Project Charter - Group 11

Community Service Social Network

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Project Title: CivicConnect

Problem Statement:

For those who are not already a part of service organizations/initiatives or options within their community, it can be difficult to seek out community service opportunities. One of the easiest internet mediums for people to navigate and gain information from are social media platforms. There are several notable platforms that expand beyond traditional social media content, such as those for career building and networking, finding novels and films, and even sharing running statistics: Why not create a platform centered around community service that allows for people to get community service recommendations based on their profile and allow users to post about events they have partaken in. The purpose of building this network is to encourage individuals to discover and engage with their communities, creating an environment of community service that is tailored to an individual's interest and fostering a culture of giving back that goes beyond the scope of traditional social media.

Project Objectives:

- Build a user-facing web application that acts similar in nature to a social media platform, that allows for users to either create a profile either as a 'Community Member' or an 'Organization.'
- Create an interface for Community Members to interact with and be provided with listings for community service opportunities based on parameters they have established in their profile (Such as: Location, Age, Transportation, Interests, etc.)
- Create an interface that allows for Community Members to attend listings made by organizations and indicate this on their profile via a post.
- Create an interface that allows for organizations to make posts about community service opportunities for Community Members.
- Build machine learning algorithms to properly create community service recommendations based on a Community Member's profile.

Stakeholders:

- Users: (1) Any community member can use this app to seek out opportunities for community service. (2) Any organization/initiative that hosts opportunities for community service can use this platform to post 'listings' of events or opportunities to increase participation.
- Developers: Aysu Saglam, Heidi Teng, Avishi Goyal, Jammy Wang, Roohee Urs
- Project Coordinator: Leo Y Lin
- Project Owners: Aysu Saglam, Heidi Teng, Avishi Goyal, Jammy Wang, Roohee Urs

Deliverables:

1. User Registration and Authentication System: Develop an authentication system that allows for users to sign up for the platform as either a 'Community Member' or and 'Organization'
   Deliverable: A functioning sign-in/sign up system *React* interface that utilizes *Firebase Authentication* for login and security management.

2. User Profile Creation: Create an interface that allows for users to create detailed profiles with relevant information such as location, age, transportation availability, and interests.
   Deliverable: A *React* interface that utilizes forms to capture user information that can be used to create and edit profiles. Information will be stored in a *MongoDB* database.

3. Service Recommendations for **Community Members**: Implement a machine learning algorithm that recommends community service opportunities based on a Community Member's profile and potentially other parameters such as past attendance/the attendance of other users with similar profile parameters.
   Deliverable: A *Node.js/Express* API endpoint that returns personalized recommendations for each Community Member that utilizes a trained machine learning model (*Python, TensorFlow AWS SageMaker)*.

4. Listing/Post Creation by **Organizations**: Allow Organizations to create and manage posts for community service events. These posts can consist of text, image, and potentially video that are all uploaded by the user.
   Deliverable: A *React* interface that allows for Organizations to create and delete posts about community service opportunities. Information will be stored in a *MongoDB* database.

5. Event Attendance/Posts by **Community Members**: Allow Community Members to attend events listed by organizations and create posts indicating their participation.
   Deliverable: A *React* interface that allows for Community Members to mark their attendance at an event and create a post about their experience. Information will be stored in a *MongoDB* database.

6. Activity/Post Feed: Create a 'feed' for users to see posts made by other users.
   Deliverable: A *React* interface with a real-time activity feed of posts and event information. Users will be able to interact with posts that they come across in their feed, through likes and indication of attendance.

7. Messaging Component: Allow users to DM one another.
   Deliverable: A *React* interface will be able to facilitate messaging between users. Users will be able to specify another user, or potentially a group of users, and create an instance of a messaging chat.

8. Linking Organization Profiles for Cross-Posting: Organizations will be able to link their other social media accounts.
   Deliverable: A *React* interface that displays information/links to outside social media accounts on other platforms (i.e Instagram).

9. FAQ Component: Display an FAQ section on an organization's profile.
   Deliverable: A *React* interface which displays a list of frequently asked questions and answers on a profile belonging to an organization. The content of this section will be editable by the organization.

10. Deliverable: Create a RESTful service to handle communication between the Frontend (React) and the Backend (Node.js + Express). This will also facilitate exchange of data between the web app and the database (MongoDB).