

PROJECT REPORT

PERSONAL EXPENSE TRACKER

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INTRODUCTION

1.1 Project Overview:

Personal Expense Tracker is a daily expense management system which is specially designed for non-salaried and salaried personnel for keeping track of their daily expenditure with easy and effective way through computerized system which tends to eliminate manual paper works. It will also manage records in systematic way and user can access the stored data conveniently. We have tried to design the project in such way that user may not have any difficulty in using this application without much effort. This software can be really used by end user who have Android running devices with them. The language that we use to develop this system is and MYSQL for database.

1.2 Purpose:

The idea of developing this project for user convenience. Because whenever they make expenses immediately, they add in the application. Some of the concerns maintaining a personal expense is a BIG problem, in daily expenses many times we don't know where the money goes. Some of the conventional methods used to tackle this problem in normal circumstances are like making use of a sticky notes by common users, Proficient people deals with this kind of problems by using spreadsheets to record expense and using a ledger to maintains the large amounts data by especially by expert people. We believe a handy design and a handy mobile application which handles these troubles. Such that app is capable of recording the expenditure and giving broad view with easy to use the user interface and this application is intelligent enough to shows the history of expenses.

LITERATURE SURVEY

2.1 Existing Problem:

The Expense tracker existing system does not provide the user portable device management level, existing system only used on desktop software so unable to update anywhere expenses done and unable to update the location of the expense details disruptive that the proposed system provides. In existing, we need to maintain the Excel sheets, CSV files for the user daily, weekly and monthly expenses. In existing, there is no as such complete solution to keep a track of its daily expenses easily. To do so a person as to keep a log in a diary or in a computer system, also all the calculations need to be done by the user which may sometimes results in mistakes leading to losses. The existing system is not user friendly because data is not maintained perfectly. But this project will not have any reminder to remain a person in a specific date, so that is the only drawback in which the remainder is not present. This project will be an unpopulated information because it has some disadvantages by not remind a person for each and every month. But it can used to perform calculation on income and expenses to overcome this problem we propose the new project.

2.2 References:

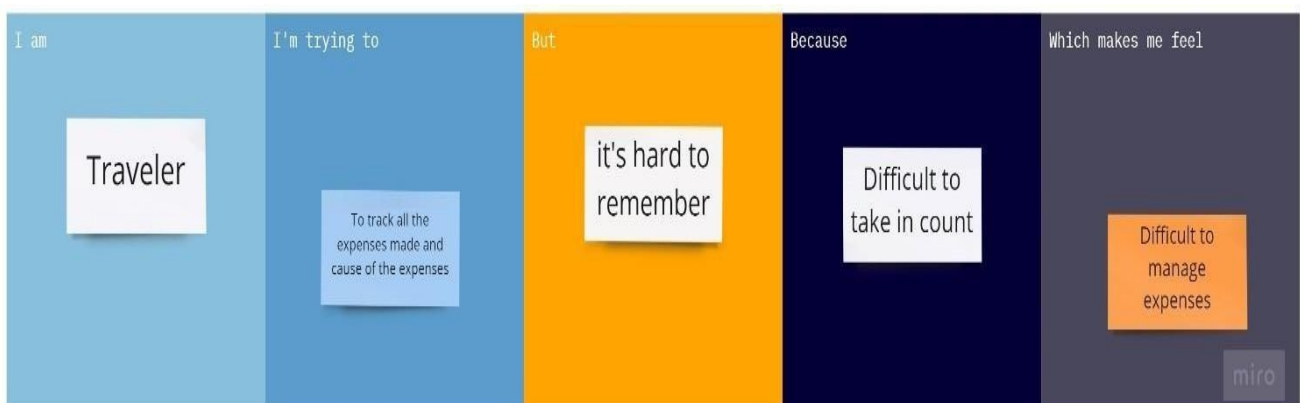
- [1] <http://expense-manager.com/how-expense software/>
- [2] <https://www.splitwise.com/terms>
- [3] <http://code.google.com/p/socialauth-android/wiki/Facebook>

[4] <http://code.google.com/p/socialauth-android>

[5] Developer.android.com

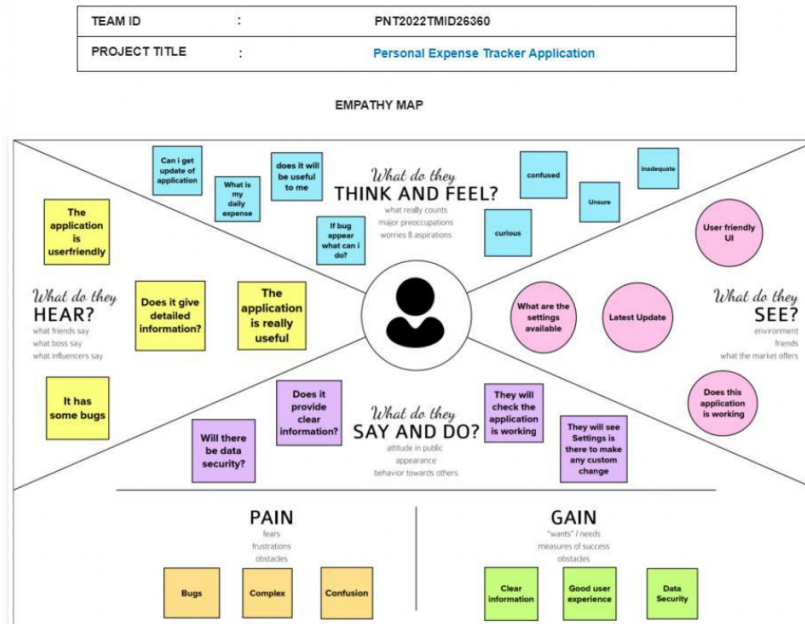
[6] <http://www.appbrain.com/app/expensemanager/com.expensemanager>

2.3 Problem Statement:



IDEATION & PROPOSED SOLUTION

3.1 Empathy map canvas:



3.2 Ideation & Brainstorming:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving.

Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

3.3 Proposed Solution:

Problem Statement : There are many budgeting tools online, but not all of them are effective in assisting users in actually creating and adhering to a budget. The ongoing maintenance, the consolidation of all user financial accounts and activity into a single dashboard are some of the negatives. However, a lot of this current software includes convoluted features that are difficult to use. The major problem is to take count paper receipts and calculate the expense statistics.

Idea / Solution description: People tend to neglect their budgets due to their busy and chaotic lifestyles, which results in them spending more than they planned. Future costs cannot be foreseen by the user. Their carelessness with money management will be a concern even though they can record their expense.

Novelty / Uniqueness: Including all the expense including money spend using cash, Bank-cheques, etc. This application keeps track of all of your spending. To enter your expense, simply click. To decrease human error, prevent data loss, and expedite settlements. In this program to display the pie chart or graph lines.

Social Impact / Customer Satisfaction: One can keep track of their own costs and create a monthly or annual budget with this tool. The application will display the statistics and sent alert message, if your spending exceeds the specified limit.

Business Model (Revenue Model): The subscription/ premium to access extra features of this application can be used by business people, and also adding advertisement to generate revenue.

Scalability of the Solution: Using IBM-cloud statistics can be shown to the user with high scalability, and with high accuracy.

3.4 Proposed Solution fit:

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none"> Customers those who spend money unwontedly and to track their expenses. Customer those who can't remember their expense. Those who expecting to track their expense via statistics. 	6. CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none"> Customer should use UPI or Net-Banking to track the expense. If the money is spend through cash customer must add the expense in the application. 	5. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none"> SPENDEE Application available both android and the ios.
	2. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none"> The main Intention of the application is to track the expense and provide statistics of expenses It provides statistics based on categories of expenses. To include money spend through cash, bank cheque's etc. 	9. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none"> The Main problem is gathering the data from the UPI apps or Nat-Banking application. This will act as the main problem of the application. Laziness of the customer to add the expense done through cash in the application. 	7. BEHAVIOUR BE <ul style="list-style-type: none"> Customer should responsibly add the expenses done through off-line mode. To assure the data safety to the user.
	3. TRIGGERS TR <ul style="list-style-type: none"> Customer may think , they spend more money and no saving. 	10. YOUR SOLUTION SL <ul style="list-style-type: none"> Design a cloud based web Application of the expense tracker. Provide statistic of the expense done by the user through the graphs or charts. 	8. CHANNELS of BEHAVIOUR H <ul style="list-style-type: none"> In Online mode user don't have more work user need to set the maximum expense limit. In Off-line mode user should responsibly
Identify strong TR & EM	4. EMOTIONS: BEFORE / AFTER EM <ul style="list-style-type: none"> BEFORE: No Savings. AFTER: Few saving due to expense tracking application. 	<ul style="list-style-type: none"> Providing email alerts if the total expense exceed the limit. 	add the expenses done through cash

REQUIREMENT ANALYSIS

4.1 Functional Requirement:

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

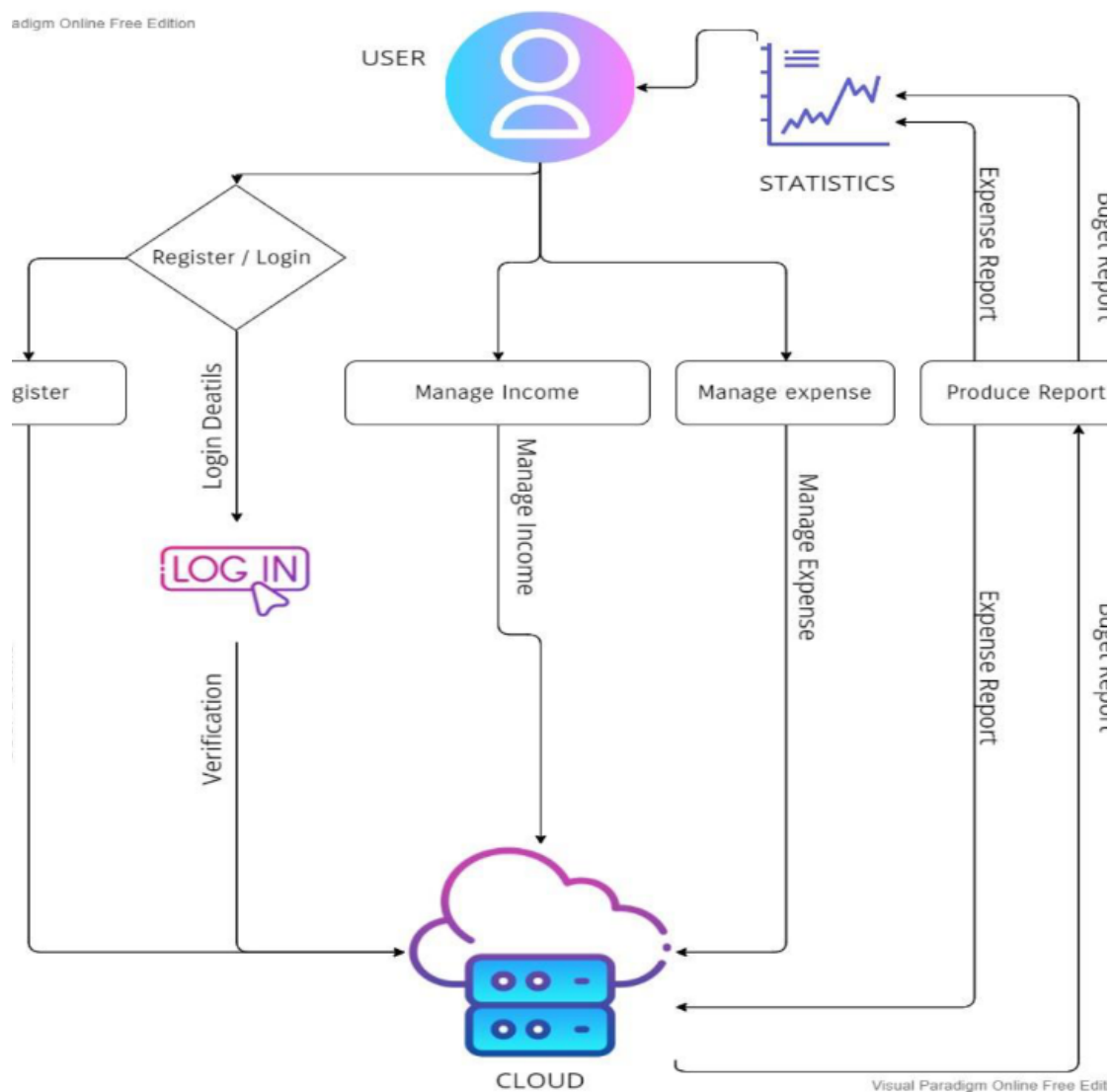
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Effectiveness, efficiency, and overall experience of the user interacting with our application should be maximised.
NFR-2	Security	Authentication, authorization, encryption of the data must be done in the application.
NFR-3	Reliability	Probability of error in the operations in a specified environment for a specified time should be minimised.
NFR-4	Performance	How the application is functioning accurately and effectively the application is to the end-users.
NFR-5	Availability	Using Cloud Storage and database, application reliability and the user satisfaction will affect the solution
NFR-6	Scalability	Capacity of the application to handle growth, especially in handling more users.

4.2 Non-Functional Requirement:

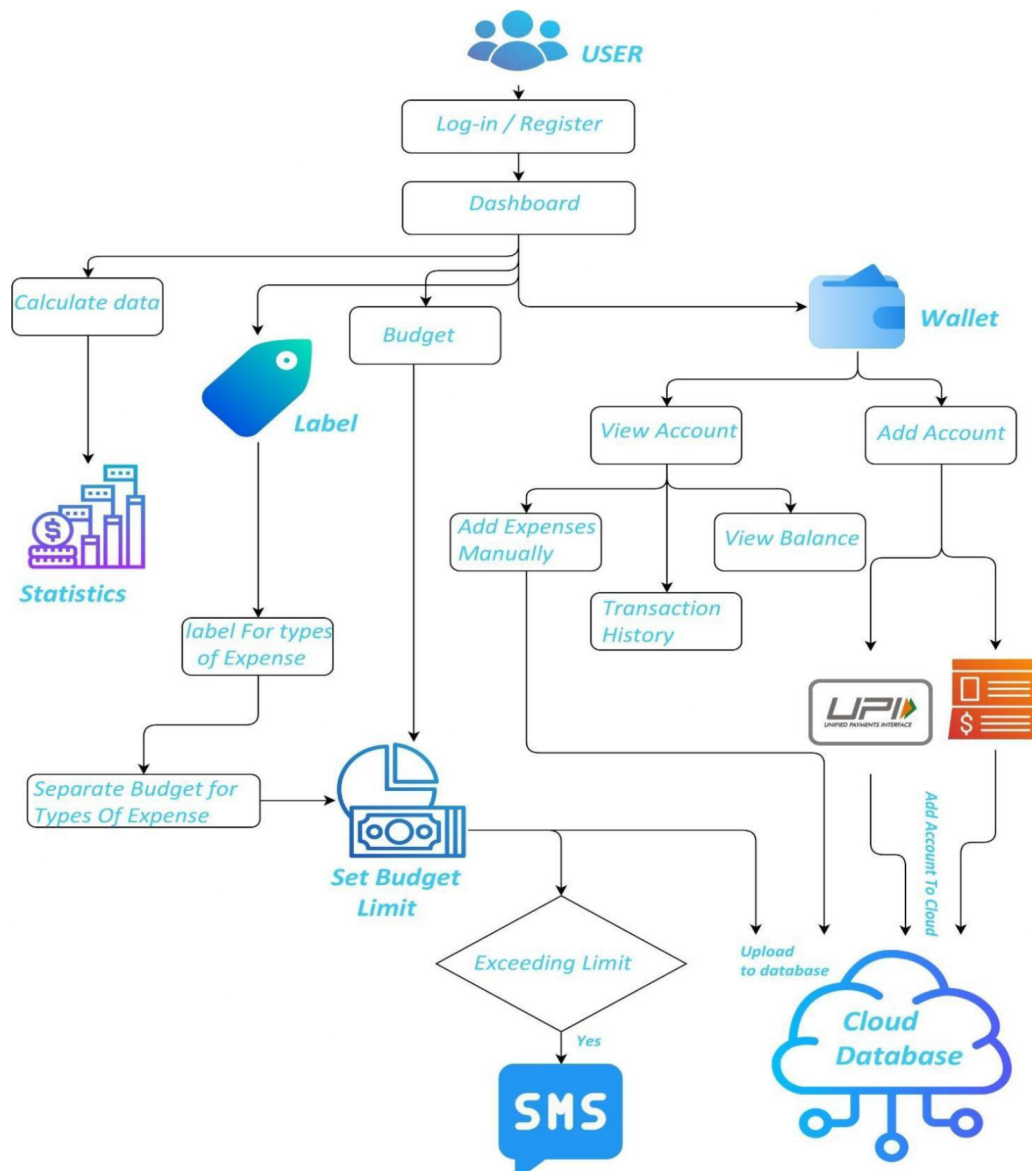
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Data	Data gathered in the application server is saved in the high security cloud server.
FR-4	Alert Notification	Alert messages through the Email or SMS.
FR-5	User Monthly Budget Plan	Setting Monthly budget to manage their expenses.
FR-6	Cloud Data Storage	To save the user valuable data high security cloud storage are used (AWS, IBM, GOOGLE, etc)

PROJECT DESIGN

5.1 Data Flow Diagram:



5.2 Solution & Technical Architecture:



5.3 User Stories:

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-2	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard		As a user, I can access my detail, manage the expense, add budget, expense report from the app etc..		High	Sprint-1
Customer (Web user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
	Login	USN-2	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard	USN-3	As a user, I can access my detail, manage the expense, add budget, expense report from the app etc..		High	Sprint-1
Customer Care Executive	Email or Customer Care no		As a user, I can contact the service administration for the support.	I can solve the Issue.	High	Sprint-3
Administrator	Email or Customer Care no		As a user, I can contact the service administration for the support.	I can solve the Issue.	High	Sprint-1