

Budgeting App Test Plan

INTRODUCTION

We have some types of tests that would test the Web App well, but as required the main goal here is to build an End-to-End test framework.

End-to-end testing is where the whole application is tested from start to finish. It involves assuring all the integrated pieces of an application function and work together as expected. This is given by simulation real user scenarios, essentially testing how a real user would use the application.

E2E tests allow us to cover sections of the application that unit tests and integration tests don't cover. This is because unit tests and integration tests only take a small piece of the application and assess that piece in isolation. Even if the pieces work well by themselves, we can't ensure that they will work together as a whole. Having a suite of end-to-end on top of unit and integration tests allows us to test our application.

Scope

In Scope

We have some functional and non-functional features that need to be tested on this Web App, following our features that fit on this test scope:

Functional:

- Adding a type, description and value of a new transaction spent or received.
- Remove any transaction.
- Update any transaction.
- Total Inflow.
- Total Outflow.
- Working Balance.
- Inflow vs Outflow graphics.
- Spending by category graphic.

Non-functional:

- Test how many transactions the application can handle.
- Test if it has some inflow or outflow limit.
- How many items all of the graphics can handle.
- Multiple accesses at the same time.

Out of Scope

This is a simple app and has no login or sign in feature, neither user data store, so the security test is not required for now.

We can

Quality Objective

The main objectives of this test are:

- Ensure the Application Under Test conforms to functional and non-functional requirements
- Ensure the AUT meets the quality specifications defined by the requirements
- Bugs/issues are identified and fixed before go live
- Find some enhancements for future development
- Make the performance even better

TEST METHODOLOGY

Overview

As this project has some features implemented, we can use the Agile methodology, since the team is already working on the development, and for that we can use of some advantages:

- It is possible to make changes in the project at any time to comply with the requirements
- This incremental testing minimizes risks

Incremental testing is used in agile development methods and hence, every release of the project is tested thoroughly. This ensures that any bugs in the system are fixed before the next release.

Interactions amongst customers, developers and client are emphasized rather than processes and tools. Agile methodology focuses on responding to change rather than extensive planning.

Test Levels

On this test plan the the test level used is End-to-End that not only validates the software system under test but also checks its integration with external interfaces. The purpose of this test is to exercise a complete production-like scenario.

Bug Triage

- The transactions has no remove button;
- When the Total Outflow is bigger than the Total Inflow, the working balance is not negative;
- When the Total Outflow is bigger than the Total Inflow, the working balance is colored red;
- When the amount is too big it doesn't appear properly on the grid;
- When the amount is too big it doesn't appear properly on the graph;
- When the amount of a category is too big, it overshadow the others categories;
- When click on Reports, the window should focus on the entire bar graph.

Testing Tools

- Web-driver IO
- Gulp
- Jasmine

TERMS/ACRONYMS

TERM/ACRONYM	DEFINITION
API	Application Program Interface
AUT	Application Under Test

TEST CASES

№	Steps	Expected results	Test results	Comments
1.	Add a transaction			
	Pre-steps: 1. Open Budget Site 2. Click Budget Tab on top left of the page;			
1.1.	Add an inflow transaction Steps: 1. Select Income from the Category list; 2. Add a description: "Dept. received from a friend"; 3. Add value: "\$ 800.00" Click on Add button.	- The transaction and it's information appears on the main table; - Total Inflow value changed with the last transaction added; - Working Balance value changed; - Total Inflow value is green.	Pass	
1.2.	Add an outflow transaction Steps: 1. Select Travel from the Category list; 2. Add a description: "Trip to Greece"; 3. Add a value: "\$ 2,000.00" Click on Add button.	- The transaction and it's information appears on the main table; - Total Outflow value changed with the last transaction added; - Working Balance value changed; - Total Outflow value is red.	Pass	
2.	Add multiple transactions			
	Pre-steps: 1. Open Budget Site 2. Click Budget Tab on top left of the page;			
2.1.	Add multiple inflow transactions Steps: 1. Create an inflow transaction following with Category: "Income"; Description: "Paycheck"; Value: "\$ 4500.00"; 2. Create an inflow transaction following with Category: "Income"; Description: "Rent"; Value: "\$ 2200.00"; 3. Create an inflow transaction following with Category: "Income"; Description: "Dept."; Value: "\$ 3400.00"; 4. Create an inflow transaction following with Category:	- On "Inflow vs Outflow" Tab, total Inflow value changed with the last transaction added; - Total Inflow graphic is green.	Pass	

	<p>“Income”; Description: “Dept.”; Value: “\$ 1200.00”;</p> <p>5. Click Reports Tab on top left of the page;</p> <p>6. Then click on “Inflow vs Outflow” Tab.</p>			
2.2.	<p>Add multiple outflow transactions</p> <p>Steps:</p> <ol style="list-style-type: none"> 1. Create an outflow transaction following with Category: “Health”; Description: “Doctor visit”; Value: “\$ 200.00”; 2. Create an outflow transaction following with Category: “Beauty”; Description: “Beauty Treatment”; Value: “3500.00”; 3. Create an outflow transaction following with Category: “Home”; Description: “TV.”; Value: “\$ 2300.00”; 4. Create an outflow transaction following with Category: “Clothing”; Description: “Party clothes”; Value: “\$ 1540.00”; 5. Click Reports Tab on top left of the page; 6. Then click on “Inflow vs Outflow” Tab. 	<p>- On “Inflow vs Outflow” Tab, total Outflow value changed with the last transaction added;</p> <p>- On “Inflow vs Outflow” Tab , each transaction amount must be equal to the amount on the table grouping by category;</p> <p>- On “Spending by Category” Tab must contain only outflow transactions;</p> <p>- On “Spending by Category” Tab, each transaction amount must be equal to the amount on the table grouping by category;</p>	Pass	
3.	Negative Tests			
	<p>Pre-steps:</p> <ol style="list-style-type: none"> 1. Open Budget Site 2. Click Budget Tab on top left of the page; 			
3.1.	<p>Add an outflow value higher than the total flow</p> <p>Steps:</p> <ol style="list-style-type: none"> 1. Select Travel from the Category list; 2. Add a description: “Trip to Japan”; 3. Add a value: “\$ 200,000.00” <p>Click on Add button.</p>	<p>- The transaction and it’s information appears on the main table;</p> <p>- Total Outflow value changed with the last transaction added;</p> <p>- Working Balance value must be negative;</p> <p>- Working Balance value is red.</p>		
3.2.	<p>Add an outflow with a big text description</p> <p>Steps:</p> <ol style="list-style-type: none"> 1. Select Car from the Category list; 2. Add a description: “Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras ornare nulla sed risus blandit, id consectetur nulla fermentum. Nulla non dignissim lacus, at dictum 	<p>- The big text on description must appear fully on the table.</p>	Pass	

	<p>sapien. Vivamus lacinia imperdiet diam at accumsan...";</p> <p>3. Add a value: "\$ 20,000.00"</p> <p>4. Click on Add button.</p>			
3.3.	<p>Add an inflow with a big value</p> <p>Steps:</p> <p>1. Select Income from the Category list;</p> <p>2. Add a description: "Apartment selling";</p> <p>3. Add a big value: "\$ 300,000..."</p> <p>4. Click on Add button.</p>	<p>- The big value must appear and be readable on the table.</p> <p>- The big value must appear on "Reports" Tab and be readable.</p>	Pass	
3.4.	<p>Add an outflow without value</p> <p>Steps:</p> <p>1. Select Insurance from the Category list;</p> <p>2. Add a description: "Kids Insurance";</p> <p>3. Left the value blank;</p> <p>4. Click on Add button.</p>	<p>- The transaction not be added;</p> <p>- Add button must be disabled.</p>	Pass	
3.5.	<p>Add an outflow without description</p> <p>Steps:</p> <p>1. Select Insurance from the Category list;</p> <p>2. Add a description: "";</p> <p>3. Add a value: "\$ 30,000.00"</p> <p>4. Click on Add button.</p>	<p>- The app accept transaction without description;</p> <p>- The transaction appear on the table without description.</p>	Pass	
3.6.	<p>Add an outflow with value in string</p> <p>Steps:</p> <p>1. Select Insurance from the Category list;</p> <p>2. Add a description: "";</p> <p>3. Add a string value: "string_value"</p> <p>Click on Add button.</p>	<p>- The app must not accept letters as a value;</p>		
3.7.	<p>Add an outflow with value in string and number</p> <p>1. Select Insurance from the Category list;</p> <p>2. Add a description: "";</p> <p>3. Add a string value: "123e456"</p> <p>Click on Add button.</p>	<p>- The app must not accept letters and numbers as value;</p>		