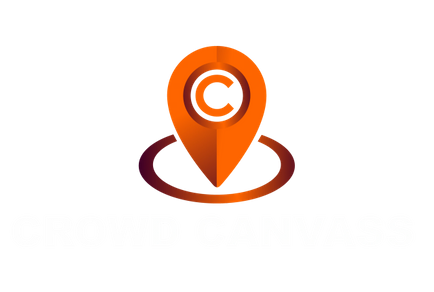
**Crowd Canvass**



**Team Members:**  
Shayne Burns  
Wylie Frydrychowicz  
Charlie Irmiger  
Max Rothweiler  
Hannibal Santiago

**Advisor:**  
Nadiyah Johnson

**Date:**  
10/12/20

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**1. Introduction**

Crowd Canvass is an early stage start-up company that aims to digitize canvass, volunteer, and other group events. The stakeholder is Brian McKee, and his vision for this project is a web application that better organizes and tracks group community events. Compared to a mobile application, we believe a web application would be more useful because any device with internet access can use the application. The purpose of this document is to provide a detailed overview of the proposed Crowd Canvass project and explain the various aspects related to the project. This document will provide a background on canvassing, as well as the objectives that have been defined for the project. An analysis of the potential risks associated with this project will also be discussed.

**2. Background**

Crowd canvassing is an application attempting to make the process of canvasing and creating volunteer networks easier. Canvassing is not a new concept being used often in democratic political races since the Roman republic. Though in a modern setting it has become a common place practice in not just political campaigns but in community outreach and volunteering. Creating volunteer networks and canvassing projects are a great way to help out underserved communities as they can come together to do various projects from food drives to street cleanings, protests, and many other ways to have their voices heard. As of now, there are many apps and organizations that have both canvassing and volunteering focuses. There tends to be two types of apps: one focusing on data for political canvassing such as Crowdskout, Ecanvasser, Moonshadow, and many other, and the other group has a focus on volunteering with either donations focused like One Today or ones that connect volunteers to local non-profits. There are also organizations that have developed apps that bridge the gap which help non-profits canvass and organize events. Though there is a hole found between all these, that is the flexibility to create volunteer events not just with registered non-profits but with any individual or organization. The problem stems from the fact that any person with a good idea in an area should be able to find likeminded volunteers to come together. A simple easy way to find local volunteers for an event, a cause, etc. is in dire need. A new solution needs to be found so that potentially great ideas cannot be lost due to a lack of word getting out that volunteers are needed despite the potential demand.

**3. Purpose**

The purpose of this project is to deliver an application that allows for people to create events, primarily allowing people to volunteer, as well as doing Door-To-Door services to assist their community.

***Scope****:*

The main objectives of this project are to provide an application that will allow others to create events for a variety of purposes and to allow others to sign up to either get paid for their service or volunteer. The project’s main features would be an application that uses GPS geolocation technology, a web application so anyone can create an event from anywhere on any platform, and to have a paying system in place for volunteers to get paid for their service –if the event manager chooses so. This app is meant to give an ease of access for volunteering in communities that struggle with help. The way the application will be used is:

1. GPS Tracking
   1. This feature is used primarily for the Door-To-Door service events, such as helping with election polls or door surveys.
2. Geolocation on Web Applications
   1. This feature is meant to see where one is, when they want to create an event, or provide their service at one. This is a way that events will be filtered to the public based upon the area of selection.
3. Cloud Database
   1. We will be using a cloud-based server that will allow us to store data about events, as well as information within the Door-To-Door surveys. This way the event coordinator can see the data they have acquired.

***Objectives:***

1. Software Team
   1. Build a Web Application as a first deliverable
   2. Build/Develop GPS feature for Mobile devices
   3. Construct filtering algorithms that will be used for all apps
   4. Verify the algorithms for filtering all work together
   5. Verify the conceptual design with the customer
2. Cloud Team
   1. Responsible for managing a cloud-based server for data storage
   2. Construct algorithms for data management
   3. Develop a database

**4. Resources**

This project will require the use of various resources that include experienced professionals (Table 1), equipment (Table 2), and software (Table 2).

Table 1: Personnel Resource Table

|  |  |  |
| --- | --- | --- |
| **Personnel** | **Role** | **Responsibilities** |
| Nadiyah Johnson | Advisor | Provide project guidance; addresses any concerns we have with the project |
| Brian McKee | Stakeholder | Communicates the project needs and requirements to the team; provides funding for the project |

Table 2: Equipment & Software Table

|  |  |
| --- | --- |
| **Equipment** | **Purpose** |
| Personal Laptops/Computers | Develop the application |
| Microsoft Teams | Place to host meetings, communicate, and store files |
| Website Host | Place to host the physical website |
| Server/Database Host | Place to store information that needs to be shown in the app |
| **Software** | **Purpose** |
| Notepad++ / Any text editor | Software for programming the application |

**5. Team Members**

Table 3: Team Member Roles and Responsibility Table

|  |  |  |
| --- | --- | --- |
| **Software Team Members** | **Major/Title** | **Role** |
| Shayne Burns | Undergraduate Computer Science Student | Software Developer / Research Analyst |
| Wylie Frydrychowicz | Undergraduate Computer Science Student | Software Developer |
| Charlie Irmiger | Undergraduate Computer Science Student | Software Developer |
| Max Rothweiler | Undergraduate Computer Science & Finance Student | Project Lead / Software Developer |
| Hannibal Santiago | Undergraduate Computer Science & Computational Math Student | Software Developer / Project & Risk Manager |

***Definition of Team Roles***

**Project Lead** –Liaison between students, advisor, and sponsor. Coordinates team meetings andpresentations.

**Software Developer** –Designs and implements software to fulfill project objectives.

**Research Analyst** – Analyzes target market and assesses product features.

**Project & Risk Manager** –Monitors team progress and risks.

**6. Major Risks**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Risk | Type | Probability | Impact | Mitigation Plan | Owner |
| Communication issues | Time risk | Medium | Time could be lost due to fixing errors caused by poor communication | Regular meetings, good documentation,  good communication with stakeholder | Project lead |
| Insufficient time to implement mobile version | Time risk, resource risk | Medium | Medium – web application is priority, mobile app secondary | Efficient approach of attack in translating web to mobile | Software developers |
| Insufficient testing | Time risk, software risk | Medium | Large – lack of testing could lead to bugs, loss of uptime | Thorough software testing at each stage of development | Risk manager |
| Security vulnerabilities | Security risk, software risk | Small | Large – software exploits compromise user data and uptime | Thorough software research and secure user information collection and storage | Risk manager,  Software developers |
| Loss of team member | Time Risk | High | Progress could be lost if there is no information transfer from the departing team member at the end of the semester | All files will be held in a centralized location and departing member will conduct information transfer | Risk manager |

**7. Logistics**

***Project Files and Documentation:***

Crowd Canvass will meet, share documents, and schedule meetings through Microsoft Teams. Teams allows all members of the Crowd Canvass team to upload, view, and edit documents, as well as communicate via group messaging.

Crowd Canvass will use GitHub to share individual updates to code, as well as track changes made on the master branch. Members can pull the newest version of the master branch and revert to old versions if necessary.

***Meetings:***

There will be a weekly meeting every Monday and Wednesday from 3:30-4:30pm in Microsoft Teams. The team will discuss progress made over the last week, and discuss future progress needed in order to meet deadlines.

The team will also communicate with the group advisor, Nadiyah Johnson, and the stakeholder, Brian McKee, regularly to discuss goal progress and general inquires on the project in order to stay on track at mitigate risk of time delays.

***Communication:***

Communication will be done over Microsoft Teams as well as a SMS group chat. Teams will be used for most of the group’s communication, and SMS will only be used for immediate notification.

***Timeline:***

We will use Microsoft Teams to create and maintain our project timeline.

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