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Building a budget tracking application that helps users manage their finances.

Software Project

Budget Tracker

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# Stage 1

## 1.1 Software Project Artefacts

### 1.1.1 Project Description

Documentation for budget tracker software project, this document will contain all the information, planning and testing aspects of the project.

The point of this project is to create a budget tracker for people or businesses to use to keep track of their financial aspects of their life and make it easier for them to handle it. Such as making it easier for a user to save money over time for large one-time purchases, they would want to buy.

#### Users

|  |  |
| --- | --- |
| **Name** | **Description** |
| Registered Regular User | This is a user actively using the application who has an active account. |
| Non-Registered User | This is someone who does not have an account actively with the application. |

#### User Personalities

|  |  |
| --- | --- |
| **Name** | **Personality** |
| Clancy Audie | Clancy is a regular user of the budget tracker, using in his day-to-day life to manage his finances better and make saving money easier. |
|  |  |
| Shannon Flann | Shannon is looking to take more care of her finances and is looking to discover her options when it comes to looking after her money. |

### 1.1.2 User Stories

#### Registered Regular User Stories

|  |  |  |
| --- | --- | --- |
| **User Stories** | **Notes** | **User Acceptance** |
| Clancy wants to set a budget. | Being able to set a budget, this budget is set by the user or can be set automatically by information that the user gives and is made around their life. | * Verify that they can create a budget. * Verify that they are given the option to create it manually or automatically. * Manually allows their own budget target. * Automatically creates a target based off their income and spendings. |
|  |  |  |
|  |  |  |
| Clancy would like to get reminders for important financial aspects of their life. | Reminders such as their pay day, close cash ISA. | * Verify that the option to turn on/off and configure notifications. * Verify that they can important dates in. * Verify that they receive a reminder 24 hours before and the day of. |
| Clancy would like to be able to view other currencies. | The ability to switch the currency you view your money; this can be used for if a payment is in a different current, it would be converted to the users.  If saving for a holiday can see the savings in the currency of the country, you would travel to. | * Verify the option to select between different currencies. |
| Clancy would like to input their income. | Being able to actively input the amount of money they are expected to earn within a month. | * Verify that they can manually input their income and the date that they are paid. * If there are off payments such as gifts, they can input this as well and declare it. |
| Clancy wants to declare whether Income is pre- or post- taxation | Being able to validate the data on whether it’s been taxed or not. To make the validity of the targets better. | * Being able to select if it is pre-tax or after tax. * If pre-tax show the amount it would be after tax. |
| Clancy would like to have a visual representation of their budgets. | They would like an option to view their budgets and goals with a visual representation such as a pie chart. | * Option to select a visual version. * Shows budgets in visual representation. |
| Clancy would like the ability to reset their password if they forget. | The ability to reset a password on the login screen for users. | * Being able to change password via login page with forgotten password. |
| Clancy would like if the login page to give an error code if they do not input the correct information. | Having a login to tell the user if they input their data incorrectly. | * If the user isn’t in the data base return an error * If the user is in the database but the password doesn’t match. Return an error. |
|  |  |  |

#### Non-registered User

|  |  |  |
| --- | --- | --- |
| **User Stories** | **Notes** | **User Acceptance** |
| Shannon would like to sign up to the application. | Shannon can sign up to the application with their email and a password. | * Shannon is given an option to sign in which allows them to input an email and password. |
| Shannon is told if they already have an account. | If Shannon has an account in the data base already then, they are told of this. | * If Shannon already has an account, they are told and given the option to either input a new email or log in to the already existing account. If the account password is correct. |
| Shannon passwords are checked to see if they are strong. | Checks the password Shannon inputs to see if it is strong or not. | * The password Shannon inputs is put against a password strength checker and if it does not fit the criteria, they are unable to create the account as it would endanger their info. |
| Shannon can see the type of functions the application has before signing up. | Being able to see demonstrations and pictures of the function that the application has before they sign up so that they know what they are signing up for. | * Before creating their account, the application should show functions that they are able to get with the application. |
| Shannon is given option to sign up using different services. | Being able to select if they want to create their account using different services such as google. | * When creating their account, they can select to login in with services they may use elsewhere such as google so that logging in the future is easier since it is linked to their account. |

|  |  |
| --- | --- |
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|  |  |

## 1.2 Software and Presentation

### 1.2.1 Software Prototype

This Prototype was created using Figma, this is due to it’s ease of use and accessibility to other people. While also allowing interactivity to plan it out.   
[Link to Figma](https://www.figma.com/design/0XiQlH4stzvK8XK8bgYJV5/Budget-Tracker-Website?node-id=0-1&p=f&t=4LxZ2xecreFJXJjb-0)

### 1.2.2 Video Presentation

## 1.3 Feedback

|  |  |
| --- | --- |
| **Feedback** | **Action Taken** |
| Use the phrase verify that in acceptance testing. | Changed the wording of acceptance testing to use the phrase verify that |

# Stage 2.

## 2.1 Use Case Diagram

A screenshot of a computer

AI-generated content may be incorrect.

Within this Use Case Diagram there are 2 identified actors for this application; a guest user that due to the limitations of the application that everything is behind a logged and registered account this means that they are given 2 options, logging in and creating an account. While the Logged in user requires that can access the system as its intended giving them access to the budget section and savings pot which all have their intended features.

## 2.2 Design

A screenshot of a computer screen

AI-generated content may be incorrect.

This Entity relationship diagram shows how each entity will interaction with each other. The 4 Entities are Budgets, Savings Pot, Inputted Data and Users. In this context, Users can interact with each entity, either creating their budget, setting its name, setting the time limit and the limit. While the Savings pot can be created by the user, it has a name, goal, duration and amount in the pot. While these are set by the user on creation, they are also affected by the Inputted Data entity, the user will interact with this setting their income, any expenditure throughout the month and any money that they want to add to the savings pot.

## 2.3 Software and Presentation

### 2.3.1 The Production Quality Software

### 2.3.2 Video Presentation

## 2.4 Transitioning Prototype into Production Quality

## 2.5 Test Specification