

# Software Requirements Specification For Team Infinity

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Version 3

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## Revision History

Version	Date	Name	Description
1	11/16/22	Elizabeth Manemann	Initial Document
2	11/27/2022	Melisa Nguyen	Revision to subsections
3	12/4/2022	Melisa Nguyen	Final Document

# 1 Introduction

## 1.1 Overview

The Commerce Bank Fundraiser application will allow users to create and donate to various noble causes. This will be a central portal where a user can create an account or browse as a guest. Via both browsing methods, the user can view and donate to fundraisers created by other users. They can also save payment methods and view/edit fundraisers created by themselves.

This document provides information on the requirements for the Commerce Bank fundraiser web application. Project goals, scope and definitions are given in the introduction. Design constraints and application environment are described in the following section. Non-functional requirements are outlined for later verification. Functional requirements are given to show the system features and expected user interaction.

Project constraints will be included in separate documentation. The Software Project Management Plan will give specifics on project budget and schedule. A separate Test Plan document will address test specifications and procedures.

## 1.2 Goals and Objectives

The goal of this project is to provide a web application for users to donate to or create charities. This application is expected to be beginner user friendly with an easy-to-use interface. Users should be able to interact with the application, use its features and donate as a guest or create an account to utilize a more customized experience. These features include:

1. All users will be able to navigate all fundraisers available and donate to their charity of choice.
2. Functions are straightforward, easy to operate, and intuitive.
3. Allow users to create an account to save and/or update payment and personal information.
4. Users with accounts will be able to view all the fundraisers they have created.

## 1.3 Scope

The Commerce Bank fundraiser web application will provide users with the ability to create, view, and donate to fundraisers all within one interface. Users will be able to view a list of fundraisers created by

other users and donate if they wish. Users will also be able to create their own fundraiser and define a description and goal.

## 1.4 Definitions

**Commerce Bank fundraiser web application** – the product that is being described here; the web app system specified in this document.

**Project** – activities that will lead to the production of the Fundraiser application.

**Client** – the person or organization for which this Fundraiser application is being built.

**User** – the person or persons who will actually interact with the Fundraiser application.

**Use case** – describes a goal-oriented interaction between the system and an actor. A use case

may define several variants called scenarios that result in different paths through the use case and usually different outcomes.

**Scenario** – one path through a user case

**Actor** – user or other software system that receives value from a user case.

**Developer** – the person or organization developing the system, also sometimes called the supplier.

**Stakeholder** – anyone with an interest in the project and its outcomes. This includes clients, customers, users, developers, testers, managers and executives.

## 2 General Design Constraints

### 2.1 Commerce Bank Fundraiser Application Environment

The complete fundraiser web application will also include an intermediary API to access fundraiser, donor, and user information. All data about the application will be stored in a Microsoft SQL database.

### 2.2 User Characteristics

Fundraiser Application Users: Individuals based in the US who have a computer and access to the Internet who are proficient with navigating the internet and web applications. Users are looking to create fundraisers to raise money or donate to desired fundraisers. In order to donate to a fundraiser, the individual will need to have either a credit card or a bank account.

### 2.3 Mandated Constraints

The application will run on an Azure virtual machine and will be built using ReactJS. The intermediary API layer will be built with .NET C# and all application information will be stored in a Microsoft SQL database, based on team experience and consensus.

## 3 Nonfunctional Requirements

### 3.1 Operational Requirements

Usability: 95% of users will not need to read the user manual to be able to use the application. Text is clear across mobile and desktop views employing proper font size and colors. Format and language is simple and concise to allow a greater number of users to understand the website.

### **3.2 Performance Requirements**

Maintainability: Changes made to the User Profile will be updated without altering the website. Modifications including addition and subtraction of fundraisers will be deployed without altering the website's functionality.

### **3.3 Security Requirements**

The fundraiser web app has two features. For the first feature, Use Case 1, a user will login with an account to view their profile information, created fundraisers, and any saved payment information. For the second feature, Use Case 2, no security is required and access to fundraiser creation and donations is available to a "guest" user.

This application's backend is secured by firewall rules that only allow predetermined explicit connections to be made to the database. SQL queries are parametrized to prevent SQL injection.

### **3.4 Documentation and Training**

The Fundraiser web application will be accessible to any user without documentation or training with internet access. The application will be Internet accessible to the user by navigating to a specific URL. A user guide and system documentation will be provided to project stakeholders.

### **3.5 External Interface**

#### **3.5.1 User Interface**

The user interface will be eye-catching and visually appealing. The process to donate to a fundraiser will be straightforward and seamless. Additionally, the ability to view created fundraisers and create a new fundraiser will be in the same spot on the interface.

The interface will be intuitive. As a web app it will be streamlined and simple to use. No training will be provided and it is expected that 95% of users will be able to use the web app without any training.

#### **3.5.2 Software Interface**

The fundraiser web app API will serve as an intermediary layer between the front-end UI and the backend database.

## **4 Functional Requirements**

### **4.1 Required Features**

#### **4.1.1 Use Case: 1**

**Description: User donates to fundraiser**

Actors: any US based individual  
Value = high  
Cost = low

### Basic Path

1. User navigates to URL for fundraiser web application
2. User is greeted with a dashboard displaying available fundraisers created by other users
3. User decides to look at the details of a fundraiser by clicking on the “Details” button
4. A page displaying the description, donors, and progress towards goal for the selected fundraiser
5. User decides to Donate by clicking a “Donate” button on the Fundraiser Description page
6. User is able to input their address and other personal information
7. For a payment method, user is able to select either a credit card or a checking account and input the relevant details plus donation amount
8. After hitting submit, the user is greeted with a confirmation pop up

#### **4.1.2 Use Case: 2**

**Description: User creates an account to login**

Actors: any US based individual

Value = high

Cost = low

Basic Path

1. User navigates to URL for fundraiser web application
2. A dropdown menu will deploy when the user clicks “Hello Guest!” tab where user is able to choice to sign up if they do not have an existing account
3. A signup page will populate fields for the user to complete and complete the signup process
4. User will be redirected to their user profile page
5. “Home” tab is clicked on to bring the user to their homepage

#### **4.1.2 Use Case: 3**

**Description: User creates an a new fundraiser and tracks their fundraiser’s progress**

Actors: any US based individual

Value = high

Cost = low

Basic Path

1. User must be logged into an account to be able to create a fundraiser
2. Follow case 2 step 2 to find the login tab
3. Once user is logged in they will navigate to the homepage
4. User decides to click “Create New Fundraiser” to add a new fundraiser to the website
5. An “Add Fundraiser” page pops up with fields to be completed by the user
6. Fundraisers created by the user will be populated in the user’s “My Fundraisers”
7. Viewing the details page will show the progress of the fundraiser’s and those who have donated to the fundraiser

### **4.2 Optional Features**

**4.2.1 Use Case: 4****Description: User updates personal information**

Actors: any US based individual

Value = high

Cost = low

Basic Path

1. Following case 2 steps 1-2, the user must be logged in
2. Once logged in the "Hello 'User'" tab will allow users to navigate to the user profile page
3. All fields are editable any change will be saved to the user's profile in the database.
4. User must enter their old password to be able to change it.