

# Monefy

### 1. Introduction:

This is a mobile-based software application which aims to build a financial organizer and financial tracker.

The application allows the users to add a new expense or new income so that the user can track his daily purchase so he can save his money due to comparing purchases with the past months.

The application comes with two platforms iOS and Android .And also it allows the user to sync data between his devices.

## 1.1. Purpose

The purpose of this document is to outline the requirements for "Monefy" software. It will explain the purpose and features of the System, what the system will do and how the users will interact with the system and with each other.

### 1.2. Scope

This Scope of the project is limited to the testing of the features described in the succeeding sections of this document

#### 1.3. Reference

Nil

# 2. Specific Requirements:

## 2.1. System Modules

Following features/modules be available to user role:

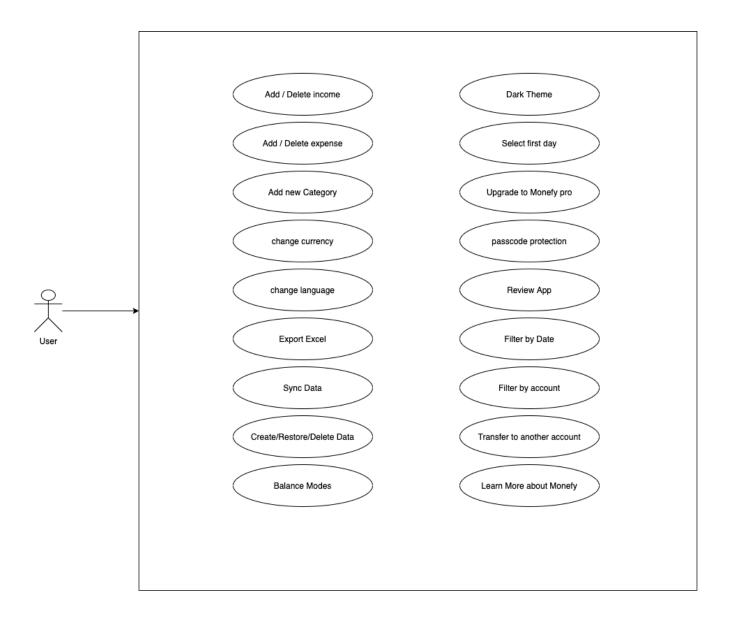
Client		
Add/Edit/Delete incomes		
Add/Edit/Delete expenses		
Add new Category [incomes / expenses]		
Add/Edit new account		
Change currency		
Change Language		
Export excel file		
Sync data		
Create/Restore/Delete data		
Balance Modes [ Budget mode , Carry over , Future recurring records ]		
Dark Theme		
Select first day of [ Month / Week ]		
Upgrade to Monefy pro		
Passcode protection		
Review the app		
Filter by [ Day, Week, Month, Year, All, Interval, Choosing Date]		
Filter by Account [ Cash - Payment Card]		
Transfer to another account		
Learn more about Monefy		

## Description of modules:

Moule Name	Description
Add/Edit/Delete	User can add, edit or delete any income related to specific
incomes	category
Add/Edit/Delete	User can add, edit or delete any expenses related to
expenses	specific category
Add new Category	User can add a new category for income or expense
[incomes /	
expenses]	
Add new Category	User can add a new category for income or expense
[incomes /	
expenses]	
Change currency	User can change his currency that related to his country
Add/Edit new	User can add new account over the default accounts [ cash
account	- card payment ]
Change Language	User can choose any language he wants
Export excel file	User can extract his data on excel file
Sync data	User can sync his data with Google Drive or Dropbox
Create/Restore/Del	User can backup his data or restore it, also he can delete
ete data	it.
Balance Modes [	Users can enable / disable different balance modes.
Budget mode,	
Carry over, Future	
recurring records ]	
Dark Theme	User can change his app to Dark Theme mode
Select first day of [	User can set the first day of month and also week
Month / Week ]	

Upgrade to Monefy	User can upgrade to the Monefy pro features
pro	
Passcode	User can add a passcode to protect his data
protection	
Review the app	User can add his review to the app
Filter By Date	User can filter his purchase according to selected date
Filter By Account	User can filter his purchase according to selected account
Transfer to another	User can transfer from account to another account
account	
Learn more about	User can go to another link or screen to know more
Monefy	

## 2.2 User Interfaces (Use Case Diagram)



#### 2.3 Functional Test Cases

#### 2.3.1 Add / Delete income

- Check adding positive value with cash
- Check adding positive value with payment card
- Check adding positive value with selecting date
- Check adding positive value with note
- Check adding negative value
- Check adding zero value
- Try to change the default category of income
- Try to delete the added income
- Check the reflection of adding/ deleting in home screen
- Check the functionality of Calculator
- Check the income GET endpoint return all add incomes
- Check the income Delete endpoint will delete the incomes
- Check the income POST endpoint will add income into database

#### 2.3.2 Add/Edit/Delete expenses

- Check adding positive value with cash
- Check adding positive value with payment card
- Check adding positive value with selecting date
- Check adding positive value with note
- Check adding negative value
- Check adding zero value
- Try to change the default category of expenses
- Try to delete the added expenses
- Check the reflection of adding/ deleting in home screen
- Check the functionality of Calculator
- Check the expense GET endpoint return all add incomes

- Check the expense Delete endpoint will delete the incomes
- Check the expense POST endpoint will add income into database

#### 2.3.3 Add new Category [incomes / expenses]

- Try to add new category for income
- Try to add new category for expense
- Try to uninstall the app and install it again
- Check the new category available to use in calculations for both income and expenses
- Check POST / GET / DELETE endpoints for new categories and their reflection on the database.

#### 2.3.4 Add/Edit new account

- Check that the new account will be activated from the starting of initial balance date with enabling "included in the balance" switch.
- Try to disable the "included in the balance" switch.
- Try to add initial balance for the account and check if it reflect on the home screen
- Try editing the existing account
- Try to exchange rate and changing the existing currency
- Check POST / PUT / GET / DELETE endpoints for new account

#### 2.3.5 Change currency

- Check that the selected currency will reflect on the whole accounts and with both incomes and expenses
- Check closing the app and opening again will make the currency at the same value before
- Check PATCH/GET endpoints for change currency.

#### 2.3.6 Change Language

- Check that changing language will reflect on the app
- Try to close the app and open it again to make sure that the changes still remain

### 2.3.7 Export excel file

• Try to extract the data as an Excel sheet with selected language

#### 2.3.8 Sync data

- Try to sync data with google drive
- Try to sync data with Dropbox
- Try to use another device and try to sync it

#### 2.3.9 Create/Restore/Delete data

- Try to create a backup
- Try with full memory device
- Try to restore a backup
- Try to delete a backup and check that all data are deleted

#### 2.3.10 Balance Modes

- Try to use Budget mode and check if the income still fixes
- Try to use carry over
- Try to use Future recurring records

## 2.3.11 Dark Theme

• Try to switch to Dark Mode and check that all elements appears for example make sure that black words are converted to white for example

#### 2.3.12 Select first day of [ Month / Week ]

 Select the first day of month and go to filter feature to see if the month will start calculating from this day  Select the first day of week and go to filter feature to see if the week will start calculating from this day

#### 2.3.13 Filter by Account

- Try to use cash and check that it will represent all purchase that made by cash only or not
- Try to use card and check if it will represent all purchase that made by card only or not
- Try to select both and check if it will represent all purchase
- Try to change between them and make sure the change happens

#### 2.3.14 Transfer to another account

- Make a transfer and make sure that the value is deducted from the first account and the added to the second account
- Try to transfer negative amount
- Try to transfer zero amount

## 2.3.15 Filter by Date

- Try to filter by day and make sure that the all purchase that happened in that day only will be presented
- Try to filter by week and make sure that the week will start with selected day of week
- Try to filter by month and make sure that the month will start with the day of month
- Try to filter by Year
- Try to filter by Interval
- Try to filter by date

## 2.3.16 About Monefy

- Try to click on Monefy Privacy Policy will redirect the user to corresponding page
- Try to click on website link and check if it navigate correctly to it

#### 2.3.17 Review App

 Try to click on Review app button and check if it will navigate correctly to the review page

#### 2.4 Non functional Test Cases

#### 1. Performance Constraints:

- a. Device performance:
  - i. Check that the device startup in allowed time
  - ii. Check that app still at the same state after navigating from another app
  - iii. Check that the app not consuming a lot of memory and battery
  - iv. Check different devices vendors
  - v. Check different OS versions
- b. Network Performance
  - i. Try App using Wifi, 2.5G, 3G, 4G with switching between them
  - ii. Try with low speed connection
  - iii. Try disconnect internet connection and come back again
  - iv. Try with Wifi/Mobile Data connected but no internet connection.
  - v. Try with Airplane mode.
- c. Server Performance
  - i. Make sure that the server respond in specific time
  - ii. Make sure that the number of api calls in one feature not too much
  - iii. Make sure that the app does not crash when the server is down or updated and return a descriptive message.

#### 2. Compatibility Constraints:

- a. Make sure that app performs well in both Android and iOS
- b. Make sure that app can be scalable to fit in different mobile screen sizes
- c. Make sure that app not prevent alarm / calls functions

#### 3. Security Constraints:

- a. Check when applying the passcode protection it cannot be broken by brute force attacks.
- b. Make sure that connection between application and server is secured

- c. Make sure that app cannot apply reverse engineering on it
- d. Avoid buffer overflow and memory corruption
- e. Make sure that subscribe with Monefy pro will not cost more than user paid

#### **Prioritization of Test Cases**

- Check adding positive value with cash/card for income/expense
- Check the functionality of Calculator, should work as expected
- Check that changing language will reflect on the app
- Check that the selected currency will reflect on the whole accounts and with both incomes and expenses
- Try to use cash and check that it will represent all purchase that made by cash only or not
- Try to use card and check if it will represent all purchase that made by card only or not
- Try to select both and check if it will represent all purchase
- Try to filter by day and make sure that the all purchase that happened in that day only will be presented
- Try to filter by week and make sure that the week will start with selected day of week
- Try to filter by month and make sure that the month will start with the day of month
- Try to filter by Year
- Try to filter by Interval
- Try to filter by date
- Check that the device startup in allowed time
- Check that app still at the same state after navigating from another app
- Check that the app not consuming a lot of memory and battery
- Check different devices vendors
- Check different OS versions
- Make sure that the server respond in specific time
- Make sure that the number of api calls in one feature not too much
- Make sure that the app does not crash when the server is down or updated and return a descriptive message.
- Make sure that app performs well in both Android and iOS
- Make a transfer and make sure that the value is deducted from the first account and the added to the second account
- Try to create a backup

- Try to restore a backup
- Try to delete a backup and check that all data are deleted
- Try to sync data with google drive
- Try to sync data with Dropbox
- Select the first day of month/week and go to filter feature to see if the month/week will start calculating from this day
- Check that the new account will be activated from the starting of initial balance date with enabling "included in the balance" switch.
- Try to disable the "included in the balance" switch.
- Try to add initial balance for the account and check if it reflect on the home screen
- Try editing the existing account
- Try to exchange rate and changing the existing currency
- Make sure that app performs well in both Android and iOS
- Make sure that app can be scalable to fit in different mobile screen sizes
- Make sure that app not prevent alarm / calls functions
- Try to change the default category of expenses
- Try to delete the added expenses
- Check adding positive value with note
- Check adding negative value
- Check adding zero value
- Try to change the default category of income
- Try to delete the added income
- Check the reflection of adding/ deleting in home screen
- Try to extract the data as an Excel sheet with selected language
- Try to switch to Dark Mode and check that all elements appears for example make sure that black words are converted to white for example
- Check when applying the passcode protection it cannot be broken by brute force attacks.
- Make sure that connection between application and server is secured
- Make sure that app cannot apply reverse engineering on it
- Avoid buffer overflow and memory corruption
- Make sure that subscribe with Monefy pro will not cost more than user paid
- Try to add new category for income
- Try to add new category for expense

- Try to uninstall the app and install it again
- Check the new category available to use in calculations for both income and expenses
- Try App using Wifi, 2.5G, 3G, 4G with switching between them
- Try with low speed connection
- Try disconnect internet connection and come back again
- Try with Wifi/Mobile Data connected but no internet connection.
- Try with Airplane mode.
- Try to use Budget mode and check if the income still fixes
- Try to use carry over
- Try to use Future recurring records
- Try to click on Monefy Privacy Policy will redirect the user to corresponding page
- Try to click on website link and check if it navigate correctly to it