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# 1. An analysis of budgeting apps: Vault22, Mint, and You Need a Budget (YNAB).

#### 1.1 Introduction

Many find it hard to handle their money. Budgeting apps can simplify and improve this process (Wilson et al., 2021). This study looks at three popular budgeting apps. These are Vault22, Mint, and You Need A Budget (YNAB) (Wilson et al., 2021). These apps aim to boost financial smarts (Wilson et al., 2021). They offer features for budgeting and setting goals (Wilson et al., 2021). They also help users build good money habits (Wilson et al., 2021). To make a better budgeting tool, we must know it's good and bad points (Wilson et al., 2021).

This review rates each app carefully (Wilson et al., 2021). It looks at features and how easy they are to use. Security and overall worth are also checked (Wilson et al., 2021). We will explore unique features like gamification (Wilson et al., 2021). These features make budgeting more like a game (Wilson et al., 2021). We will also look at personal finance tips. These insights can help users make smart choices (Wilson et al., 2021). The goal is to suggest ways to make budgeting apps even better (Wilson et al., 2021). Understanding user needs is key to improving these tools (Wilson et al., 2021). A well-designed app can empower people to take control of their finances (Wilson et al., 2021). This can lead to better financial health and less stress (Wilson et al., 2021).

## 2. Research on Each of the Apps

#### 2.1 Vault22 (Formerly 22seven)

South African users can download the budgeting app Vault22 for free (Vault22.io, 2024). It was formerly called 22seven (Vault22.io, 2024). Old Mutual offers this user-friendly platform (Vault22.io, 2024). It works well with South African financial groups. The app gathers data from many accounts (Vault22.io, 2024). These include bank accounts, credit cards, loans, and investments (Vault22.io, 2024). This gives a full view of your financial state (Vault22.io, 2024).

A simple dashboard shows the user's finances.

- Easy-to-read graphs display spending habits (Vault22.io, 2024). They show sorted costs and savings (Vault22.io, 2024).
- Vault22 connects with many local financial firms (Vault22.io, 2024). This helps South African users easily manage their money (Vault22.io, 2024). This connection ensures data is up-to-date and reliable (Vault22.io, 2024).

#### Effortless Budgeting

- The app makes a budget based on your spending (Vault22.io, 2024). This makes it easier to control your money (Vault22.io, 2024).
- It helps you reach your goals (Vault22.io, 2024). For example, if you spend too much on eating out, the budget shows this. It helps you cut back (Vault22.io, 2024).
- You can invest in Vault22 each month in a tax-free way at a low cost (Vault22.io, 2024). This feature makes saving money simple (Vault22.io, 2024).

The software keeps your data safe (Vault22.io, 2024). It uses strong encryption and data safety steps (Vault22.io, 2024). This protects your financial data (Vault22.io, 2024). Vault22 mainly works in South Africa. So, it might not be as helpful for people outside of South Africa (Vault22.io, 2024).

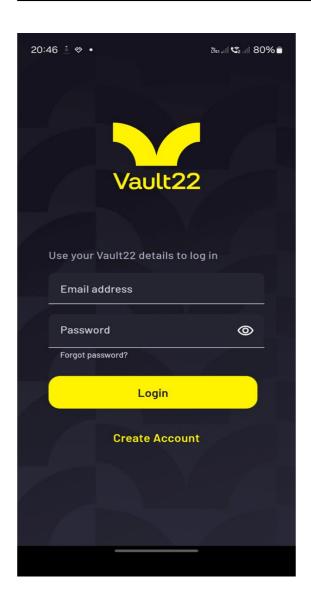
#### Basic financial features:

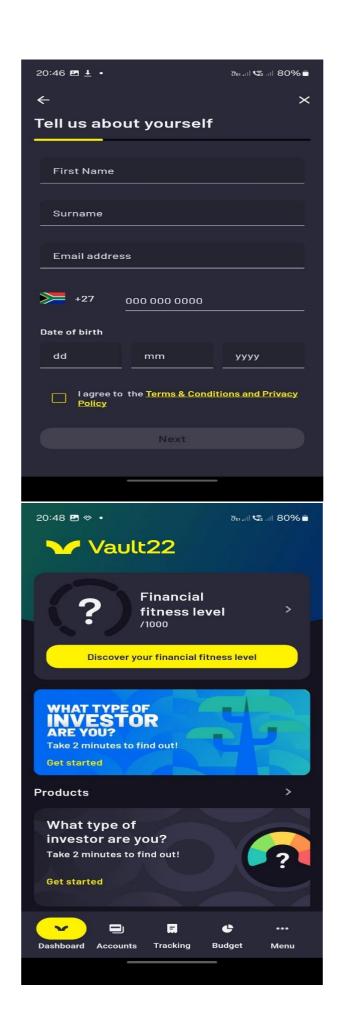
- The app has good budgeting tools (Vault22.io, 2024). But it might not have advanced features found in other apps (Vault22.io, 2024).
- It may not have detailed debt tools (Vault22.io, 2024).
- It may lack complex financial data (Vault22.io, 2024).

#### Innovative Features:

- Vault22 logs and sorts of costs automatically (Vault22.io, 2024). This is based on spending habits and custom budgets (Vault22.io, 2024).
- It offers low-cost, tax-free monthly ways to invest (Vault22.io, 2024). Imagine saving a little each month (Vault22.io, 2024). Over time, this can grow into a large sum. This feature helps users build wealth slowly (Vault22.io, 2024).

# Screenshot for the BUDGET APPLICATION





#### 2.2 Mint Budget App

Mint is a popular personal finance program used around the world. Its easy design helps people manage their money better (Mint, 2024). It simplifies budgeting, watches spending, and helps with saving (Mint, 2024). Mint gives a full view of your money by connecting to different financial accounts (Mint, 2024).

These include bank accounts, credit cards, loans, and investments (Mint, 2024).

Mint's design is straightforward, using a dashboard.

- This dashboard shows a summary of all your money activity in one place (Mint, 2024).
- Users can easily see charts that show their spending habits and progress toward their financial goals (Mint, 2024).
- These visual aids help people understand where their money is going and how close they are to reaching their targets (Mint, 2024).

Mint links to many banks and financial groups, both in the United States and other countries. This wide connection lets users see all their accounts in one spot (Mint, 2024).

- The app automatically sorts expenses into categories (Mint, 2024). This makes it simpler to track where money is spent and adjust budgets as needed (Mint, 2024).
- Mint also has a bill tracker that reminds users about upcoming payments (Mint, 2024). This helps avoid late fees and keeps finances on track (Mint, 2024).
- Mint also provides free credit score monitoring (Mint, 2024). People can check their credit score and find ways to improve it, leading to better financial health (Mint, 2024).
- Mint is free to use and offers many features without any hidden costs, which makes it appealing to many users (Mint, 2024).

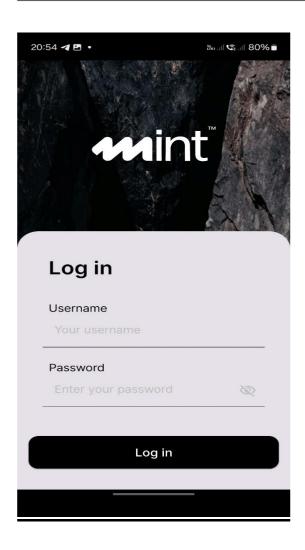
However, Mint has some issues. Sometimes, the data doesn't sync correctly.

- This can lead to errors in the information users see (Mint, 2024). Even though the app is free, it shows ads and suggests financial products. Some users might find this annoying (Mint, 2024).
- Mint uses encryption to protect user data. Still, some people worry about security, especially since Mint collects sensitive financial details (Mint, 2024). It is important to remember that no system is totally safe from possible breaches (Mint, 2024).

Mint offers services to monitor credit scores and track bills.

- These tools help users improve their credit and manage their finances more effectively (Mint, 2024). By keeping an eye on their credit score, users can take steps to raise it (Mint, 2024). The bill tracking feature ensures that payments are made on time, which avoids negative impacts on credit scores (Mint, 2024).

# **Screenshot for the BUDGET APPLICATION**



#### 2.3 You Need A Budget (YNAB)

You Need a Budget (YNAB) is a popular app for managing your money. It has an easy-touse design and clear categories (Ynab.com, 2024). You can track your income, expenses, and savings goals simply (Ynab.com, 2024). YNAB uses the Four Rules method to help you plan your spending (Ynab.com, 2024). It tells you to think about how you will spend your money beforehand (Ynab.com, 2024).

The app also gives you detailed reports and visuals of your finances.

- YNAB wants you to plan your budget (Ynab.com, 2024).
- It asks you to give every dollar a job before you spend it (Ynab.com, 2024). This stops you from spending carelessly (Ynab.com, 2024). It also helps you focus on reaching your financial aims (Ynab.com, 2024).

YNAB's reports give you a close look at your money.

- They point out where your money is going (Ynab.com, 2024). They also suggest easy ways to save and invest (Ynab.com, 2024).
- YNAB lets you set and watch your financial targets (Ynab.com, 2024). Examples of targets are saving for a house, paying off debt, and buying big items (Ynab.com, 2024).
- To help users learn about budgeting, YNAB has many learning tools (Ynab.com, 2024). These include classes and how-to guides (Ynab.com, 2024).
- YNAB keeps your data safe with strong encryption (Ynab.com, 2024). It also follows the best rules for data security (Ynab.com, 2024).

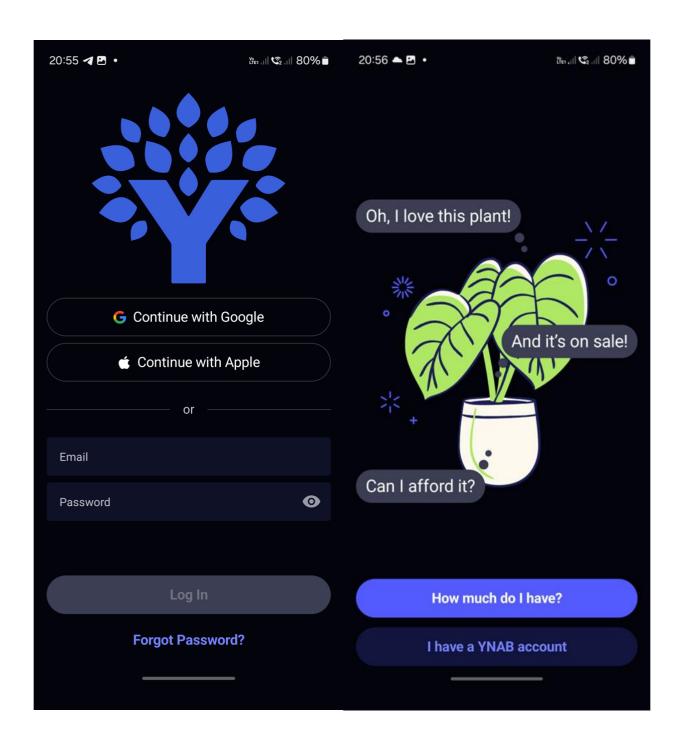
YNAB charges a fee after a 34-day free trial.

- The high monthly cost might be too much for some users (Ynab.com, 2024). Some may like free choices like Mint better (Ynab.com, 2024).
- Setting up the app can be harder than other budget apps (Ynab.com, 2024). It needs more effort to organize your money at first (Ynab.com, 2024).
- YNAB connects to fewer banks than Mint does. However, YNAB pushes you to plan your spending before you spend (Ynab.com, 2024). It helps you set goals for saving and spending (Ynab.com, 2024).

The app's goal tool shows you how well you are saving.

- You can see how far you've come (Ynab.com, 2024). You also see how much more you need to do to reach your goals (Ynab.com, 2024). For instance, you can set a goal to save R5,000 for a car down payment (Ynab.com, 2024).
- YNAB will track your progress and show you how close you are to reaching that target (Ynab.com, 2024).

# **Screenshot for the BUDGET APPLICATION**



# 3. Comparative infographic Summary

FEATURE	VAULT22	MINT	YNAB
соѕт	FREE	FREE	PAID (AFTER TRIALS)
ACCESSIBILITY	HIGH (LOCAL)	HIGN (GLOBAL)	MODERATE
BILL REMINDERS	NO	YES	NO
BUDGET PLAN METHOD	AUTO GENERATED	HISTORICAL	PROACTIVE (RULES)
CREDIT SCORE TRACKING	NO	YES	NO

# 4. Selected Features for SPENDWISE Application

#### The features of the new budgeting software are based on the prior analysis:

- It will include bank links to Vault22 and Mint, allowing for the easy import of transaction data and better expenditure tracking.
- The program will stress goal-focused budgeting, as inspired by YNAB, asking users to assign objectives to each revenue source to promote purposeful spending.
- Like Mint, visual dashboards will present charts and summaries of daily, weekly, and monthly spending patterns.
- Users will be able to check their credit scores using Mint features if they wish to activate it.
- To encourage saving, the app will use gamified components such as medals and streaks, similar to YNAB's approach.
- Spending notifications will tell customers when they exceed their spending limitations, allowing them to keep on target.

## 5. SpendWise Planning App & Design

#### 5.1 Introduction

#### 5.1.1 App Overview

SpendWise is an Al-powered budgeting and financial management app designed to help users take control of their spending habits, optimize savings, and manage subscriptions efficiently. The app leverages predictive analytics, gamification, and intuitive UI to deliver a seamless financial experience.

App Name & Initial Icon Design

Name: SpendWise

Logo: A stylized PEN, symbolizing financial wisdom and smart spending decisions.

Color Palette:

Primary: Teal (#2DD4BF) – Trust and financial clarity

Secondary: Deep Purple (#7E22CE) – Creativity and intelligence

Accent: Amber (#F59E0B) – Alerts and key financial insights

(Wilson et al., 2021).

#### **5.1.2 Innovative Features**

Al-Powered Spending Predictions: Analyzes spending habits and forecasts future expenditures.

Subscription Cancellation Assistant: Highlights unused subscriptions and allows one-click cancellation.

Cash Flow Calendar: Visual timeline of income and expenses.

Gamified Savings Goals: Encourages saving with badges, streaks, and achievements.

Multi-Currency Travel Mode: Tracks foreign transactions and converts them in real-time.

Interactive Onboarding Quiz: Personalizes financial advice based on user behavior.

Dark Mode & Accessibility Features: Customizable UI for better usability.

(Wilson et al., 2021).

# 5.2 App Requirements

#### 5.2.1 Technical Requirements

1. Platform Compatibility

Native mobile app for iOS and Android.

Cloud-based data storage for user financial records.

2. Security & Privacy

End-to-end encryption for transactions.

Biometric authentication (Face ID, fingerprint scanning).

GDPR-compliant data storage.

3. Integration & API Support

Bank and fintech API integration (Plaid, Open Banking, etc.).

Currency exchange rate API for real-time conversions.

Social media sharing for gamified achievements.

(Wilson et al., 2021).

## **5.3 Functional Requirements**

#### 1. Dashboard

- Displays financial summary, upcoming payments, and alerts.
- Customizable widgets for personalized insights.

#### 2. Al-Powered Spending Predictions

- Graphs comparing projected vs. actual spending.
- Category-based breakdown (e.g., Dining, Groceries, Utilities).
- Automated spending recommendations.

#### 3. Subscription Cancellation Assistant

- Detects recurring charges and highlights unused subscriptions.
- One-click cancellation and estimated savings calculator.

#### 4. Cash Flow Calendar

- Displays income and expenses with color-coded highlights.
- Provides insights on financial health trends.

#### 5. Gamified Savings Goals

- Users can set goals with visual progress indicators.
- Streak-based incentives and reward badges.

#### 6. Multi-Currency Travel Mode

- Converts transactions in real-time.
- Displays spending breakdown per trip.

### **5.4 User Interface Design**

#### **Screen Mockups & Navigation:**

#### 1. Home Dashboard

- Purpose: Provides an overview of financial health, key alerts, and quick access to app features.
- Navigation: Links to spending insights, subscriptions, savings goals, and travel mode.

#### 2. Spending Predictions

- Purpose: Al-driven spending forecast with visual graphs and savings recommendations.
- Navigation: Toggle between spending categories and receive personalized financial tips.

#### 3. Subscription Management

- Purpose: Identifies unused subscriptions and facilitates easy cancellation.
- Navigation: Links to bank integrations for transaction analysis.

#### 4. Cash Flow Calendar

- Purpose: Displays financial activity in a timeline format.
- Navigation: Tap on a date to view detailed transactions.

#### 5. Gamified Savings

- Purpose: Encourages saving through rewards and progress visualization.
- Navigation: Allows users to set and track multiple savings goals.

#### (Wilson et al., 2021).

#### 6. Multi-Currency Travel Mode

- Purpose: Manages foreign transactions and provides real-time currency conversion.
- Navigation: Integrated with the dashboard for quick access.

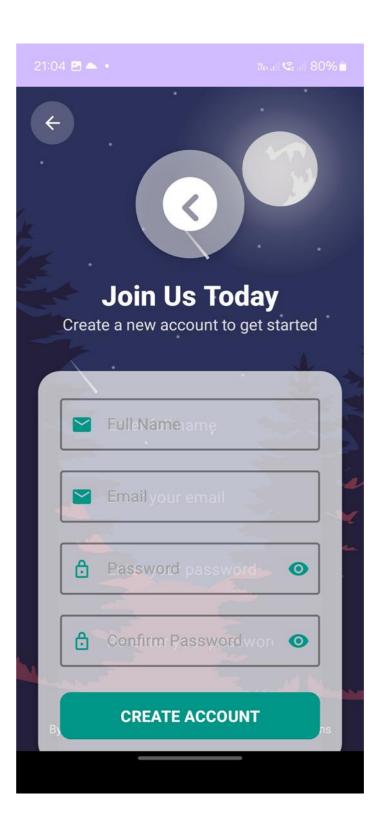
(Wilson et al., 2021).

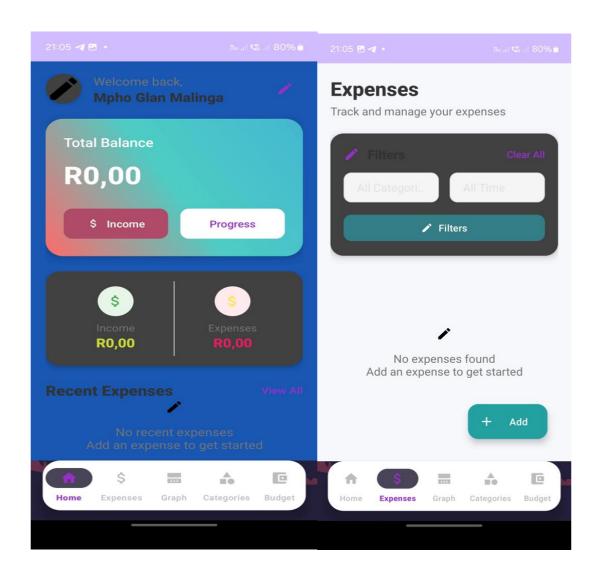
# **NAVIGATION AREA/MAP**

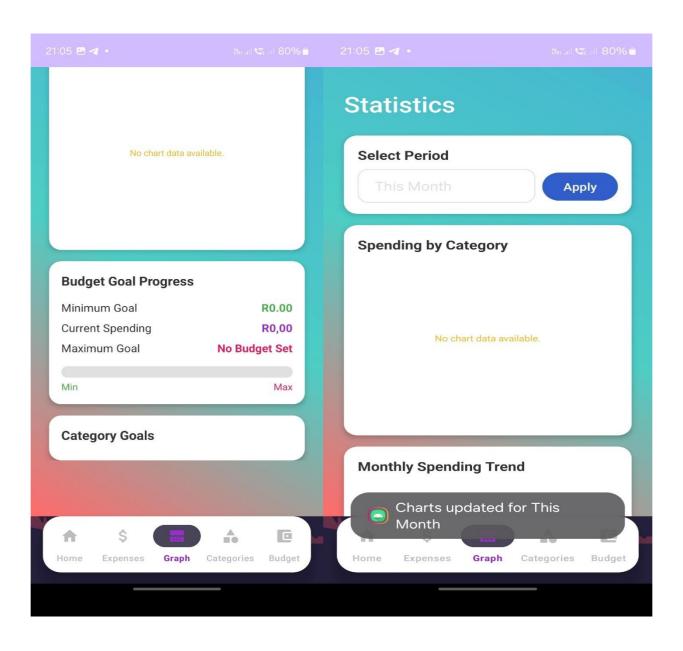
DASHBOARD > (LOGIN/REGISTER)
|| Add Expense || View Report || Categories || Goals ||

# Below is a visual representation of the SpendWise Prototype

# **SCREENSHOTS Welcome Back** SpendWise Password password 0 Forgot Password? **LOGIN** Don't have an account? Sign Up Budget Tracker Tegns Conditions Apply









Yfer .III €2..II 80% 🗓

# **Categories**

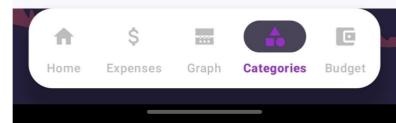
Manage your expense categories

Search categories



No categories found Add a category to get started





# **Budget**

Manage your monthly budget

**Monthly Budget** 

**R0,00** 

June 2025

Spent: R0,00

Remaining: R0,00

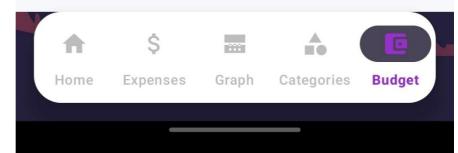
**Set Budget** 

# **Category Budgets**

No categories found

Add a pategory to got started

Logout

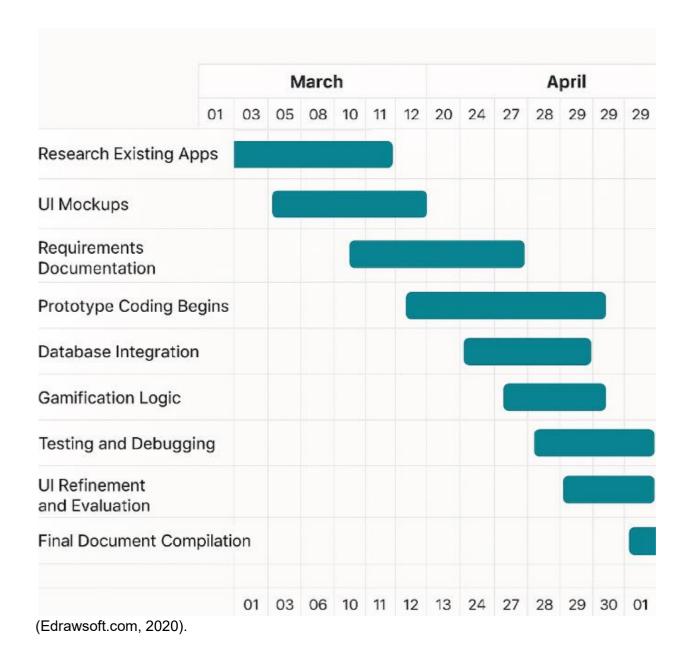


# **VIDEOS PRESENTATION**



# 5.6 Project Plan (Gantt Summary)

TASK	START	END	DURATION
Research App	13 MARCH 2025	19 MARCH 2025	6 DAYS
UI Mockups	20 MARCH 2025	25 MARCH 2025	5 DAYS
Requirements Docs	26 MARCH 2025	02 APRIL 2025	7 DAYS
<b>Prototype Coding</b>	03 APRIL 2025	15 APRIL 2025	12 DAYS
DB Integration	16 APRIL 2025	20 APRIL 2025	4 DAYS
<b>Gamification Logic</b>	21 APRIL 2025	26 APRIL 2025	5 DAYS
Testing &	27 APRIL 2025	31 APRIL 2025	4 DAYS
Debugging			
UI Refinement	01 MAY 2025	10 MAY 2025	10 DAYS
Final Compilation	11 MAY 2025	26 JUNE 2025	15 DAYS



## 6. Conclusion

An effective personal budgeting software requires budgeting, goal tracking, cost classification, and security (Wilson et al., 2021). These features are shown in Vault22, Mint, and YNAB (Wilson et al., 2021). Vault22 focuses on making budgets that fit each person's needs. Mint has many features, like checking your credit score (Wilson et al., 2021). YNAB helps people plan and reach their money goals (Wilson et al., 2021).

Imagine an app that combines the best parts of these platforms (Wilson et al., 2021). It could add fun elements like gamification to keep users engaged (Wilson et al., 2021). Progress dashboards could show how well users are doing, and easy navigation would make the app simple to use (Wilson et al., 2021). Knowing what each app does well and where it falls short allows developers to create a tool that is useful and fun to use (Wilson et al., 2021). For example, a visible progress bar can motivate users to save more each month (Wilson et al., 2021). Clear categories can show users where their money goes. Secure systems can protect their financial data (Wilson et al., 2021).

# 7. Reference List

Edrawsoft.com. (2020). All-In-One Cross-Platform Diagram Software for Flowchart, Org Chart and Mind Map. [online] Available at: <a href="https://www.edrawsoft.com/">https://www.edrawsoft.com/</a>.

Mint (2024). Budget Tracker & Planner | Free Online Money Management | Mint. [online] mint.intuit.com. Available at: <a href="https://mint.intuit.com/">https://mint.intuit.com/</a>.

Vault22.io. (2024). Vault22. [online] Available at: https://www.vault22.io/.

Wilson, J.O.S., Panos, G.A. and Adcock, C. (2021). Financial Literacy and Responsible Finance in the FinTech Era: Capabilities and Challenges. Routledge.

YNAB (n.d.). YNAB. Personal Budgeting Software for Windows, Mac, iOS, and Android. [online] YNAB. Available at: <a href="https://www.ynab.com/">https://www.ynab.com/</a>.