

Chapter1

Specification

1.1 Introduction

Our program is meant to tackle the world of personal finance, to help people manage their money better and ensure a better financial future. Our application will be a financial assistant that helps users track their financial information and help them plan for their financial future. We are making this application because personal finance can be a very difficult topic for people to handle on their own without proper education or guidance. We hope that this will be a beneficial and easy to use tool for the average person trying to improve their financial situation.

1.2 Problem Statement

The problem is that managing your own finances can be a very difficult task. People often overspend, and have difficulty properly budgeting and saving for the future. Our application would be able to help keep people's financial information in one handy place, recommend courses of action, and keep you on track with your budgeting and saving goals.

1.3 Aim and Objectives

Aim: The aim of this project is to make an easy to use tool that helps people have a better understanding of their financial situation and to give them the ability to better track their financial goals and focus on saving for the future.

Objectives:

- Allow users to input their current savings in their accounts
- Allow users to input regularly occurring costs such as groceries and bills
- Allow users to input regularly occurring income streams like payroll
- Display information with eye-catching graphs and charts
- Help track progress on financial goals, such as saving up for a big purchase like a car or mortgage.
- Give budgeting suggestions on what categories have to be cut or can be raised

1.4 Stakeholders

The stakeholders for our project would be us as the developers, and all the end users. Our scope in stakeholders is limited because we are making a mostly standalone application with minimal integration to outside systems in the current scope of the project.

1.5 Methodology

We will be using the Scrum Development methodology. This consists of initial planning and designing phases, and then transfers into a series of time boxed sprints. A sprint is a multi-week period where certain tasks are divided among the team, features are developed, tested, and then implemented with the greater system. For our project, we will have 4 sprints that last 2 weeks each. To track progress, we will not only be documenting the design phases and products

of each sprint, but will be having weekly and daily meetings to discuss progress and make adjustments if necessary.

1.6 Tools

As of now, our application will be mainly based in Java. We will need to use external libraries for the user interface, graphing capabilities, and whatever complex math needs to be done. Right now, we are looking at using JavaFX for the UI, as it's a powerful tool and there are many frameworks that build off of it to enable many useful features such as making charts and graphs.

1.7 High-Level Business Requirements

- **Functional Requirements**

- Ability to input and save user data about account balances.
- Ability to simulate regular expenses and income streams.
- Ability to calculate things like basic taxes and expected balances over long periods of time.
- Ability to display user's information in graphs and charts.
- Ability to track specific financial goals like savings for a car/mortgage, regular investing/contribution to a 401k.
- Informs users about general finance terms and how they apply to their situation.

- **Non-functional requirements**

- Nice looking and easy to use GUI
- Stable program that doesn't fail on the user
- Strong security
- Compact, not an excessive file size

1.8 Product backlog

You can use the following table:

Priority Scale: Less stars is equivalent to higher importance

Priority	User Story	Tasks	Estimated effort	Sprint
*	As a user I want to be able to input and save my financial information so that I can keep track of my finances.	User can make an account	2 Hours	1
		User can input info	1 Hour	
		Info gets saved	3 Hour	
*	As a user I want to be able to input recurring expenses and sources of income.	User can put in expenses	2 hour	2
		User can put in income streams	2 hour	
		Difference between expenses and income is calculated	1 hour	
**	As a user I want to be able to set financial goals for the future such as saving.	Set savings goals	1 hour	3
		Update goals to show progress	2 hour	
		Acknowledge goals as complete	2 hour	
***	As a user I want to be able to see my information displayed in charts and graphs.	Create charts and graphs	3 hours	4
		Integrate charts and graphs in GUI	3 Hours	
		Enable users to generate different type of charts and with what data	2 hours	