Box 1: Overview, Key Words, and Subtopic Name

The fast-paced world we live in today requires the need to better mobilize and organize events like protests and marches. Our project offers planning for the mobilization of people in events such as protests and large gatherings. The app will result in a decrease in the likeability of violence breaking between two opposite groups of a protest and allow for a safer environment both for those involved in the protest as well as the general public.

The potential outcome of the product is to better mobilize individuals and groups of people. The product will give users the ability to better respond to their surroundings when moving through their city on foot. With the influx of applications and resources for people to use to find better driving directions when it comes to avoiding traffic, accidents, or road closures, this product will utilize similar concepts, but with focus on people on foot.

Areas of technical expertise: Cloud Computing, Mobile Application, Cloud Platforms, Location API

Areas of Application: Mobile phone development, Mobilization, Location-tracking, Routing,

The subtopic of this project is Software Engineering

Box 2: Intellectual Merit

This Small Business Innovation Research Phase I project demonstrates the creation of an algorithm that computes the routing people based on large crowds and events. The intellectual merit is the product's algorithm that calculates the number of people per specific area and decides whether a route needs to be adjusted to avoid a highly crowded area or accidents that will impede the continuation of the user's trip. The development of this algorithm includes location tracking of the app users, computing the best route for getting from one place to another, and determining when an area is to be avoided. Technical hurdles for this product include being able to respond promptly when directions need to be adjusted for users. The algorithm must be able to take in and analyze data fast enough to be effective in giving the user the best experience.

Goals of the R&D include providing users with an experience that will give them the most up-to-date information in the quickest response time. In order to reach these goals, the product will focus on two major elements: accuracy and response time. Accuracy will be measured in the algorithm's ability to find all appropriate paths and give the user the best one. Response time will be measured in the program's ability to continuously pull data about location tracking, accident reports, etc that will aid in adjusting the user's path in real time.

Box 3: Broader/Commercial Impact

The broader impacts of the project are benefits to society by providing an innovative way to better mobilize individuals and groups through a medium that focuses on the movement of people at the ground level. On a commercial level, our project provides a tool for better controlling large gatherings of people in a safe way, which is very appealing in today's global climate. On a social level, a more organized system for protests will cause a positive social impact through allowing protest participants to take part of a more organized and thoroughly planned protest. Another aspect of the social level is the impact on the general public that does not take a part of the event but benefits from the safer environment that is resulted from the app.

Elevator Pitch

Have you ever wanted to join a march late but were concerned you won't be able to find it? Have participated in a march like the Women's March in D.C where there were so many participants that you were not able to actually march? People Movement is here to solve that problem.

People movement is an app for orchestrating the movement of individuals and groups of people on foot. The app focuses on providing directions getting from point A to point B for large groups of people on foot. Furthermore, the app incorporates live updates from the users to improve and adjust the route accordingly. Like mentioned previously, our app will focus on large groups of people on foot. Some of the potential applications of the app include directing protests and marches across cities, to create a safer environment for the protest participants as well as the city's residents.

Our product focuses on improving the efficiency of four main groups of people: the organizer, the group, the individual, and the community. Any organizer managing large groups will be able to more efficiency manage the moving group. He or she will be able to have up-to-date information to more quickly react to changes in the group's movement. Any group will be able to move more smoothly as a whole. Any individual will be able to join groups late, reconnect if lost, or report any incidents and/or suggestions for the route. And lastly, but most uniquely to our application, is the benefit this will have on the community. Large groups moving on foot tend to disrupt daily activities of the surrounding community and People Movement works to limit those disruptions faced by the community.

People Movement will highlight key features that current market apps do not support. First, the app will ensure a constant-fluent movement of large gatherings and will prevent "deadlocks" situations from occurring. Second, the app will provide tools for group management, allowing a user to create a group as well as join existing groups.This tool can also be used for day-to-day activities such as organizing a social gathering that will travel from one place to another for example a group of friends walking to the movies together. Third, directions will be provided based on the individual's location as well as the group location as a whole.

One does not need to worry anymore about being separated from the group since People Movement will keep track of where all group members are located while on a trip. While there are apps that provide directions for driving while taking into account traffic information, People Movement is the first to provide walking directions with respect to live events and given updates.

Join our movement and move with People Movement!