

# C>ONSTRUCTOR UNIVERSITY

CA-CS-804-B Web Application Development –  
Project



## Clan Community

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Notes:

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## **Introduction**

The purpose of this document is to provide an overview of the web application "Clan Community" and its underlying idea. "Clan Community" will be designed to organize individuals, clubs, organizations, and causes, creating a followers/member's base of similar interests, with some individuals acting as representatives.

The goal is to raise awareness about local communities within a person's location and foster growth by assisting with in-person meetups. To achieve this, the application facilitates communication. Essentially, the purpose of "Clan Community" is to enable individuals with similar interests to communicate, know one another, and support one another's growth.

To facilitate communication, "Clan Community" includes a newsfeed that displays community members' activities, including text, pictures, and links to their social media accounts. This allows users to stay up-to-date with the latest news and events in the community, as well as share their own content.

An important feature of "Clan Community" is its use of location services to enable users to connect with communities and causes in their area. This allows users to discover and support causes that are important to them, as well as to connect with other members of the community who are involved in similar projects.

## Starting Point

The idea for "Clan Community" emerged from the recognition that while social media platforms exist to connect people with similar interests, they often lack the ability to create a more meaningful sense of community and connection. We wanted to develop a web-application that would enable individuals to not only connect with others who share their passions but also to collaborate on projects and support each other's growth. By providing tools for communication, collaboration, and discovery, we believe that "Clan Community" has the potential to become a powerful platform for building communities around shared interests and causes.

At the heart of "Clan Community" is the belief that everyone should be able to easily connect with others who share their interests and passions, no matter where they are in the world. We understand that it can be difficult to find these communities, especially when you're in a new city or country, and that's where "Clan Community " comes in.

With "Clan Community," users can quickly and easily find sports clubs, gym memberships, feminist organizations, youth-led organizations, yoga clubs, and many other types of communities based on their location. Whether you're traveling to a new country, moving to a new city, or simply looking to expand your social circle, "Clan Community " can help you find the right communities to get involved in.

Moreover, "Clan Community" provides a platform for individuals to connect with representatives from different parts of the world. These representatives are individuals who have been selected based on their interest, expertise, and commitment to the causes that matter to them. By providing access to these representatives, "Clan Community" allows users to learn more about different cultures and communities around the world and to connect with individuals who are working towards similar goals.

In short, "Clan Community" is not just a platform for meeting up with like-minded individuals, but also a tool for discovering new communities and making the search process much easier. By providing access to a global network of individuals and organizations, we hope to empower users to take action towards their goals and to make a positive impact on the world.

## Substance and Structure of the project

- Key Concepts

The key concepts of the "Clan Community" web application are community building and communication, which are similar to other social media platforms who have group sections.

The platform provides a space for any number of groups of individuals, clubs, organizations, and causes that share similar interests, but what sets it apart is the use of moderators to facilitate healthy interactions among members.

- Project Scope

The web-service will be accessible to 2 types of users:

- i. Admins: Admins are the controllers and managers of the entire system that have complete privileges over both the system and users.
- ii. Members: Members are individuals of the community that have freedom to create and build an already existing community by the community guidelines. Members are allowed to create specific clubs, organizations and causes for getting people with common interests to join their community.

- Major work items

- › Developing the user interface
- › Building the backend infrastructure
- › Integrating location services
- › Implementing social media linking

- Structure

- › Client-server architecture
- › User interface on the client side
- › Backend infrastructure on the server side

- Data structures and algorithms

- › Prioritization algorithms for the newsfeed
- › Geo-location data and mapping algorithms for location service

## **Resource (Technologies)**

- › HTML
  - used to structure the web-application and display contents.
- › CSS/SASS
  - used to stylize the web-application content to be displayed.
- › JS/TS
  - used to add functionalities and make the web-service more interactable with members of “Clan Community”. The specific library to be used is React.js.
- › Python
  - used for the application layer to connect it to the database. The specific framework to be used is Flask.
- › MongoDB
  - used for the database.

## **Criterion for success**

The core project milestone is essentially making it easier for users to find communities around them. As the system is built, it will achieve the goal because it's purpose is to store and organize that specific data,

1. Completing the project on time and according to plan, with all the necessary features and functions.
2. Making sure the web application works well, is easy to use, and meets the needs of the users.
3. Making sure the web application can work with other services, like maps and social media platforms.
4. Keeping users' personal information safe and secure.
5. Making sure the web application can handle a lot of users and data without slowing down or breaking.
6. Testing the web application to find and fix any problems before it's released to users.
7. Providing ongoing support and making sure the web application stays up-to-date and working properly.

## Plan of work

### i. Phase 1: User interface on the client side

Timeline	Objectives
February 20 -March 01, 2023	Client-side only web page

### ii. Phase 2: Backend infrastructure for the server side

Timeline	Objectives
March 15-April 01, 2023	Server-side backend data persistence
March 15-April 01, 2023	Refactoring and ensuring designs are met and connections are stable for Client-side and server-side.
March 15-April 01, 2023	Functional Frontend and backend

### iii. Phase 3: Data Structures implementation

Timeline	Objectives
April 01 – April 16, 2023	Prioritization algorithm and Geo-location data and mapping algorithm implementation

### iv. Phase 4: Finalizing

Timeline	Objectives
April 16 – April 26, 2023	Deliverables: Wrapping up and making sure tests are functional

## Site map

- i. Home page
  - › Overview of the web application
  - › Sign up and login options
- ii. Profile page
  - › User profile information
  - › Activity feed of community members
  - › Connection requests and notifications
- iii. Community page
  - › Directory of communities based on interest, location, and type
  - › Search and filter options
  - › Ability to join, leave, and create communities
- iv. Moderation page
  - › Moderation tools for community leaders and moderators
  - › Ability to manage community settings, members, and content
  - › Reporting and feedback system
- v. Settings page
  - › User account settings and preferences
  - › Privacy and security options
  - › Notification and email settings
- vi. Help and support page
  - › Frequently asked questions and answers
  - › Contact and support options



**References**

