

Software Requirements Specification

Cross-Platform Expense Tracker Application

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1 Introduction:

The purpose of this project is to create a cross-platform expense tracker (Android/iOS) and PWA using Angular 8 and NativeScript frameworks. The Language used is Typescript and NoSQL database (CouchDB).

2 Purpose:

The purpose of this document is to give a detailed description of the proposed cross-platform (Android/iOS/ PWA) expense tracking application software. It will also explain system constraints, interface and interactions with other external applications. This document is primarily intended to provide a road map for developing the first version of the system.

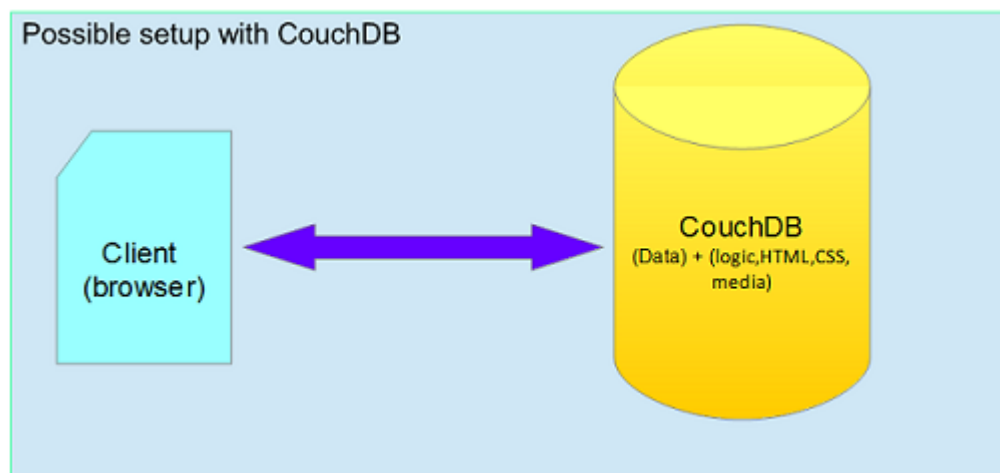
3 How the system work:

- Users have to register a new account with their email and password.
- User login with the account.
- The Home page is the Angular material table showing a sortable list of all expenses.
- Link to a Dashboard page which displays all the spending details using visual graph
- Users are allow to set/edit their budget for the month and different status will display different colours with different icons:
 - ❖ red colour - exceeded their budget and shows a "money flying" icon
 - ❖ green colour - on track of their budget and shows a smiley face icon

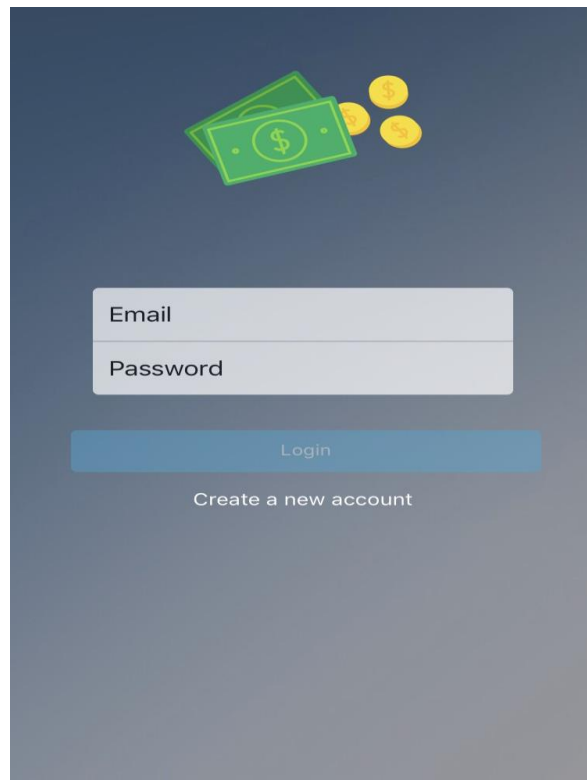
- ❖ grey colour - if they have not set any budget amount and shows unhappy face icon
- Users are allowed to insert a new record by clicking on the "Add Expense" button:
 - ❖ users have to key in all the necessary details and this record will be stored into the CouchDB
- Users view their spending record:
 - ❖ Able to perform search/filter operation on the records.
- Allow updating the records by clicking on the specific record row using the update icon on material data table.

4 Overall Description of the PWA:

This section will give an overview of the PWA system. The system will be explained in its context to show how the system interacts with other systems and introduce the basic functionality of it.



Sign Up Page:

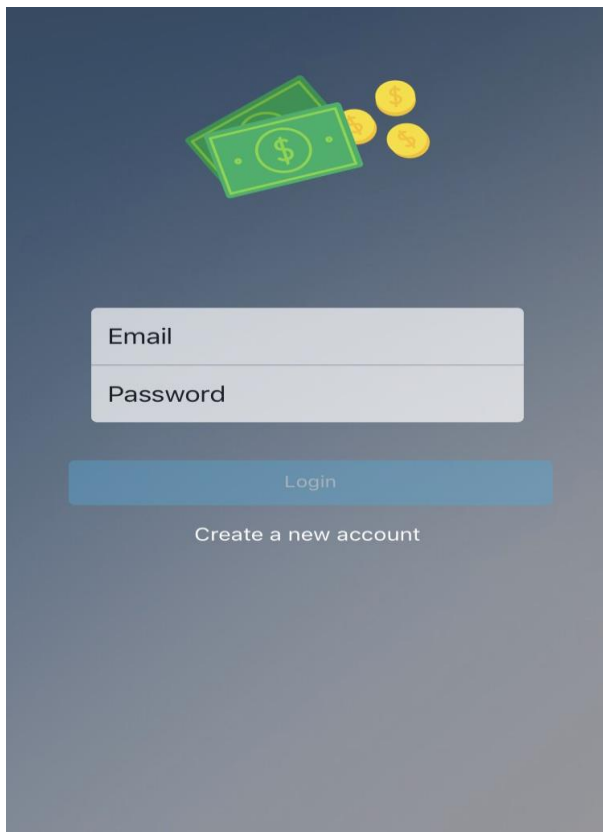


The users sign up using their registered email and password.

Validation:

- ❖ Validate the user email address(must be a valid email address).
- ❖ The length of the password must be a minimum of atleast 6-characters.

Login Page:



The users sign up using their registered email and password.

Validation:

- ❖ Validate the user email address(must be a valid email address).
- ❖ The length of the password must be a minimum of atleast 6-characters.

Main Dashboard:



Monthly Spending Category



Total Spending for the Month: **\$ 482.95**

Current Monthly Budget: **\$ 500.00** [edit](#)

Budgeting Status: **On Track**



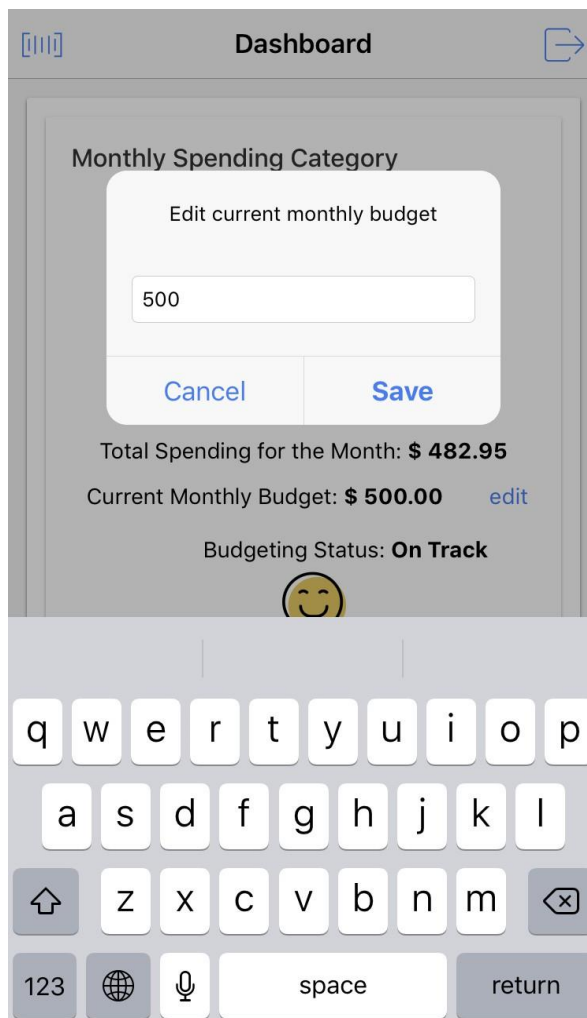
Budget

96.59%

Daily Spending



Setting monthly budget Amount:



Monthly Spending Category:

- ❖ Users are able to view their spending amount on each of the categories and they are allowed to click on the legend to filter and click on the graph to view the exact amount spent. Information such as the Total Spending for the current month and the Current monthly Budget is shown to the user directly so they are able to capture this information quickly. The progress bar is use to monitor their budget effectively.

There are 3 different Budgeting Status as shown below:

No Budget is set:

- ❖ The progress bar will turn into dark grey color.
- ❖ An icon of unhappy face is shown above the progress bar.



Budget On Track:

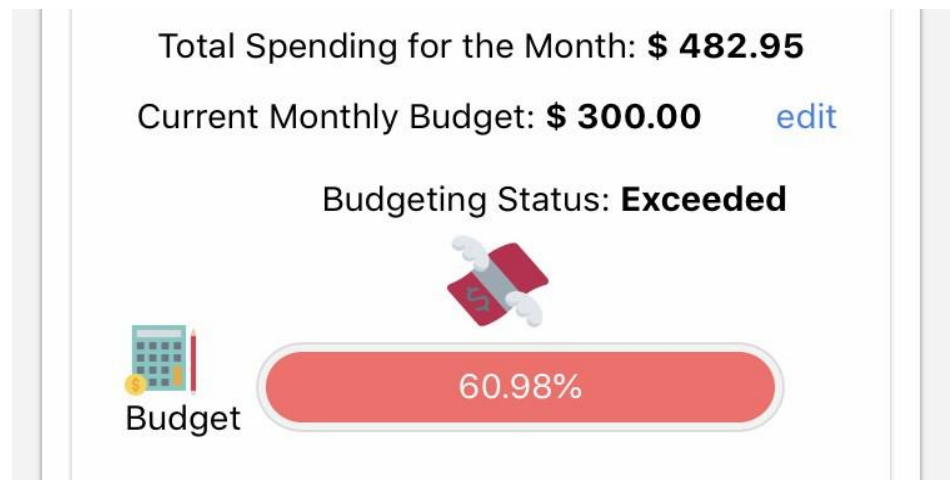
- ❖ The progress bar will turn into green color and displays the percentage of the current spending amount over the budget amount set. This is to keep track of current spending amount with relation to the budget set.
- ❖ An icon of smiley face is shown above the progress bar to show that they are on track of the budget.



Budget Exceeded:

The progress bar will turn into red color and displays the percentage of the exceeded amount as compared to the budget.

- ❖ An icon of "money flying" is shown above the progress bar to show that they have overspent their budget.



Daily Spending:

- ❖ Users are allow to view their daily spending over the week from Monday to Sunday

Monthly Spending:

- ❖ Users are able to view their past 6 months's spending record, included their current month's spending, so they can compared their spending over the months.

Edit their current month's budget:

- ❖ User are able to set their current month's budget amount hence this will derive the budgeting status.