

Software Requirements Specification For Fantastic 4

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Version 1

Prepared by:
Brayden Singleton

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Revision History

Version	Date	Name	Description
1	April 20	Brayden Singleton	Initial Document

1. Introduction

1.1. Overview

The Commerce Bank website will provide customers/users of Commerce Bank to access an expense report that keeps track of customer expenses. This website will also provide charts and a loan calculator to better budget for expenses

This document provides information on the requirements for the Commerce Bank website. Project goals, scope and definitions are given in the introduction. Design constraints and application environment are described in the following section. Nonfunctional 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 main objective of this project is to allow Commerce bank customers to track their expenses through a website. The Commerce Bank website is expected to:

1. Check against a database for correct email and password before letting a user in
2. Allow customers to enter expenses and provide charts
3. Correctly calculate loan plans
4. Enter personal information and store it in the database
5. Function in a simple and intuitive manner

1.3. Scope

The Commerce Banking website will provide users with the ability to record expenses and provide charts on a website. Users will be able to login and change pages to record expenses, see charts, enter personal information, and calculate loans to budget.

1.4. Definitions

Commerce Bank website- The product that is being described here; the software system specified in this document

Database- The system where information is stored

User/Customer- interchangeable reference to person using the Commerce Bank website

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.

2. General Design Constraints

2.1. Commerce Bank website Environment

The Commerce Bank website will be a online website. That online website will connect to a database that stores the information of current users and will verify during login and also display personal information along.

2.2. User Characteristics

Commerce Bank Users: Users who have an account with Commerce Bank. Users that have been a customer of Commerce Bank will more likely be proficient with budgeting.

2.3. Mandated Constraints

This application will be web based. It uses Python and SQL based off of team experience.

3. Nonfunctional Requirements

3.1. Operational Requirements

Usability: The user will need to have a registered account in the database before being able to access the functions of the system after logging in.

3.2. Performance Requirements

Changes made to passwords should update in the database

3.3. Security Requirements

There are 2 security implementations. The first is a login page that requires a user to correctly input their email and password. The second

3.4. Legal Requirements

Users should not have access to other users account for privacy

3.5. Documentation and Training

A user manual guide will be provided in another document

3.5.1. User Interface

After registration, users should be able to use 90% of the website without training from the user manual.

3.5.2. Software Interface

The software interface consists of Python and SQL Database programming languages accessible via Streamlit (Front end creation with Python), Python mySQL (Python connection to mySQL), and mySQL (Database information).

4. System Features

4.1. Required Features

4.1.1. User Registration

User: Any registered user of the Commerce Bank website

Cost: medium

Risk: low

Value: high

Basic Path:

1. Go to the Commerce Bank website
2. Select the registration option in the 'Select login option' menu bar
3. Enter: First Name, Last name, email and a password and confirm the password
4. Enter security questions

4.1.2. Use Case: Login

Cost: medium

Risk: High

Value High

Basic Path:

1. Go to the Commerce Bank website
2. Select the Login option in the 'Select login option' menu bar
3. Enter correct username and password
4. If entered correctly the user will be taken to the home page

4.2. Feature: Optional Features

4.2.1. Add transactions

Cost: low

Risk: low

Value: High

Basic Path

1. After logging in, select the 'Add transactions' page from the menu bar
2. Confirm email
3. Select the category of transaction from the menu bar
4. Enter transaction amount
5. Submit
6. Repeat if applicable

4.2.2. View Transaction

Cost: low

Risk: low

Value: High

Basic Path

1. After logging in, select the 'View transaction' page from the menu bar
2. Confirm email
3. Select enter

4.2.3. Loan Calculator

Cost: low

Risk: low

Value: High

Basic Path

1. After logging in, select the 'Loan calculator' page from the menu bar
2. Enter loan amount
3. Enter the loan term
4. Enter the interest rate
5. Enter the compound time in the menu bar
6. Select Enter

4.2.4. Settings

Cost: low

Risk: low

Value: High

Basic Path

1. After logging in, select the 'Settings' page from the menu bar
2. Enter personal information that is not already filled out