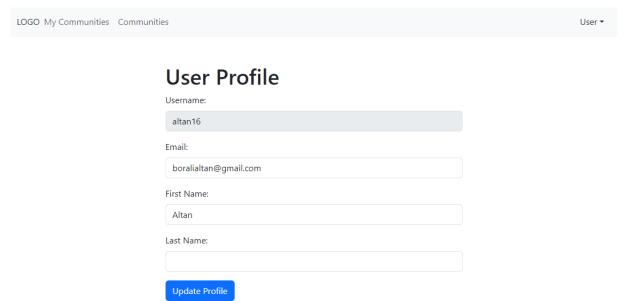
For those cases this is the home page:



Later, it will be described how user can create, subscribe community, and create post.

#### **User Profile**

User can edit Email, First Name and Last Name in this page. Username change is not possible.

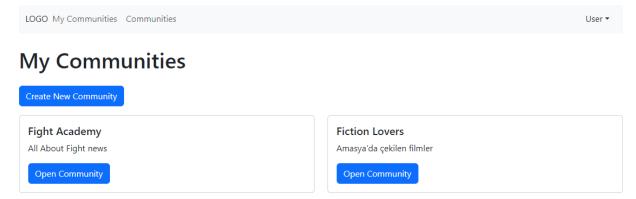


# **My Communities**

This page is to view communities which are created by user.

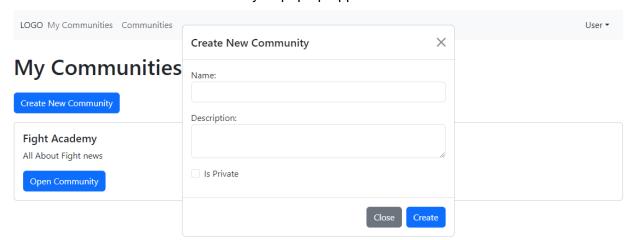
User can create new community by clicking "Create New Community" button.

User can view community page by clicking "Open Community" button.



#### **Create New Community**

After click on "Create New Community" a pop up appears as shown below.



User should fill Name and Description fields.

Is private has a field on database but it is not affecting anything.

When community is created a default template is created.

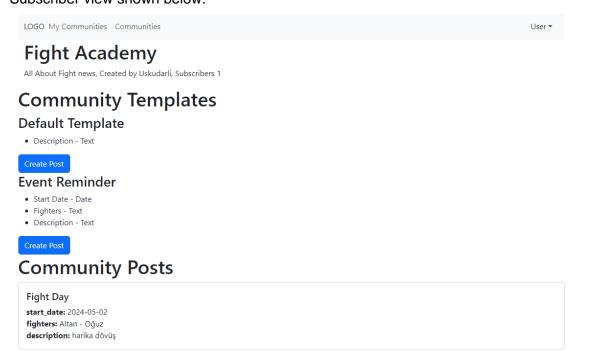
# **Community Page**

#### Subscriber

If user is subscriber

- Can create post with created templates.
- · Can view posts.

Subscriber view shown below:

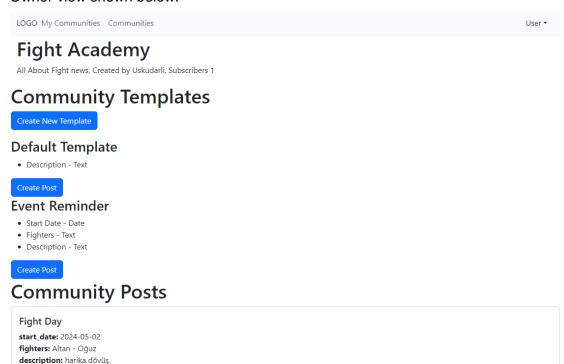


#### **Owner**

If user is owner

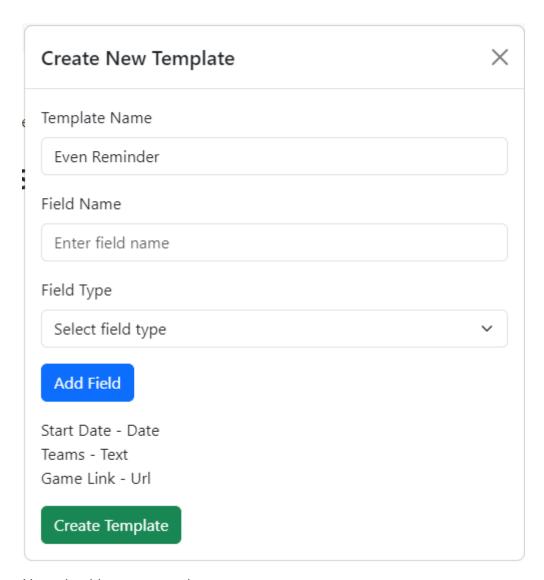
- Can create template.
- Can create post with created templates.
- Can view posts.

#### Owner view shown below:



## **Create Template**

On community page if user is the admin, after clicking "Create Template" button a modal will appears shown below.

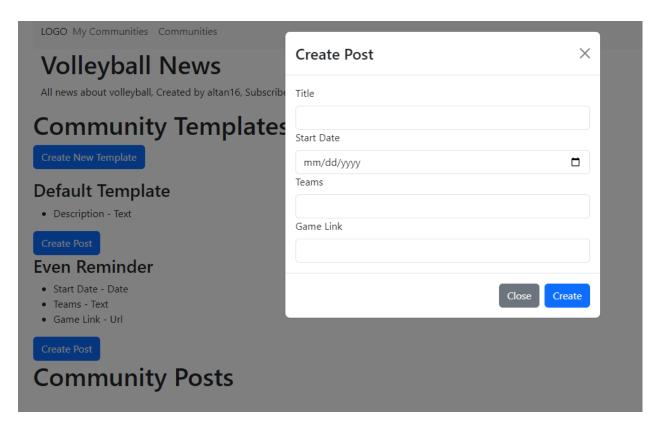


User should enter a template name.

User can create new field name and field type. After entering field name and field name and pressing "Add Field" button that selection will be added. After that field name and field type sections becomes empty again. User can add as much as wanted. After clicking "Create Template" button new template will be added.

#### **Create Post**

On community page under Community Templates section every template has a "Create Post" button. By clicking user can create a post with selected template.



# **Communities Page**

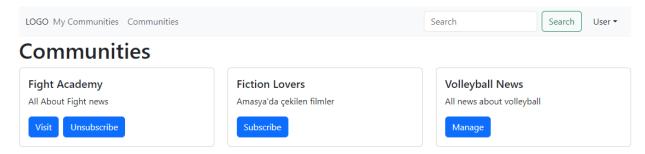
On communities page user can view all communities.

If user subscribed to a community user can visit community page or unsubscribe from community.

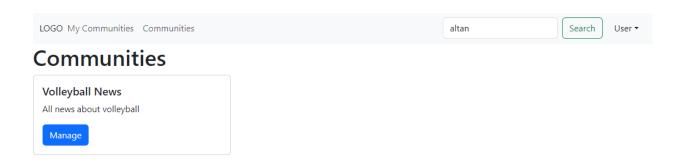
If user owner of the community visit community by manage.

If user is not subscribed to the community user can subscribe to the community.

Also in this page there is a search bar which helps user to search on communities.



Example of search:



# **Test Results**

#### **Unit Test**

For the unit test there are 6 tests are implemented. Results are shown below.

```
Found 6 test(s).
Creating test database for alias 'default'...
System check identified no issues (0 silenced).
.....
Ran 6 tests in 5.933s
```

#### **User Test**

No bugs have been found for the current status of the application.

# References

- https://docs.docker.com/
- https://docs.djangoproject.com/en/5.0/
- https://getbootstrap.com/docs/5.3/getting-started/introduction/
- https://react.dev/