# Software Requirements Specification
# For
# Team Nova

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Version 2

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# Table of Contents:

## Revision History

| Version | Date | Name | Description |
|---|---|---|---|
| 1 | 09/23/10 | Abdul Mohammed | Initial Document |
| 2 | 12/10/25 | Haley Nilsen | Final Document |

# Introduction

## *1.1 Overview*

ClariFi is a comprehensive financial management application designed to help both individual users and business teams' budget effectively, track spending, and achieve their financial goals. Developed as part of UMKC's Software Engineering Capstone Class in partnership with Commerce Bank, the platform leverages Artificial Intelligence to deliver personalized spending recommendations and streamline financial updates through an intuitive, user-friendly interface.

ClariFi serves two primary user groups: personal users managing individual finances, and business administrators overseeing team budgets and project expenses. The business platform enables administrators to manage organizational income and expenses while providing team members with read-only access to view financial data, ensuring transparency without compromising financial control.

This document outlines the requirements for the ClariFi software application. The introduction provides an overview of project goals, scope, and key definitions. Subsequent sections describe design constraints and the application environment, followed by non-functional requirements for verification purposes. Functional requirements detail system features and anticipated user interactions for both personal and business use cases.

Project constraints, budget, and scheduling specifics are documented separately in the Software Project Management Plan. Test specifications and procedures are addressed in a dedicated Test Plan document.

## *2.1 Goals and Objectives*

Personal User Objectives:

1. **Unified Financial Dashboard** – Provide an intuitive interface that consolidates all personal financial information in one centralized location
2. **Seamless User Experience** – Deliver a simple, intuitive platform that requires minimal learning curve
3. **AI-Powered Personal Insights** – Offer personalized financial recommendations through an intelligent assistant that analyzes individual income and spending patterns

Business Team Objectives:

1. **Centralized Budget Management** – Enable business administrators to manage team income, expenses, and project budgets from a single platform
2. **Role-Based Access Control** – Provide team members with transparent, read-only access to organizational financial data while restricting editing privileges to administrators
3. **Team Financial Visibility** – Allow all team members to view income and expense reports, fostering accountability and financial awareness across the organization

## *3.1 Scope*

The scope of this project compasses the complete design, development, testing, and deployment of a financial web application for Commerce Bank that will serve as a comprehensive financial goal-tracking platform. The application will provide secure user authentication and account management capabilities, robust budget tracking functionality, and sophisticated data visualization tools that present financial information in clear, actionable formats.

## *4.1 Definitions*

**ClariFi Application** – the product that is being described here; the software system specified in this document.

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

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

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

## General Design Constraints

### *5.1 ClariFi Application Environment*

The ClariFi application is being developed for a desktop interface. The application will be run on a localhost, with one machine running all components of the application.

Frontend <--> LLM <--> Backend

### *6.1 User Characteristics*

**ClariFi Users**: ClariFi is designed for young students who want to build better financial habits by tracking their spending and setting short- and long-term goals. It also supports business users who need to monitor project budgets, track income and expenses, and establish financial goals for their teams. Business sub-users are limited to read-only access.

### *7.1 Mandated Constraints*

The application is designed to run on a localhost with any computer.

## Nonfunctional Requirements

### *8.1 Operational Requirements*

Usability: 95% of users will not need to read the user manual to be able to use the application.

### *9.1 Performance Requirements*

Maintainability: Changes made to the website will not require the localhost to stop running and can be made as needed.

### *10.1 Security Requirements*

ClariFi supports self-hosted authentication. Passwords are hashed and stored in the database, and when a user enters their password, it is hashed and checked to see if it matches the stored value.

### *11.1 Documentation and Training*

The ClariFi application will need to be downloaded and run on a localhost on the user's computer. The application will be sent without documentation or training. A user guide and system documentation will be provided to project stakeholders.

## *12.1 External Interface*

### 12.1.1 User Interface

The user interface will be eye-catching and visually appealing. When users access their ClariFi accounts, the interface will provide a smooth transition as users navigate each page. The website will use Plotly integration to display any charts on the dashboards.

The interface will be intuitive. As a desktop application, 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 app without any training.

### 12.2.1 Software Interface

The ClariFi frontend will serve as an interface and enable interaction between the users and the backend (Database/LLM).

# Functional Requirements

## *13.1 Required Features*

### 13.1.1 Use Case: 1

**Description: User Login / Check Dashboard**
Actors: Personal or Business Admin User

Value = high
Cost = high

Basic Path

1. User navigates to ClariFi website.
2. System prompts user to enter user e-mail and password.
3. User enters correct user e-mail and password and clicks Login.
4. System displays Dashboard with financial summaries such as: Expenses, a Pie Chart with Expense categories listed and what amount they have, and a Goals Summary.
5. System exits.

Alternate Path

1. User navigates to ClariFi website.
2. System prompts user to enter user e-mail and password.
3. User enters incorrect user e-mail and/or password and clicks Login.

4. System displays error message: “Invalid Email Address and / or Password”
5. User may choose to login again, returning to step 1, or exit.
6. System exits.

### 13.2.1 Use Case: 2

**Description: User creates and edits a goal**
Actors: Personal or Business Admin User

Value = high
Cost = medium

Basic Path: User creates a goal

1. User navigates to their home dashboard
2. User then selects the Goals icon from the Navigation Bar on the left
3. User clicks “Create Goal”
4. The target amount is then entered along with any money already saved
5. User clicks create and the goal is displayed on the screen

Alternate Path: User edits a goal

1. User navigates to their home dashboard
2. User then selects the Goals icon from the Navigation Bar on the left
3. “Edit Goal” is selected, each is located on the right side of each goal
4. User then edits the amount that they have saved towards the goal and selects “Save”

13.3.1 Use Case 3

**Description:** User starts a chat with the Chat Assistant
Actors: Personal or Business Admin User

Value = high
Cost = medium

Basic Path: User asks the Chat Assistant a question

1. User navigates to their home dashboard
2. The user then clicks on “Chat Assistant
3. The user picks from the suggested prompts
4. The chat assistant responds with the appropriate data

## *14.1 Optional Features*

### 14.1.1 Use Case: 4

**Description: Change Name or Email in Settings**
Actors: Any ClariFi user

Value = medium
Cost = medium

Basic Path

1. The user logs into their main dashboard
2. Then, the user navigates to the settings page in the bottom left corner of the screen
3. The user will then see their email and name once the page has loaded
4. The user can change their email or username
5. User clicks “Save Changes”

14.2.1 Use Case 5

Description: Change Password
Actors: Any ClariFi user

Value = medium
Cost = high

Basic Path:

1. The user logs into their main dashboard
2. Then, the user navigates to the settings page in the bottom left corner of the screen
3. On the left side of the settings page, the user will select “Change Password”
4. The user will enter in their old password, followed by their new password twice
5. The user clicks “Save Changes”
6. The system will ensure that the password meets requirements, and will show a success screen

Alternate Path:

1. The user logs into their main dashboard
2. Then, the user navigates to the settings page in the bottom left corner of the screen
3. On the left side of the settings page, the user will select “Change Password”
4. The user will enter in their old password, followed by their new password twice
5. The user clicks “Save Changes”
6. The system will catch that the password does not meet requirements, and shows an error message