Lab 1 – Voluntunities Product Description

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CS411

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October 23, 2017

Version 4
# Table of Contents

1. Introduction ............................................................................................................. 4
2. Voluntunities Product Description ........................................................................ 5
   2.1 Key Product Features and Capabilities .......................................................... 6
   2.2 Major Components (Hardware and Software) ............................................... 7
3. Identification of Case Study ...................................................................................... 8
4. Product Prototype Description .................................................................................. 9
   4.1 Prototype Architecture (Hardware and Software) ........................................... 9
   4.2 Prototype Features and Capabilities ............................................................... 9
   4.3 Prototype Development Challenges .............................................................. 10
5. Glossary ................................................................................................................... 12
6. References ............................................................................................................... 13
Listing of Figures

Figure 1: Current process flow (Individuals and Organizations) .........................4

Figure 2: Proposed process flow (Individuals and Organizations) ..........................6

Figure 3: Major functional component diagram.....................................................7

Figure 4: Customer Risk Matrix..............................................................................10
1. Introduction

Today, the United States is facing a decrease in volunteer activity. The Bureau of Labor has published reports stating that the volunteer rates have been steadily declining, down by 0.4% in 2015. This is primarily due to the lack of awareness of the volunteer opportunities in one’s area. Both individuals and organizations lack a platform to discover or advertise potential volunteer opportunities. This could potentially deter individuals from following through on their desire to volunteer their time and energy. This could also affect an organization’s ability to meet their goals or adequately support their cause. Both parties, potential volunteers and organizations, need a central resource that contains all the volunteer opportunity information for a given area. Figure 1 shows the current process flow for both individuals and organizations regarding volunteering. Figure 1 displays the challenges they both face when attempting to find or host volunteer opportunities.

![Figure 1: Current Process Flow (Individuals and Organizations)](image-url)
Voluntunities is the solution proposed by Old Dominion University’s CS411 Gold Group (Fall 2017). Voluntunities will eliminate the current disconnect between prospective volunteers and available volunteer opportunities. It will make volunteering more simple and convenient for all parties by presenting the vast amount of volunteer information in one space. Both individuals and organizations will benefit from this volunteering one-stop shop. Users looking to volunteer will be able to browse opportunities by location. This will allow them to discover the available opportunities nearby. Organizations will be able to post their own opportunities as well. These posts provide information such as what or who is needed, how many volunteers are needed, where the volunteering will take place, and their end goal. Organizations that need donations can advertise that as well. Voluntunities will streamline the entire volunteering process. Voluntunities will increase the number of active volunteers, the success of charitable organizations, and the overall awareness of volunteer opportunities in one’s area.

2. Voluntunities Product Description

Voluntunities is a smartphone and web application that will serve people wanting to volunteer as well as volunteer organizations. This resource will help to educate people about the volunteer opportunities around them. Users, both volunteers and organizations, will benefit from all the volunteer information the application will supply. Voluntunities will be a useful tool for everything volunteer related. Figure 2 shows the proposed process flow of volunteering with Voluntunities. There is less work and stress for an individual looking to volunteer. It makes it effort-less for organizations to track the growth of their opportunity.
2.1 Key Product Features and Capabilities

Voluntunites will act as a Virtual Bulletin Board for volunteer opportunities. Willing users will be able to browse, search, and sort volunteer opportunities in an area. They then can view prospective opportunities to learn more about it and apply. Organizations that are seeking volunteers or donations can also post opportunities. They can include details such as how much or what is needed, desired skills of volunteers, and how to apply.

Voluntunities will also allow users the ability to maintain their volunteer profile. For individuals, this means displaying what opportunities you have participated in as well as how many you have participated in. This will integrate social connections into volunteering.
Individuals can see and compare what others are volunteering their time towards.

Organizational volunteer profiles could show the progress of reaching their goals, upcoming opportunities, and information about the founders and members. These profiles will show the beliefs of organizations.

2.2 Major Components (Hardware and Software)

Voluntunities will be a web application that includes a database. The database will be used to store the data of Voluntunities. This includes user profiles and activity as well as the opportunity data. The application will be mobile and web-based via smartphone and a website. The users will consist of potential volunteers, volunteer organizations, and individual organizations seeking volunteers. The interaction between the three components can be seen in Figure 3.

![Figure 3: Major Functional Component Diagram](image-url)
3. Identification of Case Study

Voluntunities aims to target the age group of 16 to 25-year-olds. The Bureau of Labor reports that volunteer rates among 16 to 19-year-olds were 26.4% and among 20 to 24-year-olds were 18.4%\(^1\), the lowest demographic. These age groups were targeted because they hold some of the lowest volunteer rates. Voluntunities would look to increase these rates by providing volunteer information through a familiar platform to the targeted ages. According to the Pew Research Center, of the adults who use the Internet, the demographic age group 18-29 were the most involved in all forms of social media. Of this population, 87% had used Facebook, 37% had used Twitter, and 53% had used Instagram. The majority of targeted users by Voluntunities were among some of the highest social media users. Because Voluntunities will be a smartphone and web application, the targeted users will hopefully see it as a familiar and easy resource to utilize. By incorporating the social media aspect, Voluntunities will allow volunteer promotion and information to disseminate into communities or age groups that normally would not be looking to volunteer.

The other targeted group is organizations. This includes both volunteer organizations and individual organizations looking for volunteers. These were targeted because as it stands, these organizations have no place to post or advertise their information other than their website. They must rely on prospective volunteers to stumble into their website or word of mouth to receive attention. Voluntunities would benefit both large reputable organizations and smaller organizations looking to gain some backing.
4. Product Prototype Description

The prototype of Voluntunities will be designed as a working database that is displayed through the smartphone and web application. This database will store all the user and opportunity data. The applications will then present this data in a concise manner to the user.

4.1 Prototype Architecture (Hardware and Software)

The Voluntunities prototype will be presented as a web application backed by a MongoDB database. It will be able to perform the actions of posting an opportunity, searching for an opportunity, and creating an account. The prototype architecture will closely represent that of the full product.

4.2 Prototype Features and Capabilities

The Voluntunities prototype will allow the user to perform multiple actions including but not limited to:

- Log in using their own credentials
- Depending on the type of account (individual or organization), view and post opportunities in an area
- Receive turn-by-turn directions to the address the opportunity is being held at
- Make a monetary donation to an organization of their choice
4.3 Prototype Development Challenges

Potential challenges exist with the development of the prototype. The possibility of an individual using Voluntunities and finding no opportunities around them is likely if the user does not live in a high-population city. This is indicated by C1 in Figure 4. If the user happens to live in a remote or secluded area, the number of volunteer opportunities in their vicinity is likely to be scarce. In this instance, the user would then have to expand the search area to something they may not be comfortable traveling to.

The second development challenge might be the low adoption of the application. The Voluntunities application may not appeal to the targeted age group as expected. This is indicated by C2 in Figure 4. Low adoption would prevent Voluntunities from developing the large community it needs to produce sufficient volunteer opportunity information.

The third development challenge would be the possible confusion about an opportunity, indicated by C3 in Figure 4. The hosting organization would have to make sure that all their date and location information for an opportunity is correct. If they make a mistake in posting the opportunity, the volunteers signed up for that event may not show up or be able to participate. This could cause an unnecessary confusion among the users and would likely cause the opportunity to be canceled or rescheduled. A check would have to be put in place to verify an opportunity’s information.
C1. No volunteering opportunities posted in user’s location

C2. Low adoption

C3. Improper communication amongst users

Figure 4: Customer Risk Matrix
5. Glossary

**Virtual Volunteering**: Volunteer tasks completed, in whole or in part, via the Internet and a personal computer. It is also known as online volunteering, cyber service, online mentoring, and various other names.

**Virtual Bulletin Board**: System of presenting or sharing volunteer opportunities in a central place for users to browse, search, and post.
6. References


