

Babylon - A Personal Finance Application

Problem Statement

There is no completely free IOS application which allows a household to track their expenses and track their net worth collectively. An application which also performs analysis and highlights what was done correctly and what wasn't

Value Proposition

The aim of this free application would be to inculcate good financial habits which can be implemented and tracked across the entire household. The application will apply personal finance principles outlined in the book 'Richest Man in Babylon'. The principles are:

1. Spend less than you earn
2. Invest the difference
3. Let the investment grow over a few decades

The mobile application will have 2 modules:

1. Expense Tracking - To ensure a household spends less than they earn
2. Create and Track personal or household net worth - To track how the investment is growing on a periodic basis

Key Features

MVP

1. User Profile Aspect

- a. User will be able to create an account using
 - i. Email Account
 - ii. Apple ID
 - iii. Facebook/Instagram Account
- b. User will be able to store a backup email/mobile number for account recovery
- c. User will be able to use the application as a guest
- d. User will be able to create a household account and add users to their household

2. Expense Management Aspect

- a. User would be able to set their weekly/bi-weekly/monthly personal or household income
- b. Multiple users would be able to add their income which would get added up to a household income if they are part of a household
- c. Multiple users would be able to add their expenses which would get added up to a household expense if they are part of a household
- d. Users would be able to input transactions with ease via mobile application
- e. Users would be able to create categories manually or leverage categories created automatically by the app
- f. Category level thresholds - users would be able to modify auto-generated category thresholds to set their own threshold
 - i. Auto generated category thresholds will be from some well established personal finance principles

3. Credit Score Improvement

- a. A user will be able to input their Credit Card cycles while hiding any confidential card information
- b. A user will be able to get payment reminders and optimize their payment date in line with when their credit information is pulled so that utilization is low and their credit score is improved

4. Net Worth Aspect

- a. A user's or household's net worth will be calculated and visible on the application.

- b. A basic learning module highlighting what is net worth and why it should be tracked will also be present
- c. Users would be able to input their assets -
 - i. Cash, House, Car, Investments
- d. Users would be able to input their liabilities -
 - i. Short term credit, Loans, House, Car

5. Data Analysis Aspect

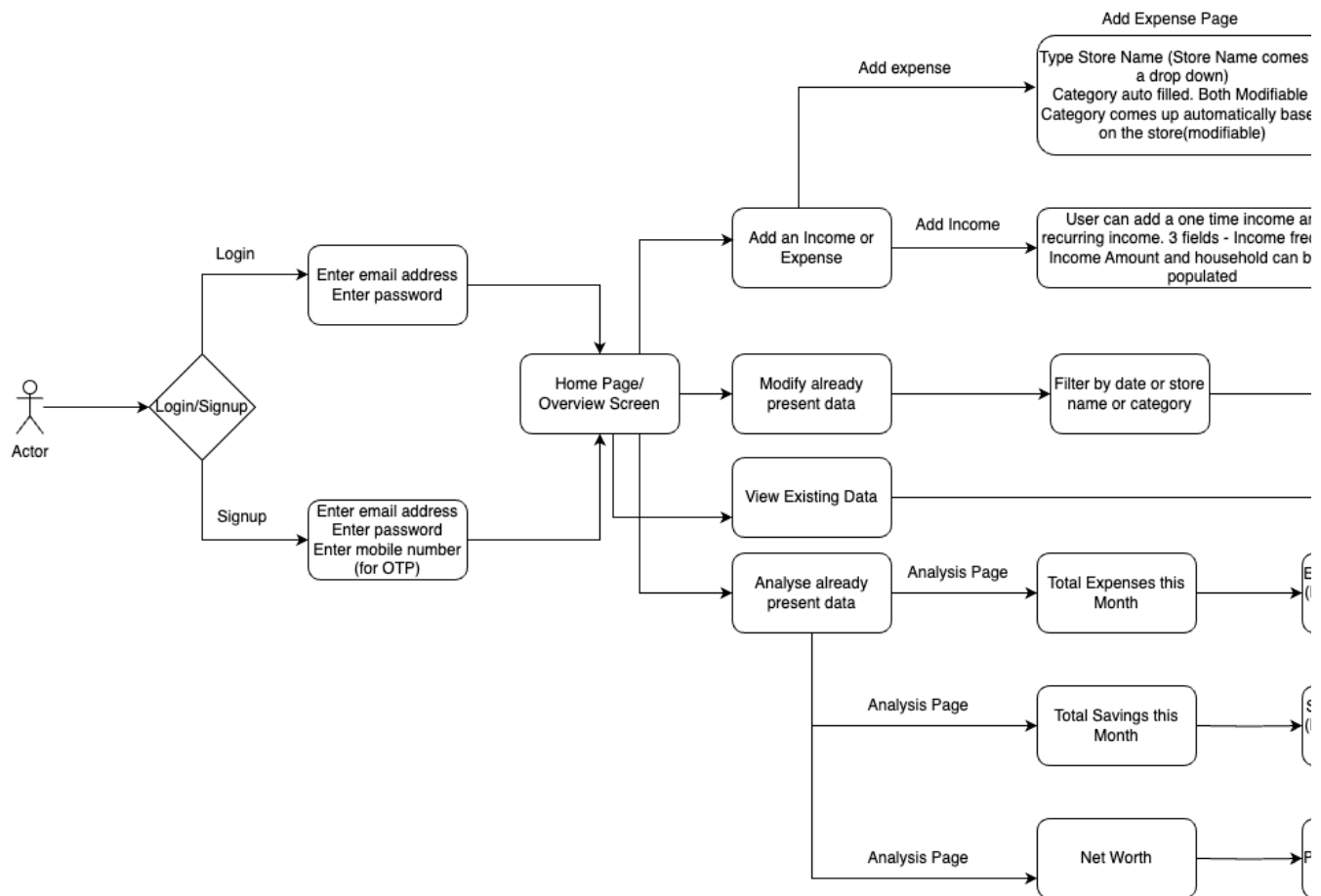
- a. Real Time Analysis
 - i. Total expense in each category (amount)
 - ii. % expense in each category
 - iii. How close is the outstanding expense in a particular category to the threshold
 - iv. Week on week, month on month, QoQ and YoY analysis, as available
- b. Real time alerts when categories threshold is breached or near breaching
- c. Highlight the categories where a good job was done and where a bad job was done
- d. Real time analysis available in the application and via IOS widgets

Out of Scope

1. Ability of the application to source transactions by itself via bank APIs etc.
2. Ability of the application to detect transactions on an image or PDF document or an audio recording or via audio/dictation
3. Ability of the application to export the information in an excel file

High Level User Experience

User Journey Flowchart



Designs/Mockups

User Stories and Requirements per Release

Category	User Story	Jira Ticket	User Acceptance Criteria
User Profile	User would be able to create an account using their email ID, apple account or facebook or instagram account		User would be able to successfully create an account. The sign up/login process would have the required validation to provide a smooth sign up/login process to the user
User Profile	User's sign up and profile information would be saved in a database for retrieval		A hashed password would be saved and other user profile information would be saved in a db. DB entries would be

			updated in real time as a user updates their information
User Profile	A user would be able to reset their account password by providing their email ID		A user is able to successfully reset their password. There is appropriate validation on the email input required from the user and a reset link is sent to the user immediately
User Profile	A user would be able to store a backup email ID or mobile number for account retrieval		A user will be able to save or update this information with email input having an email text validation and OTP verification on both
User Profile	User will be able to use the application as a guest		A user would be able to click on the option 'Continue as a guest' and use the application as a guest.
User Profile	A user would be able to use the application as a guest for a while and then create an account or log in to an existing account thus transferring their data as a guest to their account		Information of the guest would be transferred to an account if the same user creates/logs in to an account
User Profile	User will be able to create one or more households in their account and add users to each household		Users should be able to give a unique name to a household and add more users to the household - by taking an email ID as an input which either invites a user to the app or reviews the invite in the app which asks them to be a part of the household if they know the invitee.
Expense Management	A user would be able to add their income to the app		A user would be able to add their income to their account or to a household

Expense Management	A user would be able to see their household income (including their personal and any other household member's income)		A user should be able to view their income or their households total income in the application
Expense Management	A user would be able to add their expenses as an individual or in a household		A user would be able to add their expense to their account or to a household
Expense Management	A user would be able to see their expenses added up in a household expense account if applicable		A user should be able to view their expense or their households total expense in the application
Expense Management	A user would be able to add a transaction using widgets as well as an application		A user should be able to add expenses using widgets as well as the application
Expense Management	A user would be able to see their logged in expense automatically categorized		A user should be able to see their logged expenses automatically categorized either due to the default categorization or based on their categorization
Expense Management	A user would be able to modify categories created automatically		A user should be able to modify any default categorization or any category they might have set to a particular expense or a type of expense
Expense Management	A user would be able to modify auto generated category thresholds in %s		A user should be able to modify any default thresholds or any threshold they might have set to a particular expense or a type of expense
Net Worth	A basic learning module highlighting what is net worth, how it is calculated and why it should be tracked will also be present		A user should be able to access a learning module highlighting benefits of personal finance, tracking net worth and how to use the application

Net Worth	A user would be able to input their assets - Cash, House, Car, Investments, Others		A user should see input fields of Cash, House, Car, Investments and Other. They should be able to enter integers in each of these fields
Net Worth	A user would be able to input their liabilities - Short term credit, Loans, House, Car, Others		A user should see input fields of Short term credit, Loans, House, Car and Other. They should be able to enter integers in each of these fields
Net Worth	A user or household's net worth will be calculated and visible on the application.		A users net worth should be calculated in real time and updated based on any modifications to its underlying parameters
Net Worth	A user would be able to see their net worth on the application as well as on a widget		A user should be able to see their net worth at any point in time in the app
Data Analysis Aspect	A user would be able to view total expenses in each category (amount) in real time in the application and via widgets		A user should be able to view total expenses (category wise split) for any time period filtered in real time, in the application or have this filter output shown on a widget
Data Analysis Aspect	A user would be able to view total expenses in each category (%s of threshold) in real time in the application and via widgets		A user should be able to view total expenses (category wise split) for any time period filtered in real time, in the application or have this filter output shown on a widget
Data Analysis Aspect	A user would be able to view in real time how close the outstanding expenses are to the threshold in each category		A user should be able to see a color code based on how close an expense category is to being breached
Data Analysis Aspect	A user would be able to view period on period(week, month,		A user should be able to view period on period

	quarter, year) analysis in real time, as available		change in expenses, change in savings
Data Analysis Aspect	A user would be able to see total savings in a period		A user should be able to see total savings in a period
Data Analysis Aspect	A user would be able to see the categories in which they were within their limits and the categories where they exceeded their limits		A user should be able to see total expenses in each category and their set thresholds in each category along with the delta

Open Questions

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