Monefy Test Plan

Version 1.0

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 2017-11-10 | 0.1 | Initial Draft | Atul R |
|  |  | Update according to latest implementation. Add test cases for Monefy web application. | N/A |
|  |  |  |  |
|  |  |  |  |

Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title** | **Date**  **yyyy-mm-dd** | **Signature** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table of Contents

1. Introduction

1.1 Purpose of this document

1.2 Intended Audience

1.3 Scope

1.4 Definitions and acronyms

1.4.1 Definitions

1.4.2 Acronyms and abbreviations

1.5 References

2. Test-plan introduction

3. Test items

3.1 Web application

3.2 Monefy Android application

3.3 Monefy iOS application

3.4 End-to-end Scenario

3.5 Non-functional Scenario

4. Features to be tested

5. Features not to be tested

6. Approach

6.1 Approach to configuration and installation

7. Item pass/fail criteria

7.1 Installation and Configuration

7.2 Documentation problems

7.3 Test Entry and Exit criteria

8. Suspension criteria and resumption requirements

9. Environmental needs

9.1 Hardware

9.2 Software

9.3 Other

10. Test procedure

10.1 Test case specifications

10.1.1 Monefy Android/iOS functional End -to- End Scenarios - E2E

10.1.2 Non-functional Scenario - NFR

10.2 Defect Tracking Tools

11. Responsibilities

11.1 Developers

11.2 Testers

11.3 User representative

12. Risks and contingencies

# Introduction

## Purpose of this document

This document describes the Monefy(Mobile App) acceptance test plan, which works as a guidance for Monefy acceptance test activities. The acceptance test ensures that Monefy product meets the customer requirements at an accredited level.

## Intended Audience

This document is intended for:

* Monefy testers
* Monefy developers
* Monefy Proponent and Customer
* Monefy project supervisor
* All other stakeholders who are interested in this project

## Scope

This document includes the plan, items, scope, approach, environment and procedure of Monefy acceptance test. Then the pass/fail criteria of the test items are defined. After that, the responsibilities of developers and user representatives are identified. At last, risks and contingencies are specified to ensure the test reliability. Other information not related to the test activities is not included in this document.

The Test Scope includes the following mobile feature:

**Mobile:-**

1, Monefy app sign-in.

2. User registration

3. Home/Dashboard screen

4. OVERALL expenses (DAY/M0NTHLY/WEKLY/YEARLY REPORT)

5 Cash and Payment by card Transaction

7. Help

## Definitions and acronyms

### Definitions

|  |  |
| --- | --- |
| **Keyword** | **Definitions** |
| Monefy | Project Name and Team Name |
| iOS | Monefy Operating System/Platform |
| Android | Monefy Operating System/Platform |

## Acronyms and abbreviations

|  |  |
| --- | --- |
| **Acronym or**  **abbreviation** | **Definitions** |
| API | Application program interface |
| AUT | Application under test |

## References

* Monefy Project Description: [http://score-contest.org/2011/projects/Fickas.Monefy.pdf](http://score-contest.org/2011/projects/Fickas.MOb.pdf)
* Monefy Requirement Definition
* Monefy Design Description
* Monefy Project Plan
* Monefy Google Site: <https://sites.google.com/site/projectdsd/>

# Test-plan introduction

The Monefy product will be verified and validated to meet all the requirements outlined in the requirement definition document. Unit test cases will be designed separately for the Monefy application and web and mobile based application. Integration test cases will be designed to test the end-to-end scenarios. And performance test will also be included to verify some of the non-functional requirements.

# Test items

Based on the Monefy requirements and design description, application modules of web application, Monefy Android/iOS application, end-to-end scenario and non-functional scenario will be tested.

## Monefy Android application

In Monefy Android application, User should be able to install the app successfully and login to app successfully with registered user ID only Monefy iOS application

## Monefy iOS application

In Monefy Android application, User should be able to install the app successfully and login to app successfully with registered user ID only Monefy iOS application

## End-to-end Scenario

In the end-to-end scenario, User is able to login to app successfully. On the Home screen user should be able to view expenses and income report in charts .User should be add Income and Expenses from this category

## Non-functional Scenario

For privacy/security and authentication, system will generate a key for the observer selected, and the key will be used to relay back the information when OE demands a signature. Only observation data with the key matched will be valid.

For accessibility, Android platform is used for Monefy application device to ensure that data can be encrypted to make the transmission secure.

For affordability, Monefy application will provide means to capture observations even if it hasn’t got access to the Internet.

For performance, the time of loading a web application, searching the database and printing the result should be at an acceptable level and system should recovery to normal state within a specified time.

# Features to be tested

All the requirements outlined in requirement definition document will be tested as new features.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Identity** | **Status** | **Priority** | **Description** | **Source** |
|  |  |  | Login Page |  |
| LOG-1 | I | 1 | Ability to create a user. | SYS |
| LOG-2 | I | 1 | Ability to login the app successfully | SYS |
| LOG-3 | I | 1 | Ability to reset the password | SYS |
|  |  |  | Dashboard(Home Page) |  |
| INI-1 | I | 1 | Ability to add expenses | CTM |
| INI-2 | I | 1 | Ability to view spend report Day weekly/Monthly/Yearly report | CTM |
| INI-3 | I | 1 | Ability to create own profile | CTM |
| INI-4 | 1 | 1 | Ability to see Cash and Payment by Card transaction |  |
| INI-4 | I | 1 | Help Index HTML page | CTM/SYS |
|  |  |  | Others |  |
| OTH-1 | I | 1 | Ability to register a user on website. | SYS |
|  |  |  | NFR |  |
| NFR-1 | I | 2 | The identity of user should be kept secret. | CTM |
| NFR-2 | I | 1 | Observer authentication should be possible if desired. | CTM |
| NFR-3 | I | 1 | Encryption techniques should be used for security for Monefy applications | CTM |
| NFR-4 | I | 2 | There should be some facility to access information via Monefy device even though there is no internet access. | DEV |

# Features not to be tested

Following features shall not be tested because they are either in executable or uncontrollable.

* Large number of users as high-load stress. High-load is only possible when the product is released to public because the emulated test result in lab is not convincible.
* Network delays. It’s not possible to control the network delay as in realistic environment so it will not be covered in this acceptance test.

# Approach

Acceptance test will be executed based on this acceptance test plan. And after all test cases are executed, a test report will be summarized to show the quality of our Monefy product. Following test approaches will be used in test execution:

* **Unit test**. Developers are responsible for unit test as white-box testing. The implementation of each module and individual component will be verified separately.
* **Integration test**. After the unit test is passed above the defined quality threshold, testers will execute the integration test cases. After all the modules are integrated, it’s crucial to test the product as a black-box. End-to-end scenarios will be tested to ensure the communication functionality.
* **Regression test**. After developers fix the bug in one feature, regression test will be executed by testers to ensure that the other functions are not affected.
* **Field test**. Firstly, untrained end users recreate one or more existing (but narrow) mass observation events in the Monefy system. A number of observers will be invited to help with evaluation. After that, post event questionnaires will be used to collect quantitative usage data as well as qualitative data and further improvement will be taken into consideration.
* **Positive and negative testing design technique**. This approach will be combined with unit test and integration test. Test cases are designed in sunny day scenarios, which ensure that all functional requirements are satisfied. What’s more, rainy day test cases will also be covered to show how the system reacts with invalid operations.

## Approach to configuration and installation

For web application, no installation or configuration by the end user is required. The basic functionality of web applications is possible without the presence of JavaScript. Only the hardware/software environment required in Section 9 is necessary. For Monefy Android/iOS application, software on the Android platform and iOS platform following the installation manual is required. For Monefy web application, no installation is required except connecting with network.

# Item pass/fail criteria

Details of the test cases are specified in section 10. Following the principles outlined below, a test item would be judged as pass or fail.

Preconditions are met

Inputs are carried out as specified

The result works as what specified in output => Pass

The system doesn't work or not the same as output specification => Fail

## Installation and Configuration

Installation and configuration of web application does not affect the testing as long as the test environment is as required in section 9. Nevertheless, the Monefy Android/iOS application should be installed successfully on Android platform, iOS Platform and cellular connection or internet is required; otherwise integration test cannot be executed.

Path : <http://Monefy.io/>

## Documentation problems

Requirement definition document should be kept up-to-date, or there will be a waste of time for developers and testers with extra efforts on fake errors. Test plan document should describe test cases clearly without ambiguity, which helps tester to execute the test cases and validate the requirements.

User manual document should be finished completely before filed test, or untrained end user will have trouble in using the Monefy product correctly.

## Test Entry and Exit Criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of testing | Entry criteria | Tasks to be performed | Verification | Exit criteria |
| Test case writing | All use cases reviewed and committed.  All reference documents in place. | Test case writing | Test case will be reviewed and corrected as per review point | All test cases written successfully. |
| Functional  Testing | Code completed and committed.  All reference documents in place. | Test case execution | All test cases passed and application performing as per expected criteria | All test cases executed successfully.  All bugs tracked to closure |

# Suspension criteria and resumption requirements

For website interface, the response time is short. Any bugs found can be fixed by developers quickly and no need to start the testing process from the beginning. However, when major bugs such as the communication between Monefy and web application occur, it will block the following test cases and the testing has to be paused. The test will restart from the very beginning until the major error is solved.

# Environmental needs

## Hardware

* Laptop or Desktop PC
* Monefy with Android platform

## Software

* PC Operating System:
* Windows Vista (32- or 64-bit)
* Windows 7 /8 /10(32- or 64-bit)
* Browsers: (screen resolutions of 1024x768px or more)
* Opera 10 or later
* Microsoft Internet Explorer 9 or later
* Latest version of chrome
* Latest version of Firefox.
* Monefy Platform: Android 2.0/2.1 (Eclair) Based on Linux Kernel 2.6.29 or later
* Android OS supported: KitKat 4.4, Lollipop 5.0, Marshmallow 6.0

Resolutions (Portrait mode):  720 x 1280, 1080 x 1920, 1440 x 2560

* iOS: 9.1, 10.0.1

Resolutions (Portrait mode): iPhone 5s, 6, 6s, 6 plus and 6s plus

## Other

* Internet connection for PC
* Wi-Fi/3G/4G/GPRS connection for Monefy app

# Test procedure

## Test case specifications

Each case is specified with one-liner and detail description covering test type, precondition, input and output.

### Android/iOS app E2E scenarios

### **10.1.1. a Description:**

To verify user is able to add expenses

**Test type:** Positive

**Preconditions:**

1. App should be installed on android/iOS mobile devices.
2. User should have an account
3. Battery level should be more than 25%

**Input definition:**

1. Tap on Balance and Choose category (Deposits,Salary,Salary)etc

**Output definition:**

1. User should be able to see the total balance of added category.

**Remarks:**

### Android/iOS app E2E scenarios

**10.1.1.b Description:**

To verify overall expenses Daily/weekly/Monthly/Yearly expenses.

**Test type:** Positive

**Preconditions:**

1. App should be installed on android/iOS mobile devices.
2. User should have an account
3. Battery level should be more than 25%

**Input definition:**

1. Tap on Home -> daily/weekly/monthly/Yearly to see report

**Output definition:**

1. User should be able to see daily/weekly/monthly/Yearly expenses report

**Remarks:**

None

### Android/iOS app E2E scenarios

**10.1.1.c Description:**

To verify that user is able to see Cash and Payment by Card transaction

**Test type:**

Positive

**Preconditions:**

1. App should be installed on android/iOS mobile devices
2. User should have an account
3. Battery level should be more than 25%

**Input definition:**

1. Tap on Home -> Cash/Payment card

**Output definition:**

1. User should able to see Cash and Payment by Card transaction

**Remarks:**

None

### Android/iOS app E2E scenarios

**10.1.1. d Description:**

To verify user is able to Sign-out the app

**Test type:**

Positive

**Preconditions:**

1. App should be installed on android/iOS mobile devices
2. User should have account

.

**Input definition:**

1. Check whether user is able to log-out from the app

**Output definition:**

1. User should be able to log-out from the app.

**Remarks:**

None

**10.1.2** Non-functional Scenario - NFR

**101.2.a Description:**

To verify the overall performance while loading the date

**Test type:**

Positive

**Preconditions:**

1. App should be installed on android/iOS mobile devices.
2. User should have an account

**Input definition:**

1. Verify overall performance of app

**Output definition:**.

1. Loading the data for Day/monthly/weekly/Year overall Report data must be less than 5 sec.

**Remarks:**

None

## Defect Tracking Tools

* JIRA, MS excel

# Responsibilities

## Developers

* Unit test when implement their owned models
* Fix the bug and make sure the code change does not affect other functions
* Deliver a new testable version to tester

## Testers

* Write acceptance test plan
* Execute test cases and record test results
* Inform developers with the bugs as early as possible
* Summarize the results as Test Report

## User representative

* Clarify the suspicious requirements
* Comment on the test plan and test cases

# Risks and contingencies

We have tried to test on various browsers as much as possible, but it’s impossible to test on all the browsers. What’s more, Monefy Android/iOS application is tested on Android devices, and Monefy web application is tested on limited web browser, thus we cannot predict the system behavior on the other Monefy platforms (eg. iPhone, Blackberry, Symbian platform etc.). Further investigation is required to verify and improve this Monefy product.