

SWE 574 Software Development as a Team -

Group Report

SocialHUB

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Repository: <https://github.com/zeyneplervesarp/swe574-javagang>

Deployment URI: <http://34.88.198.59:8080/#/>

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Overview

Purpose

The purpose of SocialHub is to create an ecosystem where only time is used as a currency. It is a virtual environment that brings people together online and offline, enables them to share their experiences, and learn new things, make friends and expand their horizons.

This document covers the SocialHub project and all of its features, use cases, scenarios, UML and sequence diagrams.

Document Conventions

The overall touch and feel of the project is done with the Vue Argon System created by Creative Tim. The reference can be found in the references section.

The requirements mentioned below state a higher-level description of the system. The detailing is done through UML diagrams and the mockups..

Intended Audience and Reading Suggestions

This document is intended for the customer, Product Owner from the client-side, as well as the developers who need to build and test the application.

Project Scope

SocialHub is a web application that serves as an open platform for internet users. The system is designed to create a community where users can offer services based on their expertise and also participate in others' services. It seeks to be an open and creative community where members can share their talents and discover new interests. It is designed to support all kinds of services and events, and to grow and develop with the community.

More specifically, the platform is created to register users, get and display their profile information, display their balance, list services and filter and sort them, display services, and get notifications for various events. There is also an administration activity that enables the administrative users to handle member-created content, handle users, and feature services for community fostering.

There is no use of money in SocialHub. Services are given and taken according to the member's time credits and the duration of the services.

Product Features

The system will be a web application. The unregistered users will be able to display a sample of services with limited information. Users will be able to display all services, create services, receive and display notifications, request services, approve and deny requests to their services, follow and be followed by other users, display the profile of other users and approve services.

The system contains a relational database containing information on users, services, tags, notifications, user followings and approvals.

Assumptions and Dependencies

SocialHub is deployed on a Google Cloud Server. The capacity of the server can be increased or decreased by demand. The system can be run on other service providers if needed. The software developed assumes the use of Docker for containerizing the application. The speed of the system will depend on the server capacity.

Target Audience - Personas

Miranda Osborne



Age: 27
Location: Istanbul
Marital Status: Single

Biography

Gamer.
Award-winning music buff.
Social media maven.
Zombie fan. Student.
Professional internet fanatic.
Thinker.
Freelance baconaholic.

Technology Usage

- Actively on their smart phone 5 hours a day
- Uses a handheld Playstation console 2 hours a day minimum
- A heavy social media user.

Goals & Needs

- Wants to find amateur football player buddies to play physically.
- Wants to reach more people so they listen to her self-made music
- Wants to build a fan-base later gain from it

User1

Wants to build a follower-base



Super extroverted



Rebecca Phelps



Age: 50
Location: Izmir
Marital Status: Single

Biography

Probably the best TV binge-watcher you'll ever find.

Technology Usage

- They use their smart phone when they receive a message or a call
- Have an iPad on which they constantly watch Netflix / Hulu / HBO TV Shows.
- Have a desktop computer where they browse news, content of their favorite websites daily.

Goals & Needs

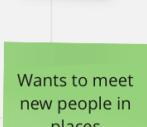
- Wants to socialize their pet dog.
- Learn new things
- Meet new people
- Go to new places as often as possible

User2

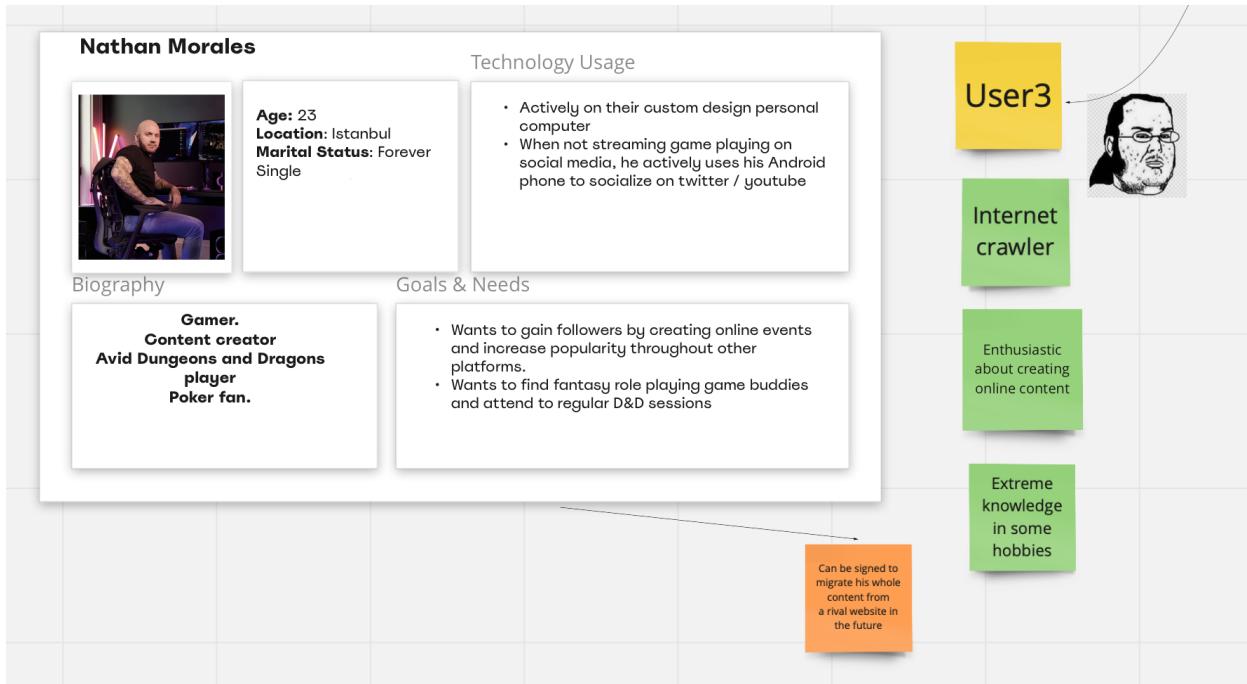
Is a traveller



Wants to meet new people in places travelled



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Glossary

These are some terms that require description in order for the requirements to be more understandable.

administrators: people who remove sensitive or reported content from the platform to keep it safe and in line with the community rules. They are hired by the management of the platform.

blocked credits: The number of credits that can't be used after applying to an offer.

community: all the members of SocialHub.

event: An event that is offered by a user, that can be applied by other users, free of charge. It is a congregation of site users to socialize.

guest: someone who is not yet a member but is visiting the platform.

organizer: the member organizing an event.

reputation points: points that every member has. They reflect the member's positive contribution to the community.

service: A meeting that is offered by a user, that can be applied by other users, paid by time currency. The user offers their services, teaching what they know in order to gain time credits.

service applicant: someone who applied for an offer but their application has not been accepted by the service giver.

service giver: someone who offers a service.

service participant: someone who applied for an offer and their application has been accepted by the service applicant.

time credit: the currency for this platform. (For example, if a service has lasted an hour, the receiver loses 1 time credit, and the offerer gets one time credit.)

user: someone who has signed up to the platform.

virtual service: A service that is offered via a zoom link. It does not take place physically.

Requirements

Functional Requirements

1. Users

1.1. Registration

- 1.1.1. The system shall allow guests to sign up to the system.
- 1.1.2. The system shall request the guest username for sign up.
- 1.1.3. The system shall request the guest password for sign up.
- 1.1.4. The system shall request from the guest location for sign up.
- 1.1.5. The system shall request from the guest a biography for sign up.
- 1.1.6. The system shall request from the guest to pick tags from a predefined list of tags for sign up.
- 1.1.7. The system shall display the location on the map that the user has chosen while registering.
- 1.1.8. The system shall display profile information to the user after authenticating to the system.
- 1.1.9. The system shall display detailed service information to the user after authenticating to the system.
- 1.1.10. The system shall display filtered and sorted service information after the user authenticates to the system.

1.2. User specifications

- 1.2.1. The system shall assign regular users "user type" users.
- 1.2.2. The system shall assign administrative users "admin type" users.
- 1.2.3. The system shall allow users to display their own profiles.
- 1.2.4. The system shall allow users to view other users' profiles.
- 1.2.5. The system shall allow users to create new services.
- 1.2.6. The system shall allow users to join services.

- 1.2.7. The system shall display to the user the requests that are made to their services.
- 1.2.8. The system shall display notifications to the user.
- 1.2.9. The system shall allow users to follow other registered users.
- 1.2.10. The system shall enable users to be followed by other registered users.
- 1.2.11. The system shall enable users to flag other services
- 1.2.12. The system shall allow guests to only view services.

2. Homepage and Feed

- 2.1. The system shall display Homepage with a link to the user page.
- 2.2. The system shall display the home page after the user logs in.
- 2.3. The system shall display to the user services created by the users that they follow.
- 2.4. The system shall display to the user events created by the users that they follow.
- 2.5. The system shall display a "featured services" section to the users homepage.
- 2.6. The system shall display a list of services in the user's homepage.
- 2.7. The system shall display a list of events in the user's homepage.
- 2.8. The system shall display a new tag page for members from the homepage.
- 2.9. The system shall display time credits on the user's own profile page.

3. Services

- 3.1. Creating Services
 - 3.1.1. The user shall be able to create services.
 - 3.1.2. The user shall be able to apply to services.
 - 3.1.3. Only one user shall be the creator of one service.
 - 3.1.4. Only registered users shall create services.
 - 3.1.5. The user shall be able to apply for other users' services.
 - 3.1.6. The user shall determine a quote of attendees of the service they create.

- 3.1.7. The user shall input date information of the service they create.
- 3.1.8. The user shall input time information of the service they create.
- 3.1.9. The user shall input a description of the service they create.
- 3.1.10. The user shall input the application deadline of the service they create.
- 3.1.11. The user shall input location information of the service they create.
- 3.1.12. The user shall choose between a physical service or a virtual service while creating a service.
- 3.1.13. The user shall input a zoom link while creating a virtual service.

3.2. Applying for Services

- 3.2.1. Only users with time credits more than a service's time credit cost, shall be able to apply for a service.

3.3. Listing Services

- 3.3.1. The system shall display services sorted by the distance to a logged-in user's location.
- 3.3.2. The system shall display services sorted by their created date and service's date.
- 3.3.3. The users shall be able to search for services by entering location.

3.4. Deadlines of Services

- 3.4.1. The applicant user shall be able to apply for a virtual service until 30 minutes before the start time.
- 3.4.2. The service creator user shall be able to edit the service until 24 hours is left to service start time.
- 3.4.3. The users shall be able to apply for a service before the service deadline time.

3.5. Editing Services

- 3.5.1. The system shall notify the applicant users when the service creator changes something in the service.
- 3.5.2. The admin shall be able to delete services.

3.6. Handshake

- 3.6.1. The attending user shall approve the service to confirm they have attended it.
- 3.6.2. The creator user shall approve that the service is completed.
- 3.6.3. The creator user shall complete a service after all attendees have confirmed that the service took place.

4. Events

4.1. Creating Events

- 4.1.1. The users shall be able to create events.
- 4.1.2. The users shall be able to set the time credits to attend an event to zero when creating the event.
- 4.1.3. The system shall set the quota of an event to limitless when an event is being created.
- 4.1.4. The user shall input the name of the event they are creating.
- 4.1.5. The user shall input a short description of the event they are creating.
- 4.1.6. The user shall select tags of the event they are creating.
- 4.1.7. The user shall input the location of the event they are creating.
- 4.1.8. The user shall input the date of the event they are creating.
- 4.1.9. The user shall input the time of the event they are creating.

4.2. Participating events

- 4.2.1. The users shall be able to participate in events.

5. Tags

5.1. Creating Tags

- 5.1.1. The user shall be able to add tags to their profile.
- 5.1.2. The user shall be able to create a new tag when the tag does not exist in the system.
- 5.1.3. The user shall add tags to services they are creating.
- 5.1.4. The user shall not enter illegal tags.

- 5.1.5. The user shall be able to add tags to their profile page that can be linked to their skills.
- 5.1.6. The user shall be able to add tags to their profile page that can be linked to their interests.
- 5.1.7. The user shall add tags to the services they create.

6. Notifications

6.1. Sending Notifications

- 6.1.1. The user shall receive a notification when another user follows them.
- 6.1.2. The service applicant user shall receive a notification when the service creator user approves their application to a service.
- 6.1.3. The service applicant user shall receive notification when the service creator user denies their application to a service.
- 6.1.4. The service creator user shall receive notification when another user applies to their service.
- 6.1.5. The service applicant user shall receive notification when the service creator user edits their service.
- 6.1.6. The event applicant user shall receive notification when the event creator user edits their event.

6.2. Handling Notifications

- 6.2.1. The user shall be able to click a link to the event belonging to the notification.
- 6.2.2. When the user reads their notification, the notification will be marked as read by the system.

7. Time Credits

- 7.1. The service creator user's time credit shall increase by specified credit amount of a service, when the service is completed.
- 7.2. When the user applies for a service, the service's credit amount shall be on hold by the system, until the service is successfully completed.
- 7.3. When a user applies for a service, the service's credit amount shall be on hold by the system, until the service is successfully completed.

- 7.4. The user shall not have more time credits than the upper limit. (10 credits)
- 7.5. The user shall not spend time credits that they don't have.
- 7.6. The newly registered user shall receive 5 time credits.
- 7.7. Only the user shall view their own time credit balance.
- 7.8. The users shall not offer any services when they reach the upper limit of their time credits
- 7.9. The users shall not consume any services when they reach the lower limit of their time credits.

8. Reputation

- 8.1. Reputation points
 - 8.1.1. Every member shall have reputation points.
 - 8.1.2. New members shall receive 10 reputation points by default after sign-up.
 - 8.1.3. The users who attended the service shall rate the creator of the service, after service completion.
 - 8.1.4. The users shall be able to select the rating from 0 to 5.
 - 8.1.5. The user shall lose 10 reputation points when they do not show up to the service they created.
 - 8.1.6. The user shall lose 5 reputation points if they cancel the service after the cancellation deadline passes.
 - 8.1.7. The applicant user shall lose 5 reputation points if they cancel the application of the service after the cancellation deadline.
 - 8.1.8. The user shall not be able to have a reputation point less than 0.
- 8.2. Badges
 - 8.2.1. The users shall be able to see their own badges as well as other users' badges.
 - 8.2.2. The user shall receive a "newcomer" badge when they are in the system for less than 3 months.
 - 8.2.3. The user shall receive a "newcomer" badge when they have participated in less than or equal to 10 services.

- 8.2.4. The user shall receive a "mentor" badge that has participated in 5 services from a newcomer.
- 8.2.5. The user shall receive a "super mentor" badge that has participated in 10 services from a newcomer.
- 8.2.6. The user shall receive a "regular" badge that has participated in 20 services.
- 8.2.7. The user shall receive a "community builder" badge that organises more than 10 events.
- 8.2.8. The user shall receive a "reputable" badge that has more than 10 reputation points.
- 8.2.9. TThe user shall receive a "well-known badge that has more than 25 reputation points.
- 8.2.10. The user shall receive a "guru" badge that has more than 50 reputation points.

9. Administration

9.1. Admin Functionality

- 9.1.1. The admin shall see on the dashboard the user profiles as a list.
- 9.1.2. The admin shall be able to flag users profiles.
- 9.1.3. The admin shall see services as a list on the dashboard.
- 9.1.4. The admin shall be able to flag services on the dashboard.
- 9.1.5. The admin shall see events as a list on the dashboard.
- 9.1.6. The admin shall be able to flag events.
- 9.1.7. The admin shall be able to remove services from the system.
- 9.1.8. The admin shall be able to remove events from the system.
- 9.1.9. The admin shall be able to remove users from the system.
- 9.1.10. The admin shall be able to pick 3 services to be featured.
- 9.1.11. The admin shall be able to view featured services on the dashboard.

9.2. Admin Dashboard

- 9.2.1. The admin shall see on the dashboard when users are attending to a service.
- 9.2.2. The admin shall see on the dashboard when the users are attending an event.
- 9.2.3. The admin shall see on the dashboard when the users are creating a service.
- 9.2.4. The admin shall see on the dashboard when the users are creating an event.
- 9.2.5. The admin shall see on the dashboard every successful user login.
- 9.2.6. The admin shall see on the dashboard every unsuccessful user login.
- 9.2.7. The admin shall see on the dashboard the count of registered users within the last 24 hours, last week, last month, and all time.
- 9.2.8. The admin shall see on the dashboard the count of approved service joins within the last 24 hours, last week, last month, and all time.
- 9.2.9. The admin shall see on the dashboard the count of created services within the last 24 hours, last week, last month, and all time.
- 9.2.10. The admin shall see on the dashboard the count of service applications within the last 24 hours, last week, last month, and all time.
- 9.2.11. The admin shall see on the dashboard the trends of the activity throughout the community.
- 9.2.12. The admin shall see on the dashboard the locations of services on the map.

10. Activity Logging

- 10.1. The System shall log activity when a user follows another user.
- 10.2. The System shall log activity when a user applies for a service.
- 10.3. The System shall log activity when a user attends an event.
- 10.4. The System shall log activity when a user is accepted to take a service.
- 10.5. The System shall log activity when a user logs in successfully.
- 10.6. The System shall log activity when a user attempts to log in unsuccessfully.

11. Recommendation

- 11.1. The System shall display new users recommendations based on their tags.
- 11.2. The System shall display recommendations based on the users behaviour, namely the following list, tags, services they have taken.
- 11.3. The system shall recommend to the users based on the past events that they have participated in.

Non-functional Requirements

1. Security

- 1.1. The system shall hash the passwords that the users enter and shall save the hashed version in the database.
- 1.2. The system shall generate a token for user authentication.
- 1.3. The system shall authenticate registered and logged-in users.
- 1.4. The system shall display an error when making an unauthorised request.

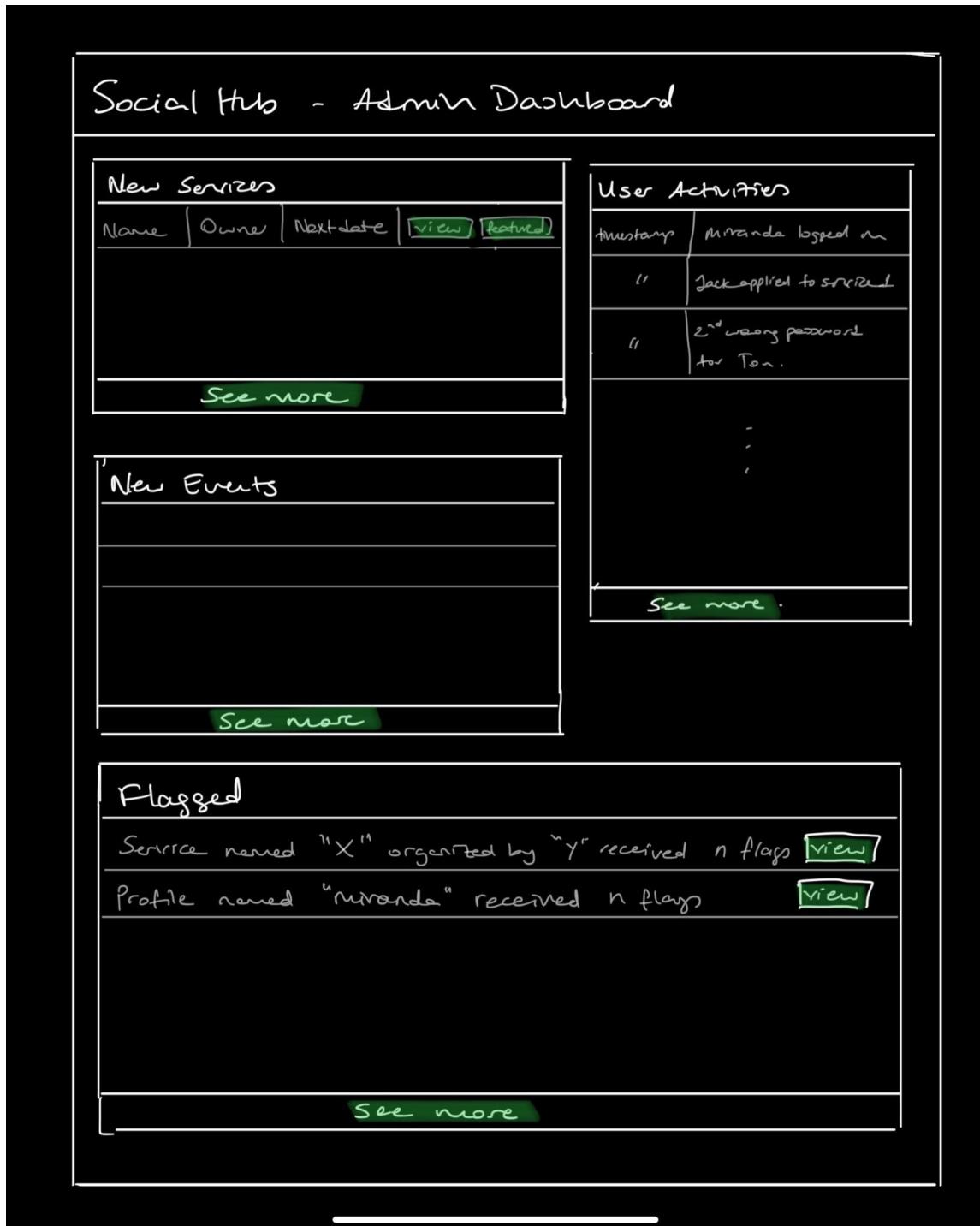
2. System

- 2.1. The system shall work as a web application.
- 2.2. The system's backend shall function as a REST API.
- 2.3. The system's frontend shall function as a web application.
- 2.4. The system's frontend shall consume the backend API.
- 2.5. The system shall be deployed on cloud.
- 2.6. Geolocation shall be used for the location information.
- 2.7. The system shall maintain a list of illegal tags.

Design

Mockups

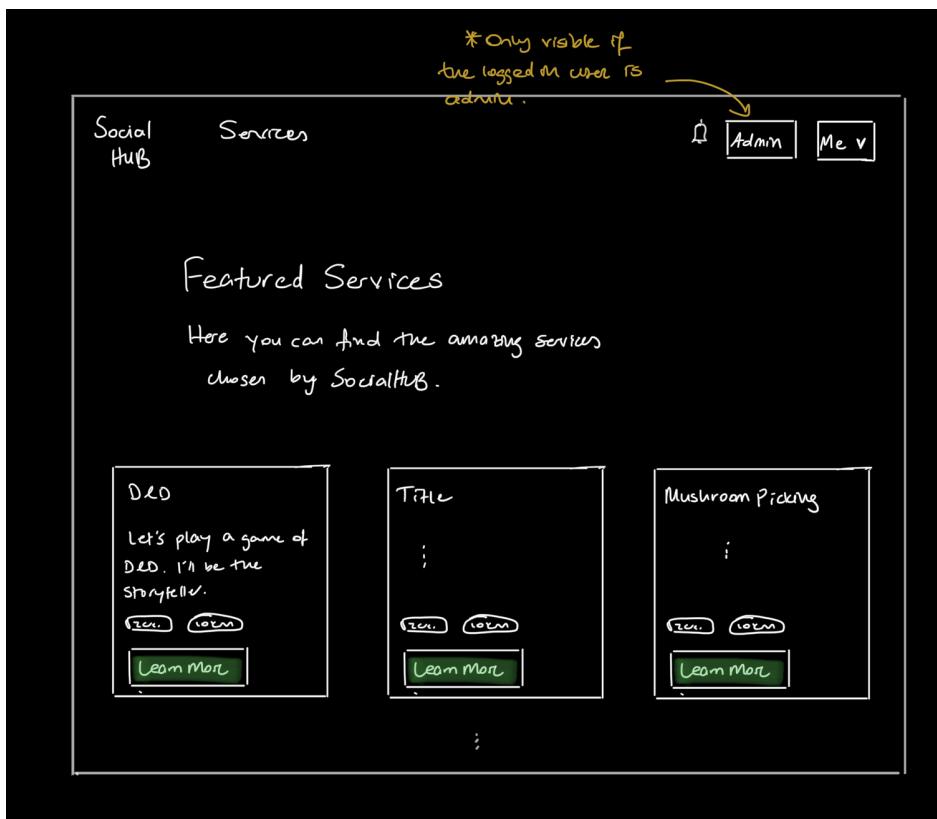
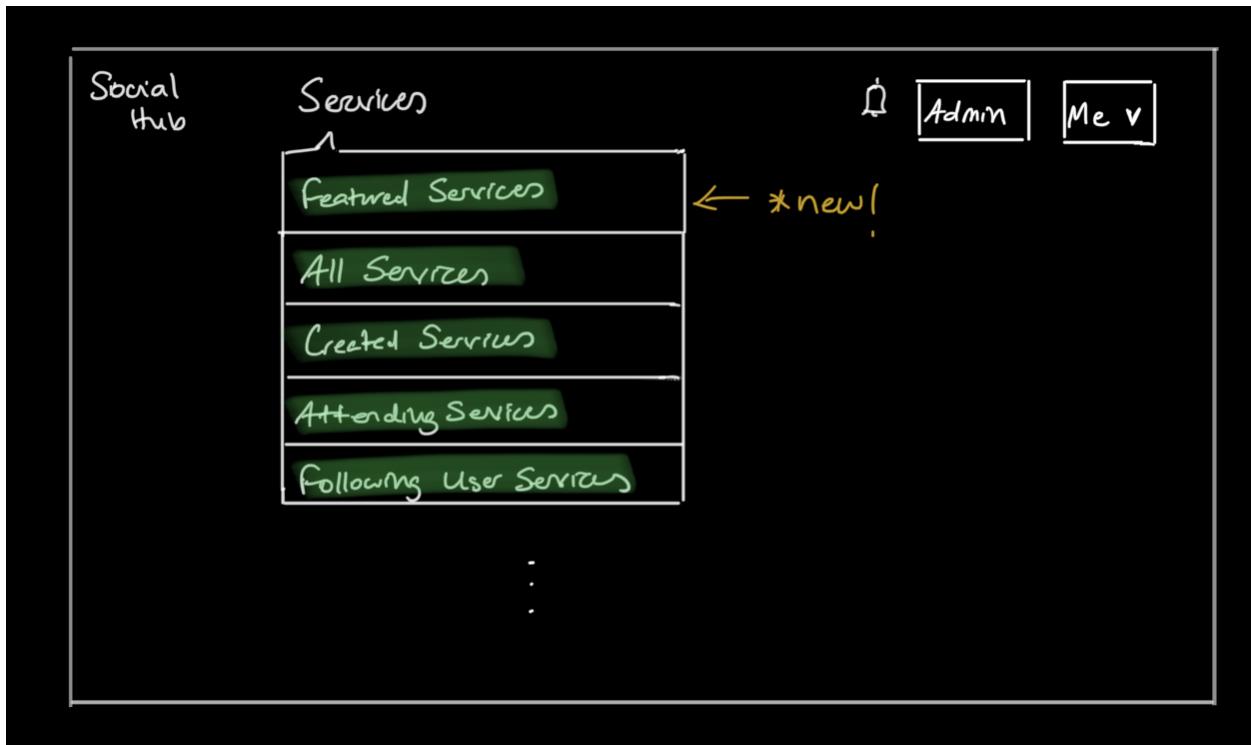
Admin Dashboard



A hand-drawn wireframe of an Admin Dashboard titled "Social Hub - Admin Dashboard". The dashboard is divided into four main sections: "New Services", "User Activities", "New Events", and "Flagged".

- New Services:** A table with columns: Name, Owner, Next date, [View], and [featured]. A "See more" button is at the bottom.
- User Activities:** A table with columns: timestamp and activity details. Examples include "miranda logged in", "Jack applied to service", and "2nd wrong password for Tom". A "See more" button is at the bottom.
- New Events:** A section showing three event cards, each with a "See more" button at the bottom.
- Flagged:** A section showing flagged items. It includes a service named "X" organized by "Y" with "n" flags, and a profile named "miranda" with "n" flags. Both have a "[View]" button. A "See more" button is at the bottom.

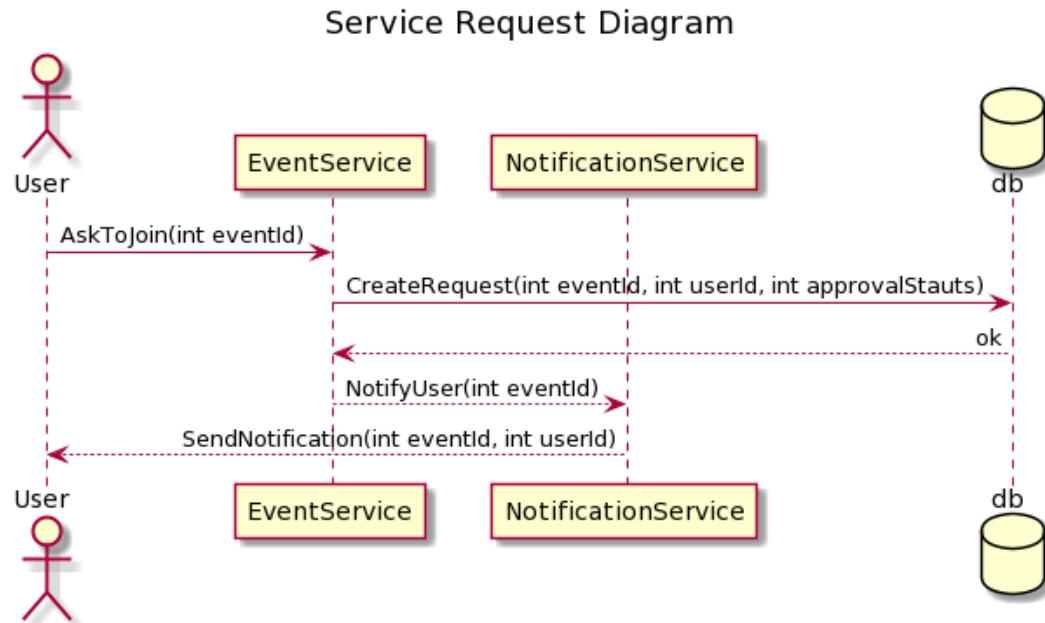
Featured Services Mockup



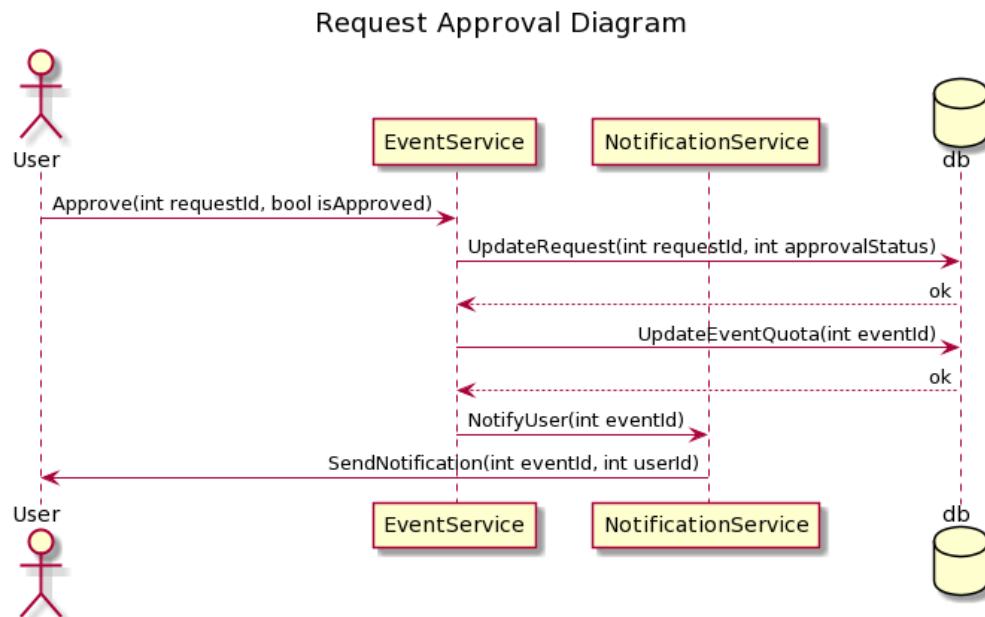
Diagrams

Sequence Diagrams

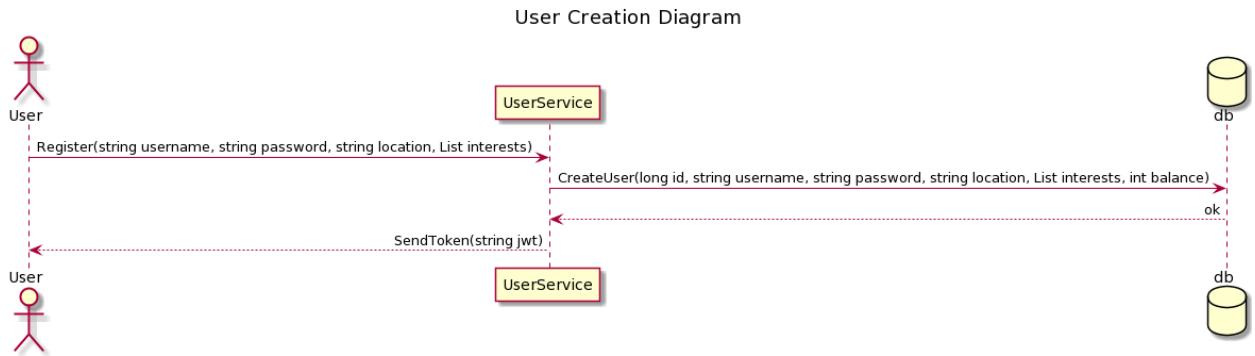
Service Request



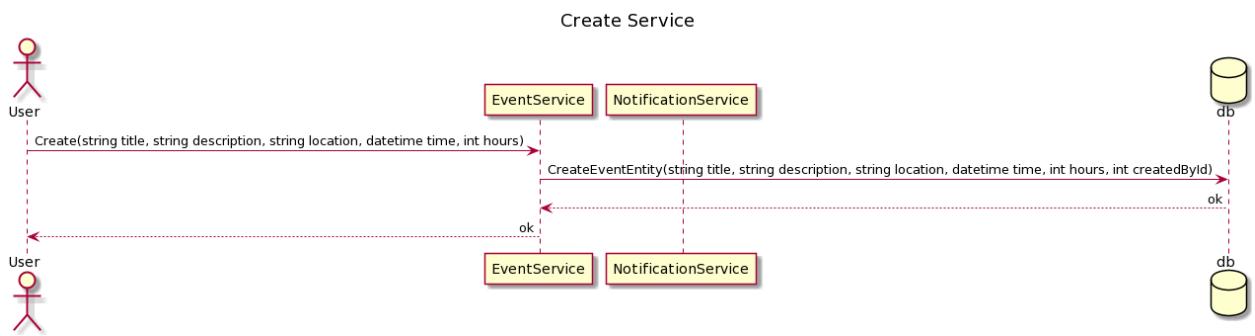
Request Approval



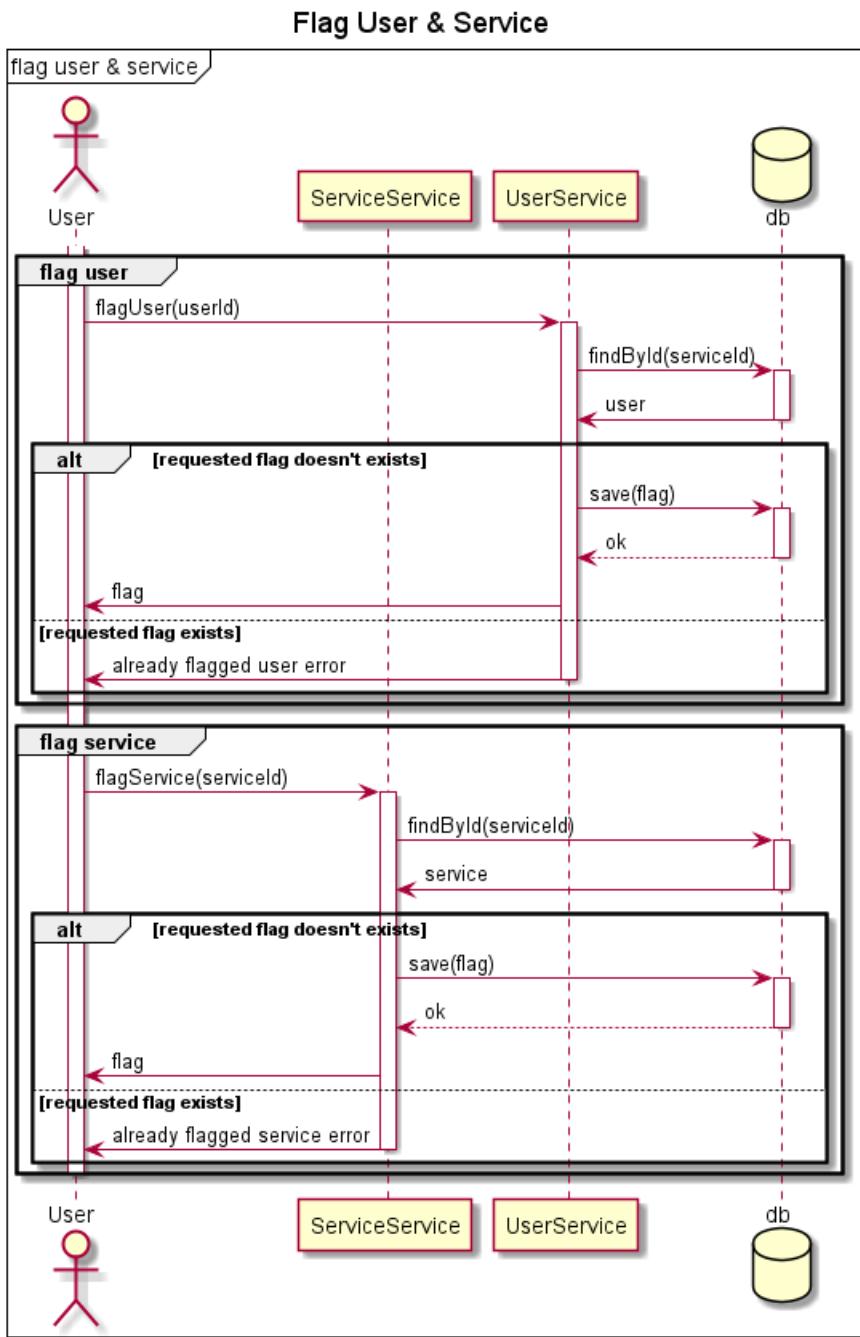
Registration



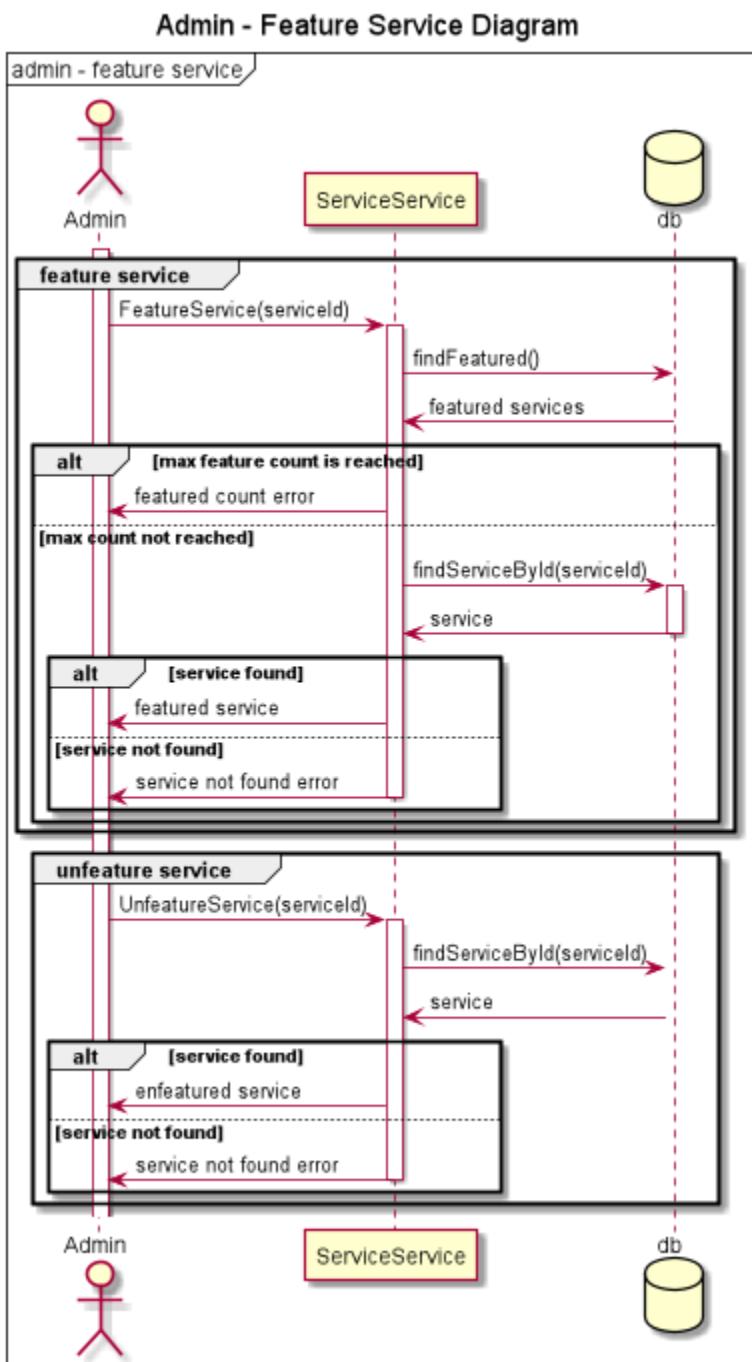
Create Service



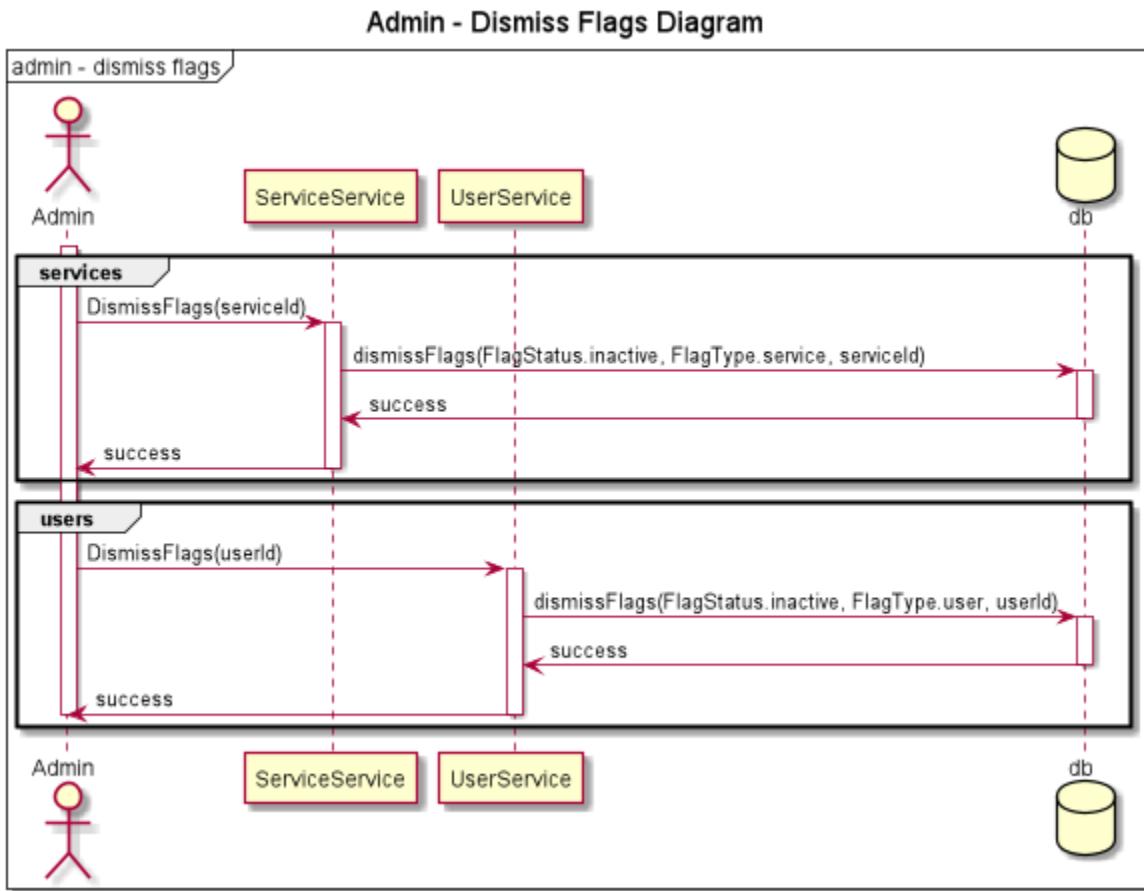
Flag User & Service



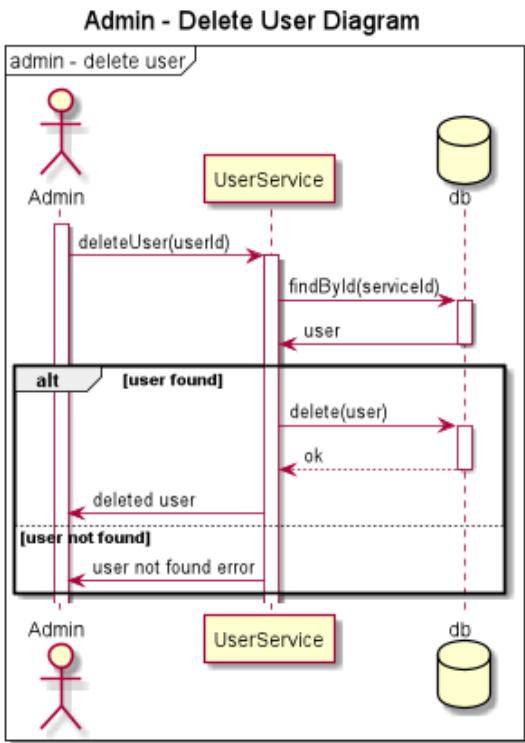
Admin - Feature Service Diagram



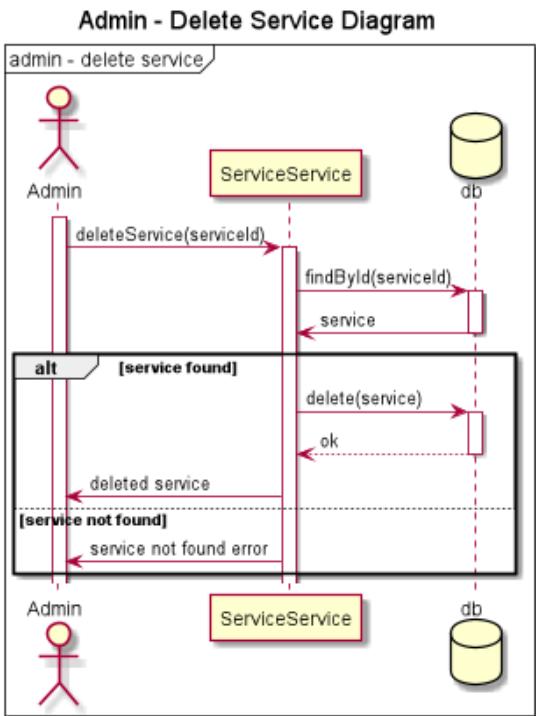
Admin - Dismiss Flag Diagram



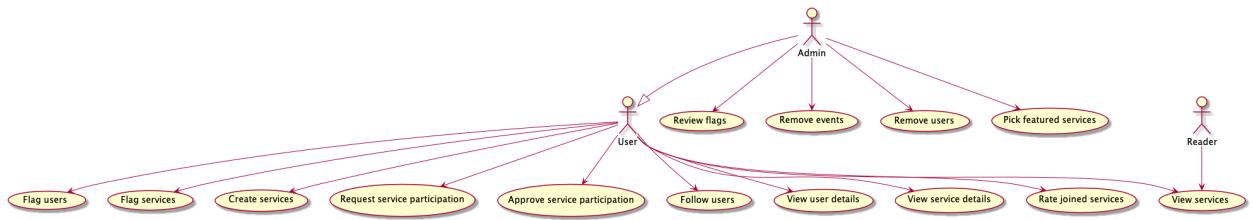
Admin - Delete User Diagram



Admin - Delete Service Diagram



Use Case Diagram



Project Specific Implementation Details

Personalization/Recommendation

SocialHub has built-in personalization for ranking Service and User objects. This feature is used both on ranking search results and generating recommendations.

How the algorithm works, step by step:

1. A set of applicable criteria gets gathered.
2. Each criterion is evaluated for the requestor user's properties on a scale from 1 to 0. This is called "criterion score".
3. Criterion scores are multiplied by the weight of the criterion. This is called "weighted score".
4. Weighted scores for all applicable criteria gets summed, this is called "recommendation score"
5. The objects are ordered by their recommendation scores.

Criteria:

Criteria 1: Newcomer - Weight: 7

Newcomer users and their services are prioritised. The younger the user, the higher the score.

Criteria 2: User Profile Tags - Weight: 8

The tags for a service or another user that match the requestor user's profile tags are prioritised. The more tags match, the higher the score.

Criteria 3: Following Users' Profile Tags - Weight: 2

The tags for a service or another user that match the requestor user's followed users' profile tags are prioritised. The more tags match, the higher the score.

Criteria 4: Following Users' Given Services' Tags - Weight: 10

The tags for a service or another user that match the requestor user's followed users' created services' tags are prioritised. The more tags match, the higher the score.

Criteria 5: Following Users' Joined Services' Tags - Weight: 1

The tags for a service or another user that match the requestor user's followed users' joined services' tags are prioritised. The more tags match, the higher the score.

Criteria 6: Rating - Weight: 5

Higher rated users or services get prioritised. The higher the rating is, the higher the score.

Criteria 7: Reputation - Weight: 5

More reputable users or their services get prioritised. The higher the reputation is, the higher the score.

Criteria 8: Joined Services' Tags - Weight: 9

The tags for a service or another user that match the requestor user's joined services' tags are prioritised. The more tags match, the higher the score.

Criteria 9: Created Services' Tags - Weight: 9

The tags for a service or another user that match the requestor user's created services' tags are prioritised. The more tags match, the higher the score.

Criteria 10: Proximity - Weight: 10

Services closer to the requestor user's location are prioritised. The closer the location is, the higher the score. This criterion is only applicable to services.

Criteria 11: Service Creation Date - Weight: 7

Newly created services are prioritised. The younger the service, the higher the score. This criterion is only applicable to services.

Criteria 12: Service Date - Weight: 7

The services that are starting sooner are prioritised. The closer the service start date is, the higher the score.

Status of the Project

Requirement	implemen-ted	documen-ted	tested	deployed
The system shall display Homepage with a link to the user page.	Yes	Yes	Yes	Yes
The system shall display the home page after the user logs in.	Yes	Yes	Yes	Yes
The system shall display to the user services created by the users that they follow.	Yes	Yes	Yes	Yes
The system shall display to the user events created by the users that they follow.	No	Yes	No	No
The system shall display a "featured services" section to the users homepage.	Yes	Yes	Yes	Yes
The system shall display a list of services in the user's homepage.	Yes	Yes	Yes	Yes
The system shall display a list of events in the user's homepage.	No	Yes	No	No
The system shall display a new tag page for members from the homepage.	Yes	Yes	Yes	Yes
The system shall display time credits on the user's own profile page.	Yes	Yes	Yes	Yes
The system shall assign regular users "user type" users.	Yes	Yes	Yes	Yes
The system shall assign administrative users "admin type" users.	Yes	Yes	Yes	Yes
The system shall allow users to display their own profiles.	Yes	Yes	Yes	Yes
The system shall allow users to view other users' profiles.	Yes	Yes	Yes	Yes
The system shall allow users to create new services.	Yes	Yes	Yes	Yes
The system shall allow users to join services.	Yes	Yes	Yes	Yes
The system shall display to the user the requests that are made to their services.	Yes	Yes	Yes	Yes
The system shall display notifications to the user.	Yes	Yes	Yes	Yes
The system shall allow users to follow other registered users.	Yes	Yes	Yes	Yes
The system shall enable users to be followed by other registered users.	Yes	Yes	Yes	Yes
The system shall enable users to flag other services	Yes	Yes	Yes	Yes
The system shall allow guests to only view services.	Yes	Yes	Yes	Yes
The system shall display Homepage with a link to the user page.	Yes	Yes	Yes	Yes

The system shall display the home page after the user logs in.	Yes	Yes	Yes	Yes
The system shall display to the user services created by the users that they follow.	Yes	Yes	Yes	Yes
The system shall display to the user events created by the users that they follow.	No	Yes	No	No
The system shall display a "featured services" section to the users homepage.	Yes	Yes	Yes	Yes
The system shall display a list of services in the user's homepage.	Yes	Yes	Yes	Yes
The system shall display a list of events in the user's homepage.	No	Yes	No	No
The system shall display a new tag page for members from the homepage.	Yes	Yes	Yes	Yes
The system shall display time credits on the user's own profile page.	Yes	Yes	Yes	Yes
The user shall be able to create services.	Yes	Yes	Yes	Yes
The user shall be able to apply to services.	Yes	Yes	Yes	Yes
Only one user shall be the creator of one service.	Yes	Yes	Yes	Yes
Only registered users shall create services.	Yes	Yes	Yes	Yes
The user shall be able to apply for other users' services.	Yes	Yes	Yes	Yes
The user shall determine a quote of attendees of the service they create.	Yes	Yes	Yes	Yes
The user shall input date information of the service they create.	Yes	Yes	Yes	Yes
The user shall input time information of the service they create.	Yes	Yes	Yes	Yes
The user shall input a description of the service they create.	Yes	Yes	Yes	Yes
The user shall input the application deadline of the service they create.	Yes	Yes	Yes	Yes
The user shall input location information of the service they create.	Yes	Yes	Yes	Yes
The user shall choose between a physical service or a virtual service while creating a service.	Yes	Yes	Yes	Yes
The user shall input a zoom link while creating a virtual service.	Yes	Yes	Yes	Yes
Only users with time credits more than a service's time credit cost, shall be able to apply for a service.	Yes	Yes	Yes	Yes

The system shall display services sorted by the distance to a logged-in user's location.	Yes	Yes	Yes	Yes
The system shall display services sorted by their created date and service's date.	Yes	Yes	Yes	Yes
The users shall be able to search for services by entering location.	Yes	Yes	Yes	Yes
The applicant user shall be able to apply for a virtual service until 30 minutes before the start time.	Yes	Yes	Yes	Yes
The service creator user shall be able to edit the service until 24 hours is left to service start time.	Yes	Yes	Yes	Yes
The users shall be able to apply for a service before the service deadline time.	Yes	Yes	Yes	Yes
The system shall notify the applicant users when the service creator changes something in the service.	Yes	Yes	Yes	Yes
The admin shall be able to delete services.	Yes	Yes	Yes	Yes
The attending user shall approve the service to confirm they have attended it.	Yes	Yes	Yes	Yes
The creator user shall approve that the service is completed.	Yes	Yes	Yes	Yes
The creator user shall complete a service after all attendees have confirmed that the service took place.	Yes	Yes	Yes	Yes
The users shall be able to create events.	No	Yes	No	No
The users shall be able to set the time credits to attend an event to zero when creating the event.	No	Yes	No	No
The system shall set the quota of an event to limitless when an event is being created.	No	Yes	No	No
The user shall input the name of the event they are creating.	No	Yes	No	No
The user shall input a short description of the event they are creating.	No	Yes	No	No
The user shall select tags of the event they are creating.	No	Yes	No	No
The user shall input the location of the event they are creating.	No	Yes	No	No
The user shall input the date of the event they are creating.	No	Yes	No	No

The user shall input the time of the event they are creating.	No	Yes	No	No
The users shall be able to participate in events.	No	Yes	No	No
The user shall be able to add tags to their profile.	Yes	Yes	Yes	Yes
The user shall be able to create a new tag when the tag does not exist in the system.	Yes	Yes	Yes	Yes
The user shall add tags to services they are creating.	Yes	Yes	Yes	Yes
The user shall not enter illegal tags.	Yes	Yes	Yes	Yes
The user shall be able to add tags to their profile page that can be linked to their skills.	Yes	Yes	Yes	Yes
The user shall be able to add tags to their profile page that can be linked to their interests.	Yes	Yes	Yes	Yes
The user shall add tags to the services they create.	Yes	Yes	Yes	Yes
The user shall receive a notification when another user follows them.	Yes	Yes	Yes	Yes
The service applicant user shall receive a notification when the service creator user approves their application to a service.	Yes	Yes	Yes	Yes
The service applicant user shall receive notification when the service creator user denies their application to a service.	Yes	Yes	Yes	Yes
The service creator user shall receive notification when another user applies to their service.	Yes	Yes	Yes	Yes
The service applicant user shall receive notification when the service creator user edits their service.	Yes	Yes	Yes	Yes
The event applicant user shall receive notification when the event creator user edits their event.	No	Yes	No	No
The user shall be able to click a link to the event belonging to the notification.	No	Yes	No	No
When the user reads their notification, the notification will be marked as read by the system.	Yes	Yes	Yes	Yes
The service creator user's time credit shall increase by specified credit amount of a service, when the service is completed.	Yes	Yes	Yes	Yes

When the user applies for a service, the service's credit amount shall be on hold by the system, until the service is successfully completed.	Yes	Yes	Yes	Yes
When a user applies for a service, the service's credit amount shall be on hold by the system, until the service is successfully completed.	Yes	Yes	Yes	Yes
The user shall not have more time credits than the upper limit. (10 credits)	Yes	Yes	Yes	Yes
The user shall not spend time credits that they don't have.	Yes	Yes	Yes	Yes
The newly registered user shall receive 5 time credits.	Yes	Yes	Yes	Yes
Only the user shall view their own time credit balance.	Yes	Yes	Yes	Yes
The users shall not offer any services when they reach the upper limit of their time credits	Yes	Yes	Yes	Yes
The users shall not consume any services when they reach the lower limit of their time credits.	Yes	Yes	Yes	Yes
Every member shall have reputation points.	Yes	Yes	Yes	Yes
New members shall receive 10 reputation points by default after sign-up.	Yes	Yes	Yes	Yes
The users who attended the service shall rate the creator of the service, after service completion.	Yes	Yes	Yes	Yes
The users shall be able to select the rating from 0 to 5.	Yes	Yes	Yes	Yes
The user shall lose 10 reputation points when they do not show up to the service they created.	Yes	Yes	Yes	Yes
The user shall lose 5 reputation points if they cancel the service after the cancellation deadline passes.	Yes	Yes	Yes	Yes
The applicant user shall lose 5 reputation points if they cancel the application of the service after the cancellation deadline.	Yes	Yes	Yes	Yes
The user shall not be able to have a reputation point less than 0.	Yes	Yes	Yes	Yes
The users shall be able to see their own badges as well as other users' badges.	Yes	Yes	Yes	Yes

The user shall receive a "newcomer" badge when they are in the system for less than 3 months.	Yes	Yes	Yes	Yes
The user shall receive a "newcomer" badge when they have participated in less than or equal to 10 services.	Yes	Yes	Yes	Yes
The user shall receive a "mentor" badge that has participated in 5 services from a newcomer.	Yes	Yes	Yes	Yes
The user shall receive a "super mentor" badge that has participated in 10 services from a newcomer.	Yes	Yes	Yes	Yes
The user shall receive a "regular" badge that has participated in 20 services.	Yes	Yes	Yes	Yes
The user shall receive a "community builder" badge that organises more than 10 events.	No	Yes	No	No
The user shall receive a "reputable" badge that has more than 10 reputation points.	Yes	Yes	Yes	Yes
The user shall receive a "well-known badge that has more than 25 reputation points.	Yes	Yes	Yes	Yes
The user shall receive a "guru" badge that has more than 50 reputation points.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the user profiles as a list.	Yes	Yes	Yes	Yes
The admin shall be able to flag users profiles.	Yes	Yes	Yes	Yes
The admin shall see services as a list on the dashboard.	Yes	Yes	Yes	Yes
The admin shall be able to flag services on the dashboard.	Yes	Yes	Yes	Yes
The admin shall see events as a list on the dashboard.	No	Yes	No	No
The admin shall be able to flag events.	No	Yes	No	No
The admin shall be able to remove services from the system.	No	Yes	No	No
The admin shall be able to remove events from the system.	No	Yes	No	No
The admin shall be able to remove users from the system.	Yes	Yes	Yes	Yes
The admin shall be able to pick 3 services to be featured.	Yes	Yes	Yes	Yes

The admin shall be able to view featured services on the dashboard.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard when users are attending to a service.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard when the users are attending an event.	No	Yes	No	No
The admin shall see on the dashboard when the users are creating a service.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard when the users are creating an event.	No	Yes	No	No
The admin shall see on the dashboard every successful user login.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard every unsuccessful user login.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the count of registered users within the last 24 hours, last week, last month, and all time.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the count of approved service joins within the last 24 hours, last week, last month, and all time.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the count of created services within the last 24 hours, last week, last month, and all time.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the count of service applications within the last 24 hours, last week, last month, and all time.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the trends of the activity throughout the community.	Yes	Yes	Yes	Yes
The admin shall see on the dashboard the locations of services on the map.	Yes	Yes	Yes	Yes
The System shall log activity when a user follows another user.	Yes	Yes	Yes	Yes
The System shall log activity when a user applies for a service.	Yes	Yes	Yes	Yes
The System shall log activity when a user attends an event.	No	Yes	No	No
The System shall log activity when a user is accepted to take a service.	Yes	Yes	Yes	Yes
The System shall log activity when a user logs in successfully.	Yes	Yes	Yes	Yes
The System shall log activity when a user attempts to log in unsuccessfully.	Yes	Yes	Yes	Yes
The System shall display new users recommendations based on their tags.	Yes	Yes	Yes	Yes

The System shall display recommendations based on the users behaviour, namely the following list, tags, services they have taken.	Yes	Yes	Yes	Yes
The system shall recommend to the users based on the past events that they have participated in.	No	Yes	No	No
The system shall hash the passwords that the users enter and shall save the hashed version in the database.	Yes	Yes	Yes	Yes
The system shall generate a token for user authentication.	Yes	Yes	Yes	Yes
The system shall authenticate registered and logged-in users.	Yes	Yes	Yes	Yes
The system shall display an error when making an unauthorised request.	Yes	Yes	Yes	Yes
The system shall work as a web application.	Yes	Yes	Yes	Yes
The system's backend shall function as a REST API.	Yes	Yes	Yes	Yes
The system's frontend shall function as a web application.	Yes	Yes	Yes	Yes
The system's frontend shall consume the backend API.	Yes	Yes	Yes	Yes
The system shall be deployed on cloud.	Yes	Yes	Yes	Yes
Geolocation shall be used for the location information.	Yes	Yes	Yes	Yes
The system shall maintain a list of illegal tags.	Yes	Yes	Yes	Yes

Status of Deployment

SocialHub is dockerized and deployed on the Google Cloud Platform. The deployment URI is <http://34.88.198.59:8080/#/>.

Dockerization Status

The entire project is dockerized, including the database, the backend and the frontend. The instructions on how to run the project on Docker can be found in the installation instructions below.

System Manual

System Requirements

SocialHub is developed using Spring Boot and Java 11.

The deployment is done using Docker 20.10.11

Java 11 can be downloaded [here](#).

To properly install all the dependencies and create the environment of the application, the host system must have maven installed. Apache Maven 4.0.0 has been used in the development of SocialHub.

Installation Instructions

To run the system, either the repo must first be cloned to the local machine or the release version should be downloaded.

The steps to clone the repo are as follows:

1. Open Git Bash in the directory you want to download the project.
2. Go to the directory of where the files will be installed
3. Enter command `git clone https://github.com/zeyneplervesarp/swe574-javagang.git`
4. Press enter

After successfully getting the code, the system can be deployed on docker. The steps to deploy on docker are as follows:

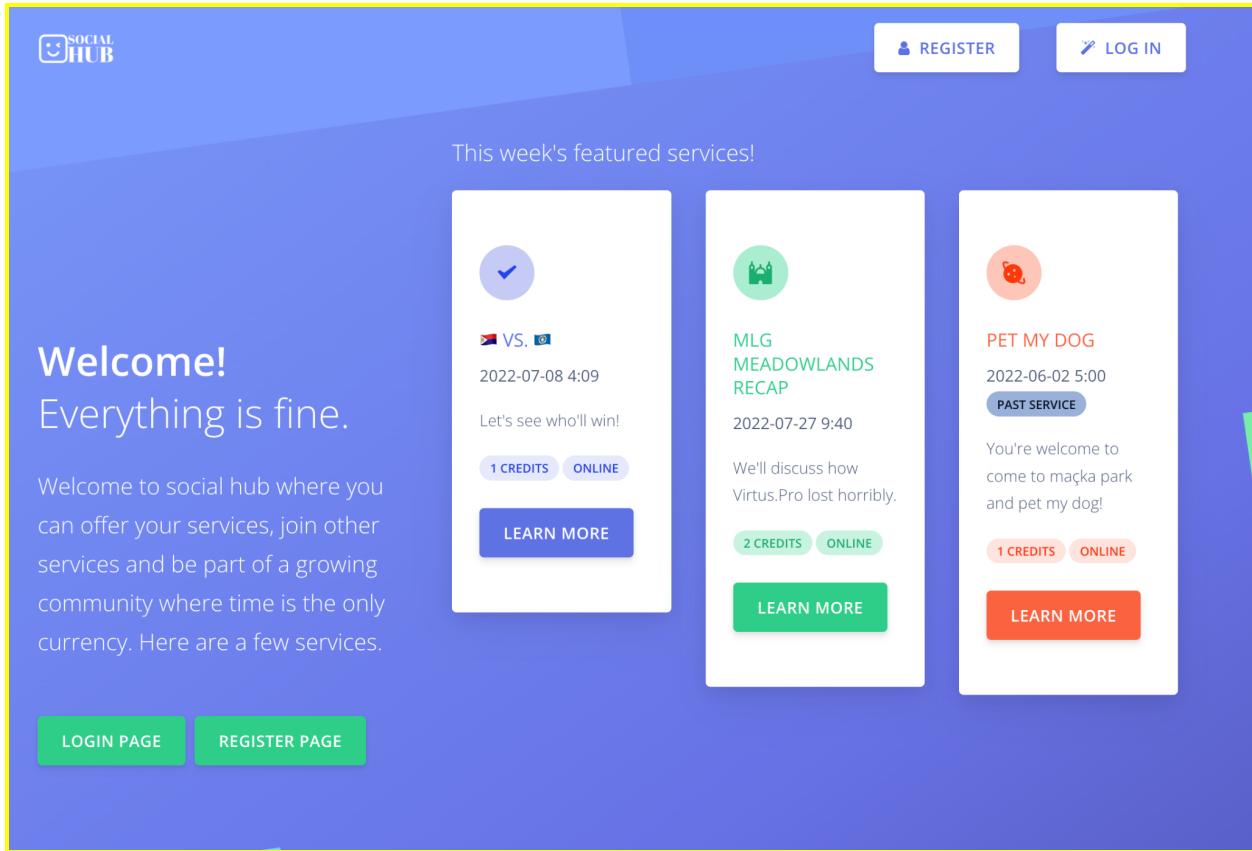
1. Go to the backend folder with the following command on your terminal
`cd swe574-javagang/backend`
2. Enter the command `docker-compose up --build`

After following all the steps, the system should successfully run on your computer. Frontend application that is visible to users will be at <http://localhost:8080/> and the backend api will be at <http://localhost:8081/>

User Manual

Landing Page

Unregistered Users



Homepage of the application for unregistered users

The application's landing page offers limited information for unregistered users. Three featured services are displayed on the main page with title, description and credit information. The user has to register to view more information.

Registered Users

The landing page changes when the user is logged in. Services now have links to the detail page and the navigation bar displays different information. Physical services have distance info according to the user's profile location.

The landing page for Social Hub features a blue header bar with the logo, navigation links (Services, Search, ME), and a notification bell. Below the header, a message says "This week's featured services!" followed by three service cards:

- WESTLEY APPRECIATION** (blue icon) - VS. (blue icon) - 2022-07-08 4:09 - Let's see who'll win! - 1 CREDITS ONLINE - LEARN MORE
- MLG MEADOWLANDS RECAP** (green icon) - VS. (green icon) - 2022-07-27 9:40 - We'll discuss how Virtus.Pro lost horribly. - 2 CREDITS 1094.12 KM - LEARN MORE
- VIZZINI APPRECIATION DAY** (red icon) - VS. (red icon) - 2022-07-01 1:52 - Mawage. Mawage is what bwings us togever today. Mawage that bwessed awangement, that dweam within a dweam. - 1 CREDITS ONLINE - LEARN MORE

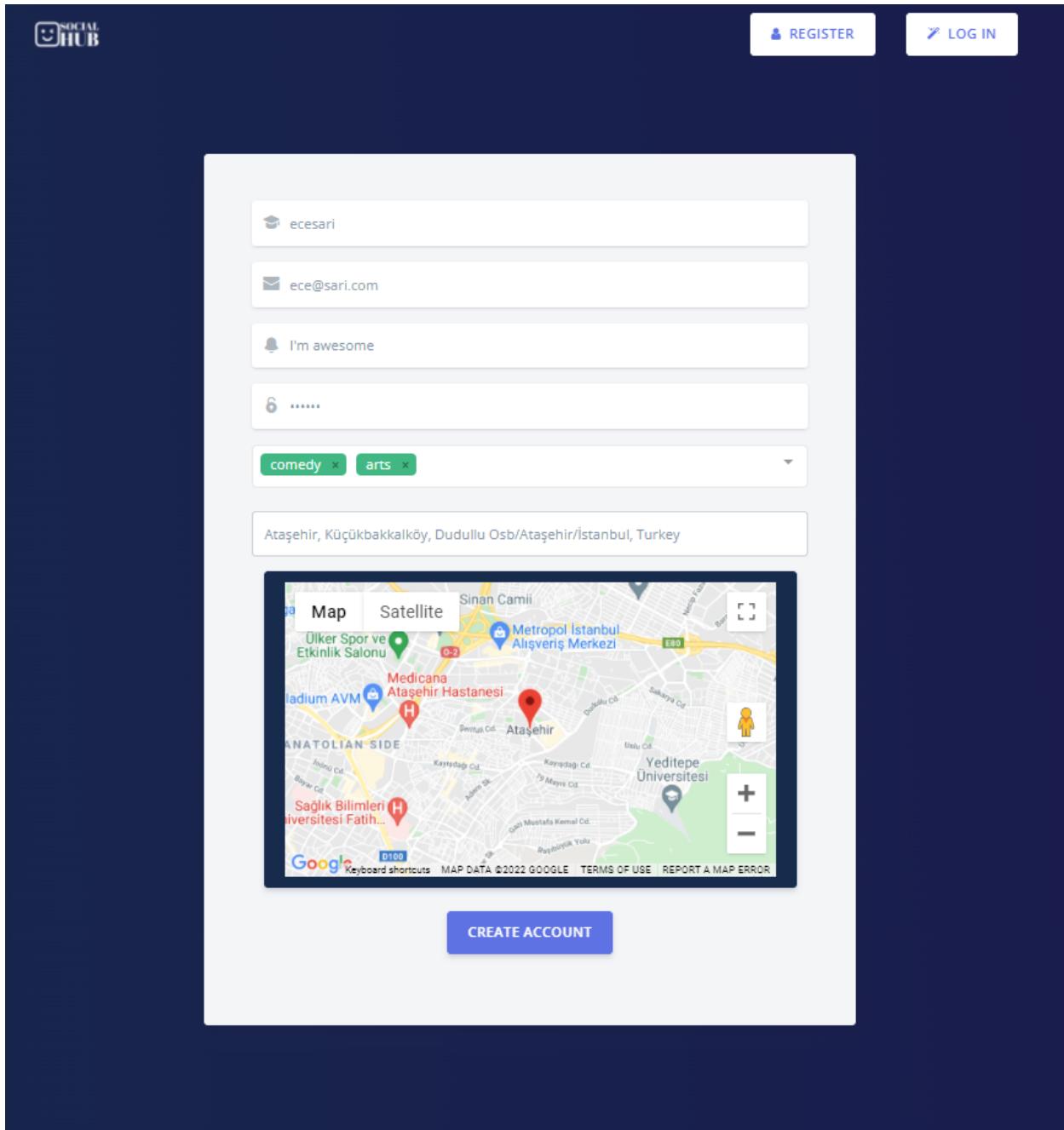
The recommended services list can also be observed at the bottom of the landing page.

A teal banner at the top says "Recommended services near you!" Below it are three service cards:

- WESTLEY APPRECIATION** (blue icon) - VS. (blue icon) - 2022-06-25 6:22 - To master our topic, Westley. - 2 CREDITS 1578.48 KM - LEARN MORE
- MLG MEADOWLANDS RECAP** (green icon) - VS. (green icon) - 2022-07-03 11:41 - Let's see who'll win! - 1 CREDITS 1628.59 KM - LEARN MORE
- MUNCH DISCUSSIONS** (red icon) - VS. (red icon) - 2022-07-12 12:42 - And their ties to the making of The Violent Bear It Away - 2 CREDITS 503.52 KM - LEARN MORE

New User Registration

Users can register to the page by following the buttons on the home page. The placeholders will give information on which information the user should enter.



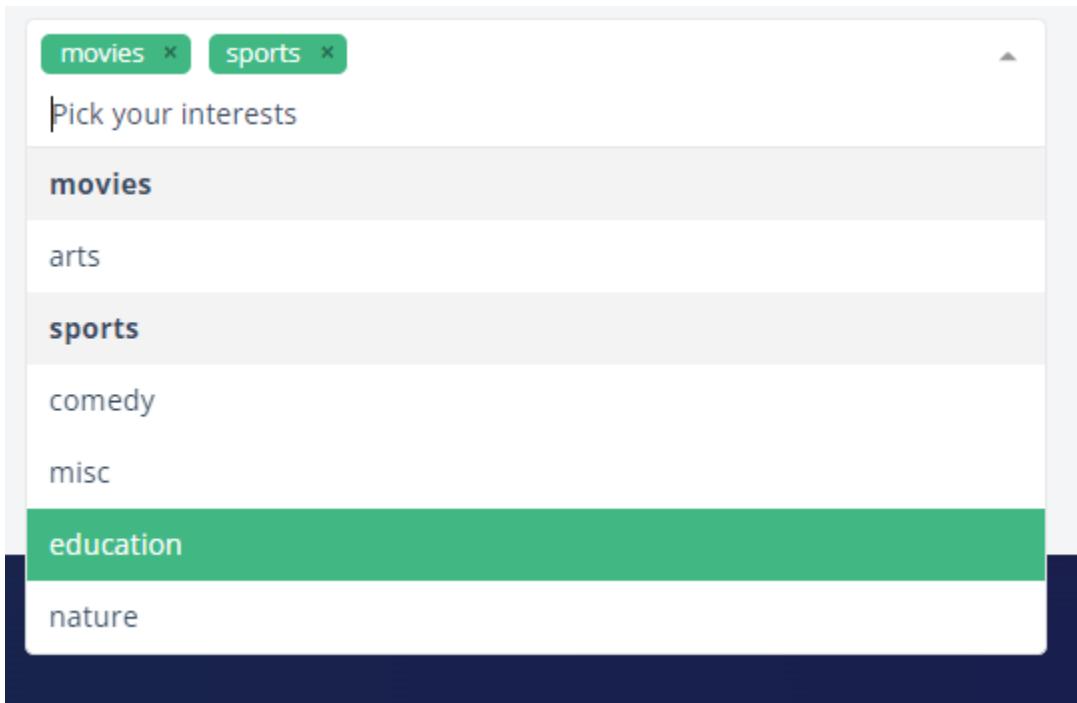
The image shows a filled registration form on a dark blue background. At the top right are 'REGISTER' and 'LOG IN' buttons. The form fields include:

- Profile picture placeholder: 'ecesari'
- Email placeholder: 'ece@sari.com'
- Bio placeholder: 'I'm awesome'
- Password placeholder: '6'
- Interest dropdown: 'comedy' and 'arts'
- Location search bar: 'Ataşehir, Küçükbağkalköy, Dudullu Osb/Ataşehir/İstanbul, Turkey'
- A map showing the location in Ataşehir, Istanbul, with markers for various landmarks like Ülker Spor ve Etkinlik Salonu, Medicana Ataşehir Hastanesi, and Yeditepe Üniversitesi.
- A large blue 'CREATE ACCOUNT' button at the bottom.

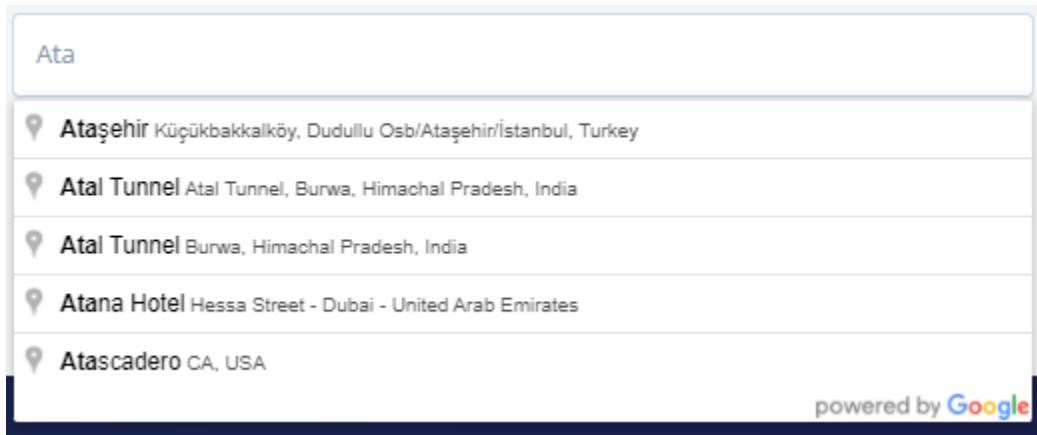
Filled registration form

Tags

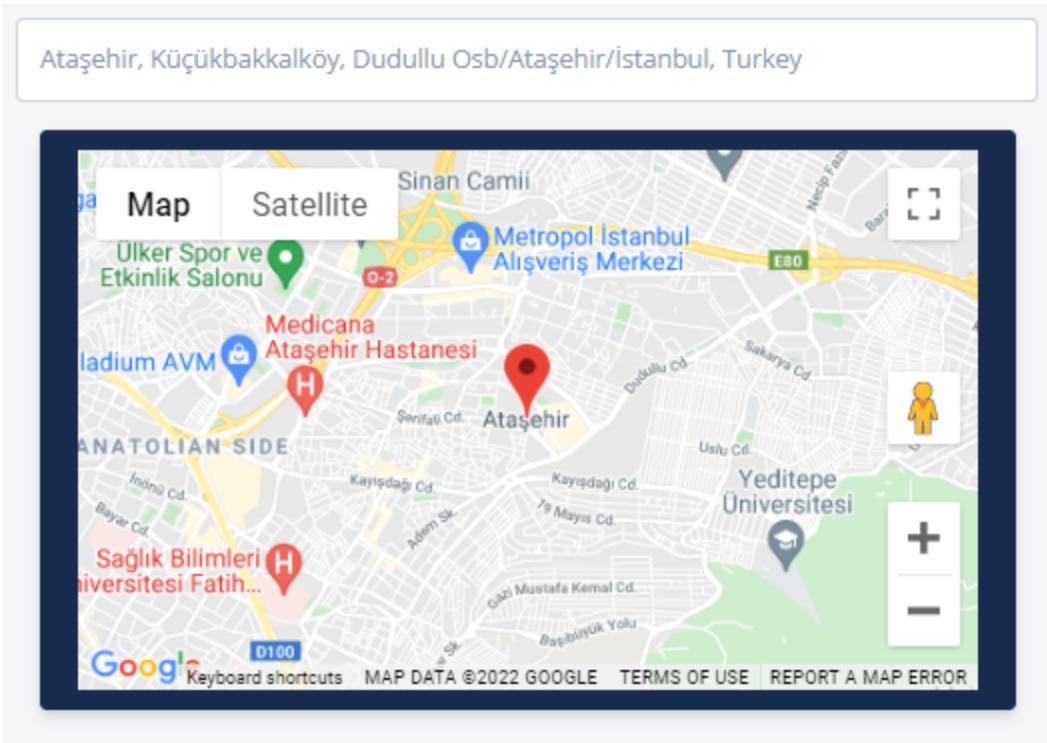
On the registration page, the user has the option to choose from multiple tags that are predefined by the system. Users can choose multiple tags.



Location

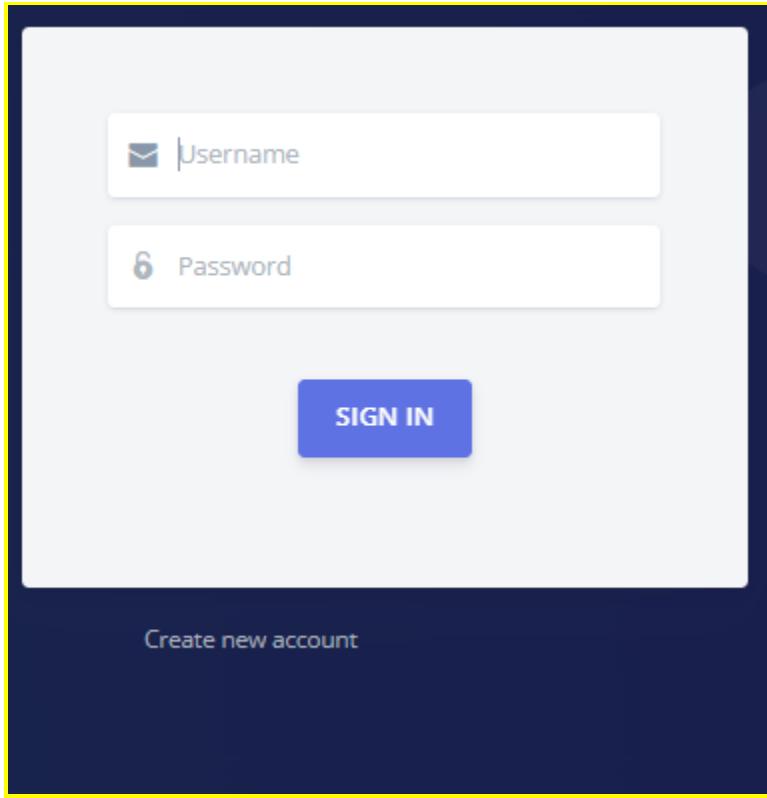


The user can enter their location information into the textbox. After selecting their location, their selected location will be displayed on the map.



After entering all the information and clicking the create button. The application will register the user and the api will return a jwt token unique to the user. The token will then be stored on the system and the user will be redirected to the homepage. The registered user will have 5 credits on their balance, 10 reputation points as a start which can be displayed on the profile page.

Login



Users can log in to the system by clicking the login buttons on the homepage. Entering a username and password is sufficient to enter the system.

Navigation Bar

Regular Users

Navigation bar has user information navigation, a notifications button on the right, service links, a search text box, and also the logo for the application to the left.

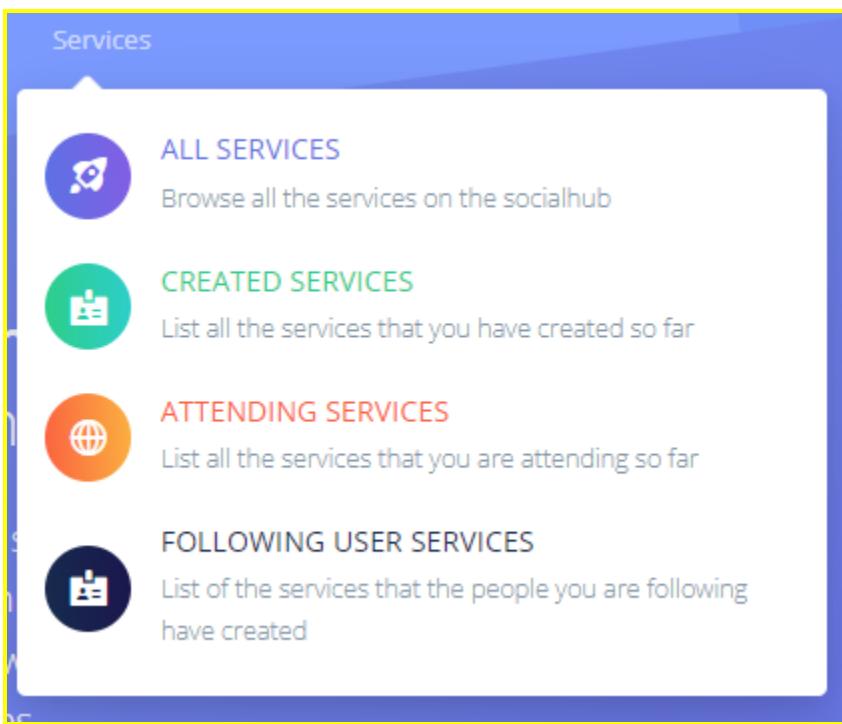


Administrative Users

The navigation bar for administrative users has all the features a regular user can see, with an addition of "Admin" button where they can navigate to the administrative dashboard.



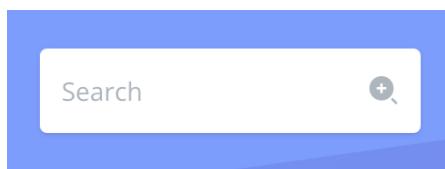
Services Navigation



The Services button is a dropdown button. When hovered over, it displays a menu with detailed information on the links. The user can choose between different pages to navigate to.

Search

The search text field lets the user search for keywords and redirects the user to the list of search results.



Search Results

The search results go through services, users and tags as shown below, and executes an algorithm in the background so that the most relevant item is at the top.

A screenshot of the Social Hub application interface showing search results. The top navigation bar includes the Social Hub logo, a 'Services' button, a search bar with a magnifying glass icon, and a notification bell icon with a blue 'ME' dropdown menu. The main content area displays a title 'Search Results (8 results have been found)' followed by a list of items:

Result	Type
PET MY DOG	SERVICE
ELPHIAS DOGE LESSONS	SERVICE
HISTORICAL FICTION CRITICAL READING LESSONS	SERVICE
I'M HOSTING A DOG PLAY DATE ONLINE	SERVICE
REBECCA	USER
DOG	TAG

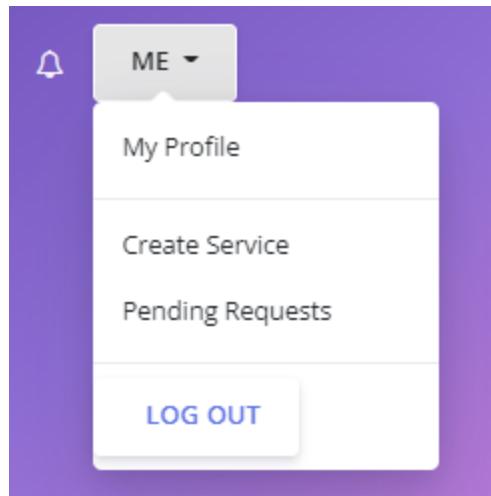
Notifications

Navigation on the right has the notification button. If there are unread notifications, the bell icon will be filled and the number of new messages will be displayed on the tooltip. The icon and the tooltip will change if all notifications are read



User Button

If clicked, the user profile titled "me" will open a menu. The menu has links to the user's own profile page, new service and pending requests.



Services Pages

Different service viewing pages can be found at the navigation bar's services dropdown button.

All Services

The screenshot shows the 'All Services' page with a header featuring a blue circular icon with a white building outline and the text 'All Services'. Below the header, a message reads: 'Here you can find all the active services. Go explore!' There is also a small green potted plant icon. To the right, there is a cartoon illustration of a person standing next to a window, looking out at a cityscape.

SORT BY ▾

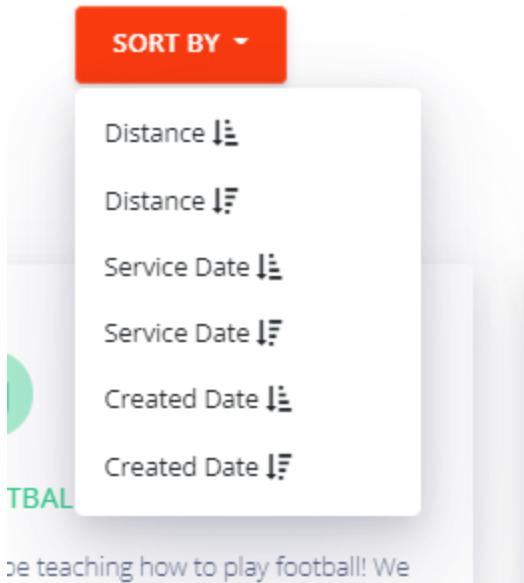
Service	Credits	Distance
FILM ANALYSIS	2 CREDITS	0.18 KM
FOOTBALL!	3 CREDITS	19.69 KM
PET MY DOG	1 CREDITS	5.56 KM

FILM ANALYSIS
I will be teaching film analysis. This is a service that is open to people who do not have any experience in film analysis
LEARN MORE

FOOTBALL!
I will be teaching how to play football! We can have a small match afterwards as well.
LEARN MORE

PET MY DOG
Well technically this is a service from my dog but anyways you can come to Maćka Park and pet my cute dog. He won't bite(I can't promise). He's definitely worth your time.
LEARN MORE

Clicking the “all services” button on the navbar will redirect the user to the all services pages. The services will now display the distance to the user along with the title, description and the credit information. The user can sort the list with different sorting filters. All future services will be listed on this page.



When a sorting filter is clicked, the list will be re-ordered.

Created Services

Created services page will display all services that have been created by the user regardless of their date.

Attending Services

Created services page will display all services that are being attending by the user regardless of their date.

Following User Services

Following user services page will display all services that are being offered by the user's following users.

Service Detail Page

Physical Services

9 Participants 9 Quota 3 Credits 0 FlagCount [SEND REQUEST](#)  

MLG Meadowlands Recap by aliquam_nulla

 Sat, 02 Jul 2022 01:51



Location: 9884 Koelpin Parks, Port Kathie, OH 41860-2279



We'll discuss how OpTic Gaming lost horribly.

[NATURE](#) [SPORTS](#)

Service detail page holds information on the service. The information provided by the service page are; number of approved participants, service date, total quota, number of credits, title, description, tags, location and the creator's link.

Online Services

0 Participants 20 Quota 1 Credits 0 FlagCount [SEND REQUEST](#)

I'm hosting a dog play date online by rebecca

Sun, 05 Jun 2022 08:00



Location: zoom.us/sdf8SKS

Let's bring all our dogs together on zoom

NATURE

Request Buttons

The button on the upper right corner changes behaviour based on the service. If there are no approved or pending requests made by the user, the button will be “send request” if a request is sent, the button will read “a request has already been sent” and if the user is the creator there will be no button. Clicking on the button will initiate the service request procedure.

[SEND REQUEST](#)

[ALREADY REQUESTED](#)

Flag Button



Flag button is displayed to the users when viewing services that belong to other users. When this button is pressed, the website administration gets notified that there is a service that needs to be reviewed.

Delete Button



Delete button is displayed when viewing a service detail page with an admin user. Only the admin user can delete a service if they find it necessary.

Edit Button



Edit button is displayed when the service detail page is viewed by the creator of the service. The creator user can edit the service inside the desired deadline window.

Cancel Button



Cancel button is displayed then the service detail page is viewed by the creator of the service. The creator user can cancel the service, but then the user's reputation points decrease.

Service Over Button

There are two cases where a service over button is displayed.

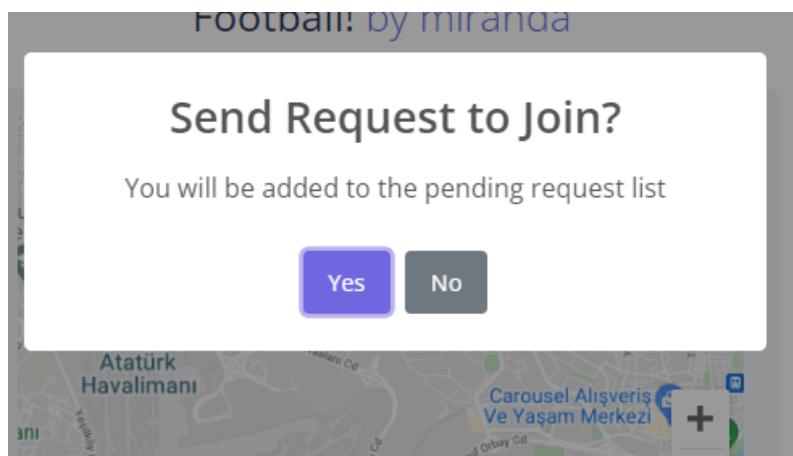
- The service is in the past, the service is in the “ONGOING” state and the creator of the service is logged in.
- The service is in the past, the service is in the “APPROVEDBYCREATOR” state and the attendee is logged in.



Clicking the button will prompt the user to confirm that the service is over.

Requesting a Service

Requesting to join a service will prompt the user to confirm that they would like to join the service. If the user clicks yes the request will be sent. If there is a balance available, a success message will be displayed that the request has been made and the page will be refreshed. A notification will be sent to the creator of the service at the end of the transaction.



Balance calculation when requesting a service

A calculation is made on the server side when a user requests a service. The calculation is made by adding the current balance and the balance of offered service and subtracting requested

services' balances. Balances that would be gained or removed are on hold by the system. These can be displayed on the profile page.

0	0	5	3
Following	Followers	Credits	Credits on Hold

Completing a Service

There is a handshake when completing a service. After the time of a service has passed, the show service button will be displayed to the creator on the service detail page.

Eminönü Tour by miranda

Map Satellite Sultan Ahmet Camii Galata Kulesi
Fatih Camii Galata Köprüsü
Historia AVM VEFA EMINÖNÜ CAĞALOĞLU
TAŞKASAP İstanbul Eğitim ve Araştırma Hastanesi
KUMKAPI Küçük Aya
SAMATYA Doğan Balık
Olivium Outlet Center

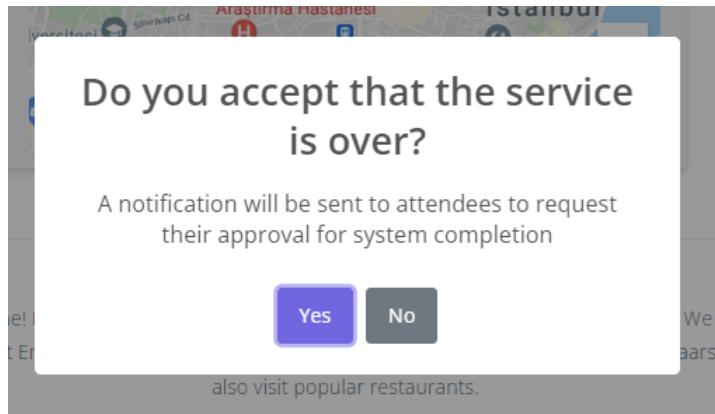
Wednesday, 15 Dec 2021 12:00

Hey everyone! I'm a professional tourist and I would like to give you a tour of Eminönü. We will start and finish at Eminönü Meydan. We will be visiting many historical places as well as bazaars. We will also visit popular restaurants.

MISC

SERVICE IS OVER?

If the button is clicked, the user will be prompted to confirm that the service is over.



Clicking yes will call the approve service method. This method will put the service on “APPROVEDBYCREATOR” state. Pending user approvals will automatically be denied by the system and a notification will be sent to requestees. Approved users will receive a notification that the creator has completed the service and that they need to confirm that the service is over.

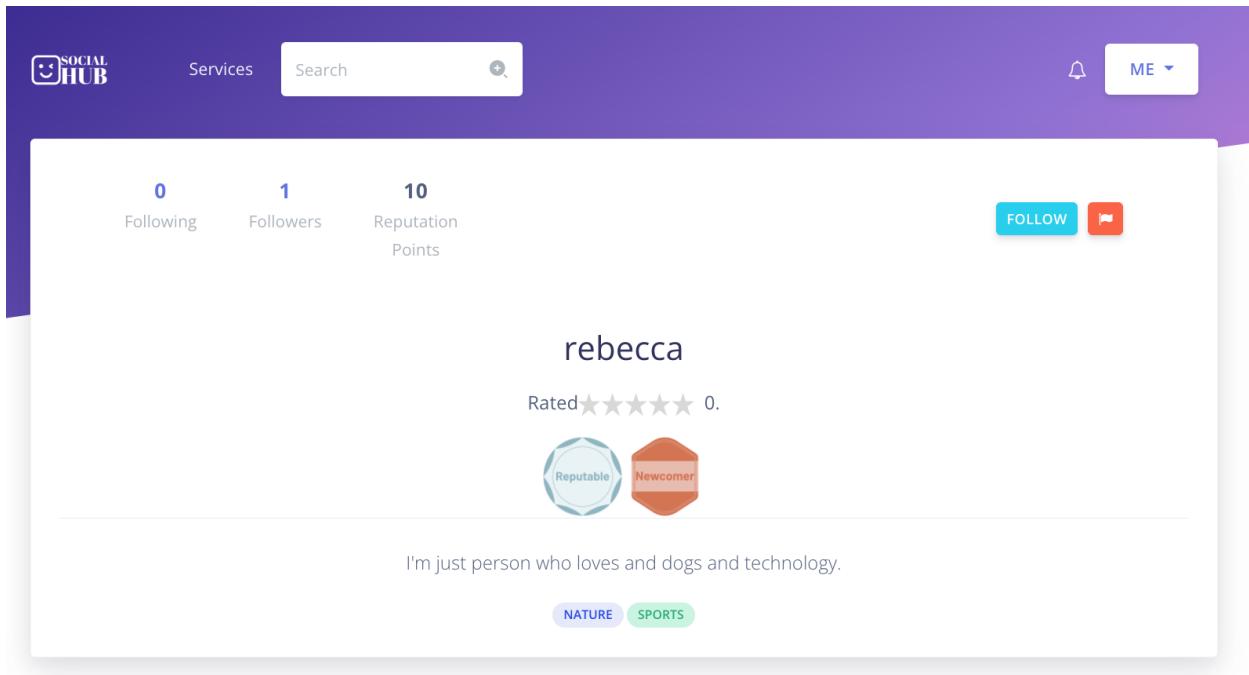
Same button will be visible to the attendees of the service if the creator has approved that the service was over. Users will be prompted to confirm that the service is over if they click the button.

Balance Update

After an attendee confirms the service is over, a notification is sent to the creator and the balances are updated. The service’s credit will be reduced from the balance of all attendees and the service credit amount will be added to the creator’s balance.

User Profiles

User pages can be viewed by all registered users. Users will see different information on their own profile page and others’ profile page.



Follow Button

FOLLOW

The follow button is placed at the right top corner of the user profile screen, when the user clicks on this button, they start following the user they are viewing.

Already Following

ALREADY FOLLOWING

The user page will display information about how many people are following the user and how many the user is following, their username, their bio and their interests. If the logged in user is not following the user, a button to follow them will be displayed on the page. If they are already following the user, a label stating that they are already following them will be displayed instead.

The screenshot shows a user profile page on the Social Hub platform. At the top, there's a purple header bar with the Social Hub logo, a search bar, and a 'ME' dropdown menu. Below the header, the user's basic stats are displayed: Following (15), Followers (11), Credits (10 - 0 on hold), and Reputation Points (1085). The main content area features the user's profile picture and name, "harum_totambiz". Below the name, it says "Rated ★★★★☆ 4." and shows two achievement badges: "Regular" (blue hexagon) and "Guru" (green circle). A bio snippet reads, "Wisely and slow; they stumble that run fast." Underneath the bio are two categories: "SPORTS" and "EDUCATION".

If the user is displaying their own profile page, their credit will be displayed on their page on top of the basic information. No following button or label will be displayed.

Balance on hold

System holds the balance of the users if they offer or request a service. The calculation is made by adding the current balance and the balance of offered services and subtracting requested services' balances.

Creating a Service

Users can create services by clicking the create service button under the profile button on the right of the navbar.

The screenshot shows the 'Create a Service' page on the SocialHub platform. At the top, there is a header bar with the SocialHub logo, navigation links for 'Services' and 'Search', and user account information ('ME'). Below the header, the main title 'Create a Service' is displayed, followed by the subtitle 'contribute to socialhub'. A descriptive text explains that users can create services to contribute to the community and gain time balance based on service duration. The form itself consists of several input fields: 'Header' (with a placeholder 'Write a description of the service here ...'), 'Quota' (with a file icon), 'Credits' (with a placeholder 'Image URL'), 'Tags' (a dropdown menu with placeholder 'Pick a tag or enter a new one'), and 'Location type' (a dropdown menu with placeholder 'Choose location type'). A large green 'CREATE SERVICE' button is located at the bottom center of the form area. The background features a blue header section and a teal footer section.

Header

Write a description of the service here ...

Quota

Credits

Image URL

Pick a tag or enter a new one

Choose location type

CREATE SERVICE

A service header, description, date, quota, credit amount, image url, tags, location type (physical or online) and if “physical location type” is chosen, location can be entered into the system.

Physical location type selected:

Physical

Izmir, Turkey

Map Satellite

CREATE SERVICE

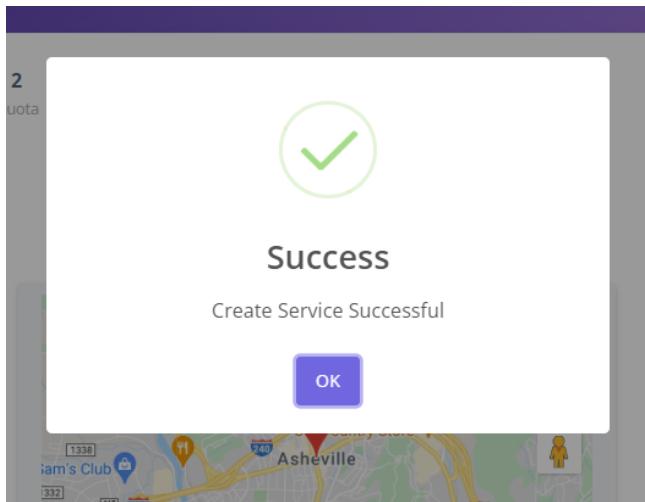
Online location type selected:

Online

<https://zoom.us/2SDsdfU>

CREATE SERVICE

Creating a system will return a success message and the user will be forwarded to the created service's page.



Tags

A screenshot of a tag selection interface. At the top, there are two green buttons with white text: "movies" and "sports". Below them is a search bar with the placeholder text "Pick your interests". A list of categories follows, each with a small blue or grey icon to its left. The categories are: movies, arts, sports, comedy, misc, education, and nature. The "education" category is highlighted with a green background and white text, while the others have a standard grey background.

On the registration page, the user has the option to choose from multiple tags that are predefined by the system. Users can choose multiple tags.

Location

Ata

- 📍 Ataşehir Küçükbakkalköy, Dudullu Osb/Ataşehir/İstanbul, Turkey
- 📍 Atal Tunnel Atal Tunnel, Burwa, Himachal Pradesh, India
- 📍 Atal Tunnel Burwa, Himachal Pradesh, India
- 📍 Atana Hotel Hessa Street - Dubai - United Arab Emirates
- 📍 Atascadero CA, USA

powered by Google

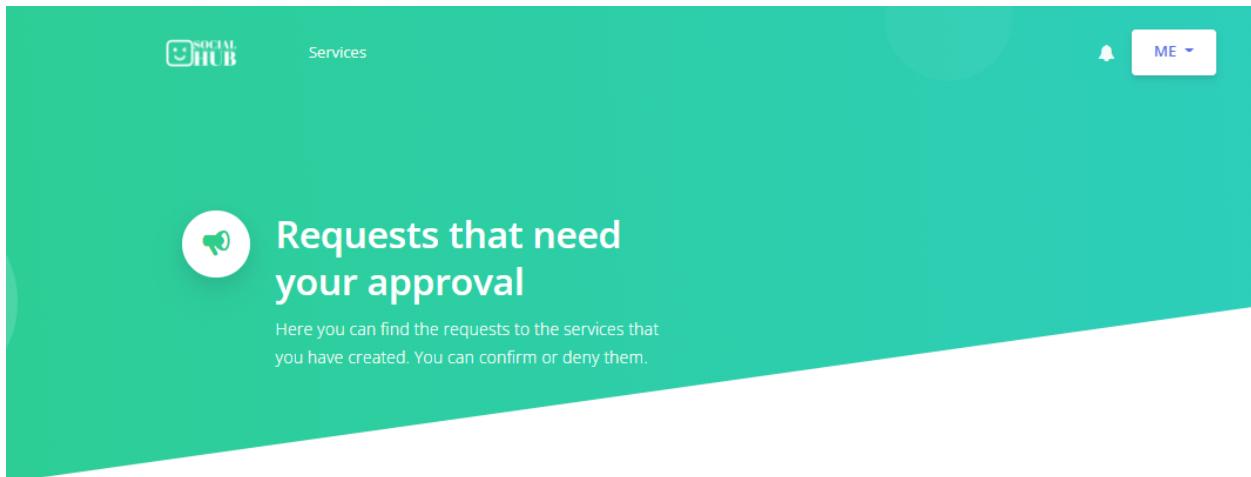
The user can enter their location information into the textbox. After selecting their location, their selected location will be displayed on the map.

Ataşehir, Küçükbakkalköy, Dudullu Osb/Ataşehir/İstanbul, Turkey

A screenshot of a mobile Google Maps application. The search bar at the top contains the text "Ataşehir, Küçükbakkalköy, Dudullu Osb/Ataşehir/İstanbul, Turkey". The main view is a map of the Ataşehir area in Istanbul, showing various landmarks and roads. A red marker indicates the selected location. The map includes labels for "Metropol İstanbul Alışveriş Merkezi", "Medicana Ataşehir Hastanesi", "Ulker Spor ve Etkinlik Salonu", "İadium AVM", "Anatolian SIDE", "Sağlık Bilimleri Üniversitesi Fatih...", "Sinan Camii", "Yeditepe Üniversitesi", and several streets like "Dudullu Cd.", "Sakarya Cd.", "Uslu Cd.", "Kayaşdağı Cd.", "7. Mayıs Cd.", "Gazi Mustafa Kemal Cd.", and "Başbakanlık Yolu". The bottom of the screen shows standard Google Map controls for zooming and navigation.

Service Request Approval

Requests made to a service will be displayed on the creator's page. Users can see the requests made to all their services on the pending requests page. Clicking on the pending requests button under the profile button will redirect the user to pending requests page.



The page will list the header of the service, requester's name and the buttons to approve or deny the request. Clicking on the buttons will send a request to the server and an alert will be displayed on the page.

Approve

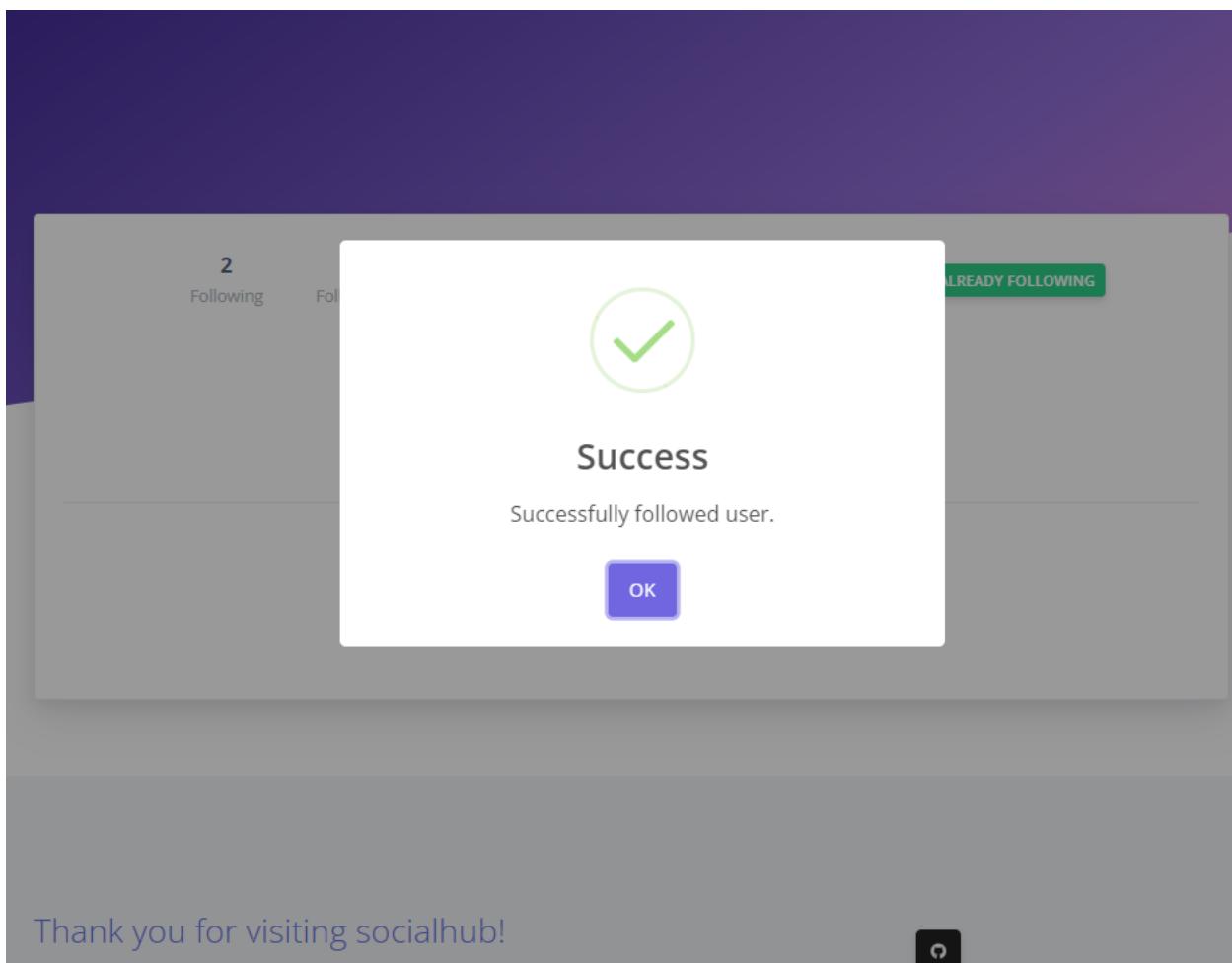
If the creator approves the system, the status will be updated to “APPROVED”. A notification will be sent to the requester and their balance on hold will increase.

Deny

If the creator approves the system, the status will be updated to “DENIED”. A notification will be sent to the requester.

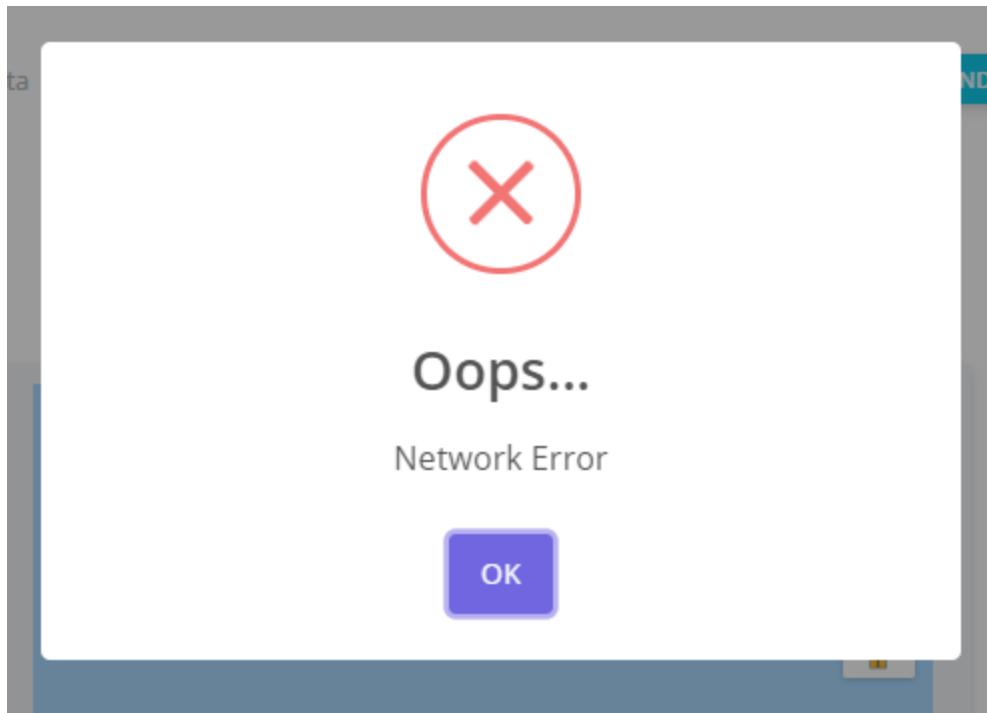
Success messages

Success messages will be displayed on a popup message



Error messages

Errors will be displayed on a popup message



Admin Dashboard

Admin dashboards landing page is the feed, where the admin can see the activities happening throughout the web site.

Feed

The screenshot shows the SocialHub Admin interface with a navigation bar at the top. The 'SOCIALHUB ADMIN' logo is on the left, and the 'Feed' tab is selected. Other tabs include Statistics, Services, Users, Flagged Services, and Flagged Users. Below the navigation is a large, stylized graphic area with blue and purple gradients. The main content area is titled 'Feed' and contains a red 'FILTER BY ▾' button. A list of four recent logins is displayed in green boxes:

- 2022-05-30 || harum_totambiz successfully logged in LOGIN
- 2022-05-30 || harum_totambiz successfully logged in LOGIN
- 2022-05-30 || harum_totambiz successfully logged in LOGIN
- 2022-05-30 || harum_totambiz successfully logged in LOGIN

The feed can be filtered by Show all, Successful Login, Unsuccessful Login, Created Services, Service Join Requests, Service Join Approved, Follow.

The screenshot shows the 'Feed' page with a red 'FILTER BY ▾' button. A dropdown menu is open, listing seven filter options, each preceded by a small icon:

- Show All
- Successful Login
- Unsuccessful Login
- Created Service
- Service Join Request
- Service Join Approval
- Follow

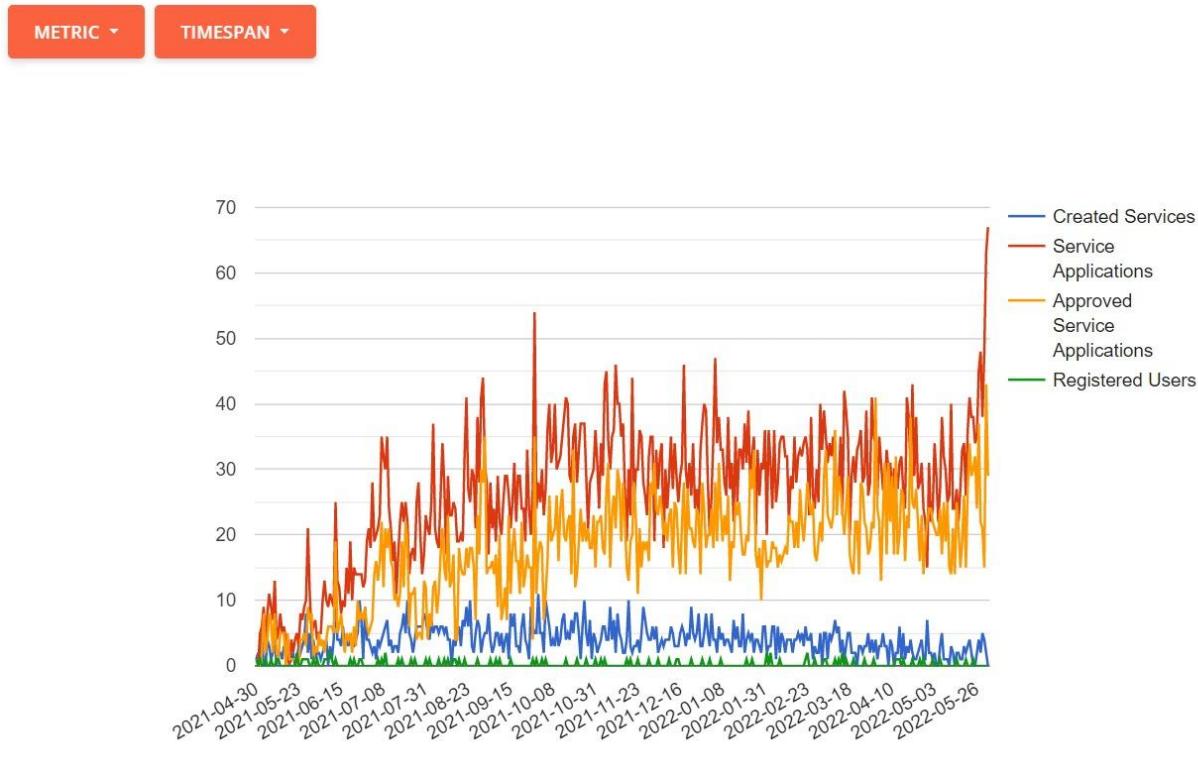
Statistics

Statistics page have three main panels.

Charts

In this table, the admin can visually see the trends of Created Services, Service Applications, Approved Service Applications and Registered Users spread through time.

socialHub with charts



Numbers

Numbers panel shows the trends of user activities separating the timelines to the Last 24 hours, Last 7 Days, Last 30 Days and All Time.

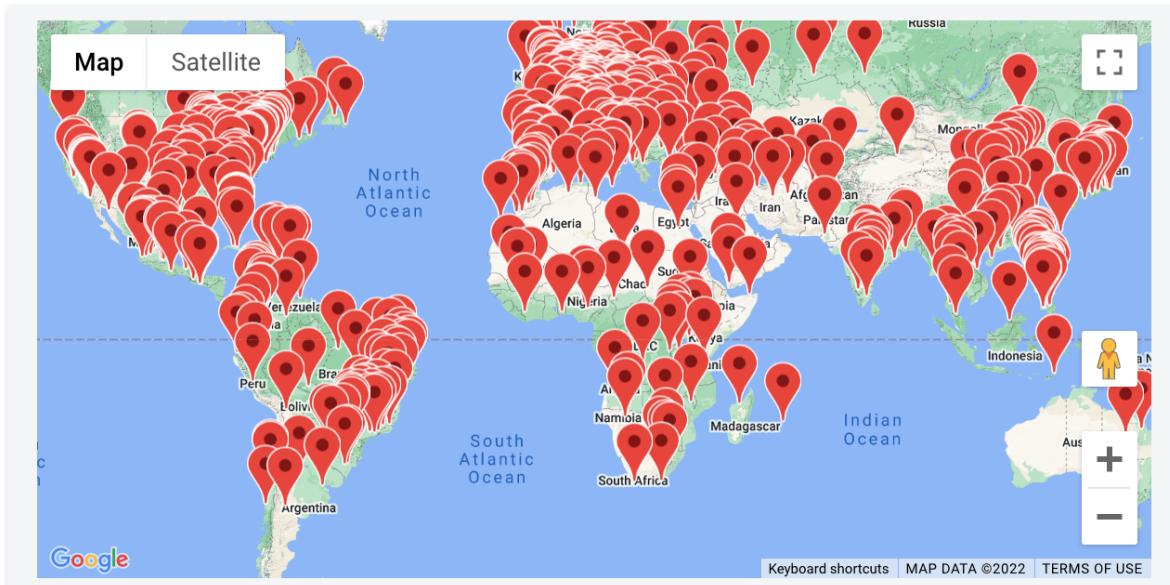
socialHub in numbers

	Last 24 Hours	Last 7 Days	Last 30 Days	All Time
Created Services	0	16	62	1370
Service Applications	1	217	982	9430
Approved Service Applications	20	185	729	6189
Registered Users	0	6	14	108

Map

SocialHub on Map shows all the service locations visually on the map.

socialHub on map



Services

This page lists the services and lets the admin feature the service or not, or go and view the service.

Services

Name	Owner	Date	View	Featured
I'm hosting a dog play date online	rebecca	Sun, 05 Jun 2022 08:00	VIEW	FEATURE
Critical music listening 3	miranda1	Tue, 31 May 2022 10:00	VIEW	FEATURE
Critical Music Listening Workshop 2	miranda1	Mon, 30 May 2022 19:00	VIEW	FEATURE
Critical Music Listening Workshop 1	miranda1	Mon, 30 May 2022 17:00	VIEW	FEATURE
Pet my dog	ecesari	Thu, 02 Jun 2022 17:00	VIEW	FEATURE
Krabby Discussion	maiores_iustoorg	Thu, 30 Jun 2022 05:26	VIEW	FEATURE
🇺🇸 vs. 🇬🇧	seurat40	Sun, 24 Jul 2022 00:06	VIEW	FEATURE
George Washington Sleptier Comedy Show	impedit_quidemco	Fri, 03 Jun 2022 16:19	VIEW	FEATURE
Vizzini Appreciation Day	nisi_voluptatibus	Fri, 01 Jul 2022 01:52	VIEW	UNFEATURE

Users

This page lists all the users and a link to the users' profiles.

Users

Username	E-mail	Bio	View
et_adipisci	jonnie.grant@hotmail.com	All the world 's a stage, and all the men and women merely players. They have their exits and their entrances; And one man in his time plays many parts.	
caravaggio33	caravaggio33@orn.co.org	Rich gifts wax poor when givers prove unkind.	
provident_ipsu mnet	raisa.tillman@gmail.com	True is it that we have seen better days.	

Flagged Services

When a user flags a service, the admin can see the service here.

Flagged Services

Name	Description	Owner	Rating	FlagCount	View
Phlox Lessons	And Kazon in Gamma Quadrant.	consequuntur_voluptas	no rating	1	
A Critique of Lewis Mills	I'll teach you how to be better than that.	qui_nonco	no rating	1	
mlkshk	Light travels faster than sound, which is the reason that some people appear bright before you hear them speak.	ut_maxime	no rating	1	

Flagged Users

This page lists all the users that are flagged by other users.

Username	Bio	Rating	FlagCount	View
est_sitinfo	So wise so young, they say, do never live long.	3.5 / 5	1	
durer10	Marty, don't be such a square. Everybody who's anybody drinks.	3.6 / 5	1	
harum_totambiz	Wisely and slow; they stumble that run fast.	3.6 / 5	1	
diego rivera62	Blow, blow, thou winter wind! Thou art not so unkind as man's ingratitude.	3.4 / 5	1	

Test Results

Below, the unit tests of the project can be found:

Badge Tests:

Test method name	Status
getAllBadges_ReturnsDtoList	passes
checkNewcomerBadgeForServiceApproval_RemovesBadge	passes
checkServiceApproval_AddsRegularBadge	passes
checkServiceApproval_AddsReputableBadge	passes
mapToDto_ReturnsDto	passes
contextLoads	passes

Notification Tests:

Test method name	Status
mapToDto_ReturnsSameProperties	passes
contextLoads	passes

Search Tests:

Test method name	Status
SearchService_canFindByServiceHeader	passes
SearchService_canFindByServiceDescription	passes
SearchService_canFindByServiceLocation	passes
SearchService_canFindByUserBio	passes
SearchService_canFindByUserUsername	passes
SearchService_canFindByTagName	passes

SearchService_disallows_MoreThan50Limit	passes
SearchService_clips_ifFoundMoreThanRequested	passes
SearchService_discardsDuplicateItems	passes

Tag Tests:

Test method name	Status
IllegalTag_ShouldReturnTrue	passes
IllegalTag_ShouldReturnFalse	passes
contextLoads	passes

User Tests:

Test method name	Status
Service_GetBalance_ShouldReturn_BalanceToBe	passes
FollowUser_ShouldThrowError_IfAlreadyFollowing	passes
FollowUser_ShouldReturnEntity	passes
Register_ShouldThrowError_WhenDataIsInvalid	passes
Register_ShouldReturnEntity	passes
Register_ShouldReturnUserType	passes
MapToDto_ShouldReturnSameFields	passes
contextLoads	passes

Approval Service Tests:

Test method name	Status
UserServiceApproval_ShouldThrowError_IfCreditBelowThreshold	passes

Rating Tests:

Test method name	Status
RatingService_disallows_InvalidRatings	passes
RatingService_disallows_NonAttendee	passes
RatingService_persists_validRating	passes
RatingService_returns_accurateSummaryForService	passes
RatingService_returns_accurateSummaryForUser	passes

Service Tests:

Test method name	Status
Service_ShouldThrowError_IfCreditAboveThreshold	passes
Service_ShouldDisallowNonAdmin_WhenFeaturing	passes
Service_ShouldDisallowNonAdmin_WhenUnfeaturing	passes
contextLoads	passes

Flag Tests:

Test method name	Status
FlagUser_shouldReturnFlag	passes
FlagService_shouldReturnFlag	passes

Activity Stream Tests:

Test method name	Status
ActivityStreamService_canFind_SuccessfulLoginAttempts	passes
ActivityStreamService_canFind_UnsuccessfulLoginAttempts	passes
ActivityStreamService_canFind_CreatedServices	passes
ActivityStreamService_canFind_CreatedEvents	passes

ActivityStreamService_canFind_ApprovedEventJoins	passes
ActivityStreamService_canFind_ApprovedServiceJoins	passes
ActivityStreamService_canFind_CreatedServiceJoinRequests	passes
ActivityStreamService_canFind_CreatedEventJoinRequests	passes
pagination_returnsNextPage_correctly	passes

Additional Information

Registered Users for Demonstration

1. Username: miranda
Password: 1
Location: Istanbul
Offers: BladeRunner Analysis
Participates to: Mushroom Picking, Game night

2. Username: rebecca
Password: 1
Location: Istanbul
Offers: Mushroom Picking
Participates to: Game night, Lets watch top gun

3. Username: nathan
Password: 1
Location: Istanbul
Offers: Game Night
Participates to: Bladerunner Analysis

4. Username: zeynepg
Password: 1
Location: Amersfoort
Offers: Let's Watch Top Gun, I Will Educate Your Dog
Participates to: Lebanon Higher Edu. Review

5. Username: ecesari
Password: 1
Location: Istanbul
Offers: Pet My Dog
Participates to: Game night

Some upcoming services:

1. BladeRunner Analysis - 12 Jun 2022 11:00, offered by miranda
2. Game Night - 22 Jun 2022 20:00, offered by nathan
3. Mushroom Picking - 26.06.2022 08:00, offered by rebecca

Lessons Learned

We struggled with prioritisation during this project. We got overwhelmed by the amount of requirements we need to implement and stressed about if we can finish everything. That's why we decided as a group to skip some of the features such as the events and focus on the newer features like the search, user experience, etc. even though we could've implemented the events with minimal effort.

We learned that implementing a feature, although not complete, is better than skipping it. Also, we could've kept a closer contact with the customer about prioritisation.

References

- This project has used a free design template by Creative Tim, which can be found here:
<https://www.creative-tim.com/product/vue-argon-design-system>

Dependencies:

- **Frontend**
 - Axios v0.24.0
 - Bootstrap-vue v2.0.4
 - Flatpickr v4.5.1
 - Nouislider v11.1.0
 - Register-service-worker v1.5.2
 - Sweetalert2 v11.3.0
 - Vue v2.6.6
 - Vue-backtotop v1.6.1
 - Vue-flatpickr-component v8.1.1
 - Vue-google-charts v1.0.0
 - Vue-infinite-loading v2.4.5
 - Vue-lazyload v1.2.6
 - Vue-moment v4.1.0

- Vue-multiselect v2.1.6
- Vue-router v3.0.2
- Vue-star-rating v1.7.0
- Vue2-datepicker v3.10.4
- Vue2-google-maps v0.10.7
- Vue2-transitions v0.2.3
- **Backend**
 - Spring-boot-starter-security
 - Spring-boot-starter-web
 - Spring-boot-starter-test
 - Spring-security-test
 - Spring-boot-starter-data-jpa
 - Spring-boot-starter-hateoas
 - Maven-compiler-plugin
 - Javafaker
 - Jwt-api
 - Jwt-impl
 - Jwt-jackson
 - Spring-beans
 - Mysql-connector-java
 - Commons-lang3
 - H2 (for development environment)
 - Guava
 - Gson,
 - Activitystreams-core
 - Commons-csv