Software Requirements Specification

CashTrack Application

Version 1.0 approved

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10 April 2022

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1. Introduction

CashTrack app is a personal finance manager, built to help you save money, plan for the future, and see all your finances in one place. With CashTrack you can stay on top of your daily expenses automatically with weekly reports on your spending, manage debt, and track bills.

1.1 Purpose

In today's busy and expensive life we are in a great rush to make money. As we are unknowingly spending money on little and unwanted things.So, we have come up with the idea to track our earnings.If we are spending money frivolously, we will not have money to set financial goals. We should remember emergencies come when you least expect it. A daily money tracker helps you budget your money so that you use it wisely. With proper tracking of your finances, you will be able to determine unnecessary spending and can save your money.

1.2 Product Scope

The future scope of the project can be Automatic Bank Updates where transactions can be automatically and securely synced with your bank, smartly categorized and factored into your budget. You can import all your transaction data from sources of your choice to CashTrack.

1.3 References

[1] Girish Bekaroo and Sameer Sunhaloo Intelligent Online Budget Tracker : School of Business Informatics and Software Engineering, University of Technology, Mauritius

[2] ATIYA KAZI, PRAPHULLA S. KHERADE, RAJ S. VILANKAR, PARAG M. SAWANT Expense Tracker : Department of Information Technology, Finolex Academy of Management and Technology, Ratnagiri, Maharashtra, India.

[3] Anjali Kumari, Utkarsh Raj, Aman Kumar D2D EXPENSE TRACKER APPLICATION : Department of Computer ScienceGalgotias University Greater Noida, India

2. Overall Description

2.1 Product Perspective

CashTrack app is a personal finance manager, built to help you save money, plan for the future, and see all your finances in one place. With CashTrack you can stay on top of your daily expenses automatically with weekly reports on your spending, manage debt, and track bills.

2.2 User Classes and Characteristics

Everyone can use this app who are struggling with managing their finances and want to keep track of their expenses and earnings.

2.3 Existing System

In existing, we need to maintain the Excel sheets, CSV etc. files for the user daily and monthly expenses. In existing, there is no such complete solution to keep a track of its daily expenditure easily. To do so a person has to keep a log in a diary or in a computer, also all the calculations needs to be done by the user which may sometimes result in errors leading to losses.

2.4 Proposed System

To reduce manual calculations, we propose an application which is developed by Android. This application allows users to maintain a digital automated diary. Each user will be required to register on the system at registration time, the user will be provided an id, which will be used to maintain the record of each unique user. Expense Tracker application which will keep a track of Income-Expense of a user on a day to day basis.

2.5 Objectives

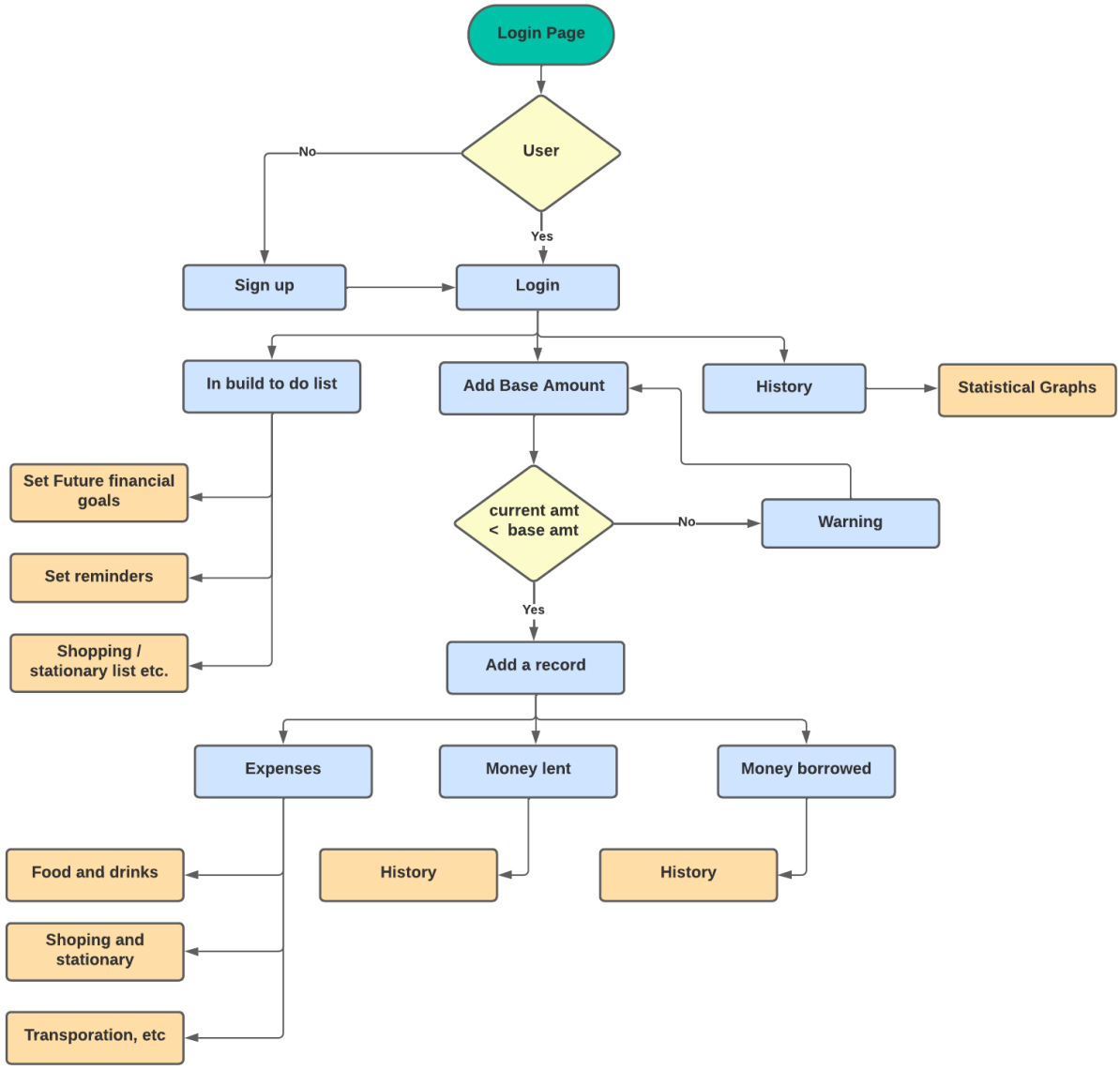
1) Managing Finances will allow users to record transactions with specific time and date, users can differentiate his/her expenses with different categories and can also set expenses limits over a particular period of time.
2) User Authentication will allow users to enter their credentials for login which will prevent accessing sensitive information from unauthorized users.
3) Managing Debts through users can track his/her borrowed and lent money and also users can review his/her history of borrowed and lent money in chronological order.
4) In-built To-do list, where users can set future financial goals with the help of inbuilt to-do list, will provide users an option to list out things for user's feasibility also will allows user to pre-plan and set reminders of payments

5) History and Insightful reports through users can review his/her history and filter the records. Easy-to-understand graphs and financial overviews will give you actionable finance insights about the state of your finances, across debts and cash. You can get your statistical report

2.6 Operating Environment

The website will be operated in any Operating Environment -Windows, Linux etc.

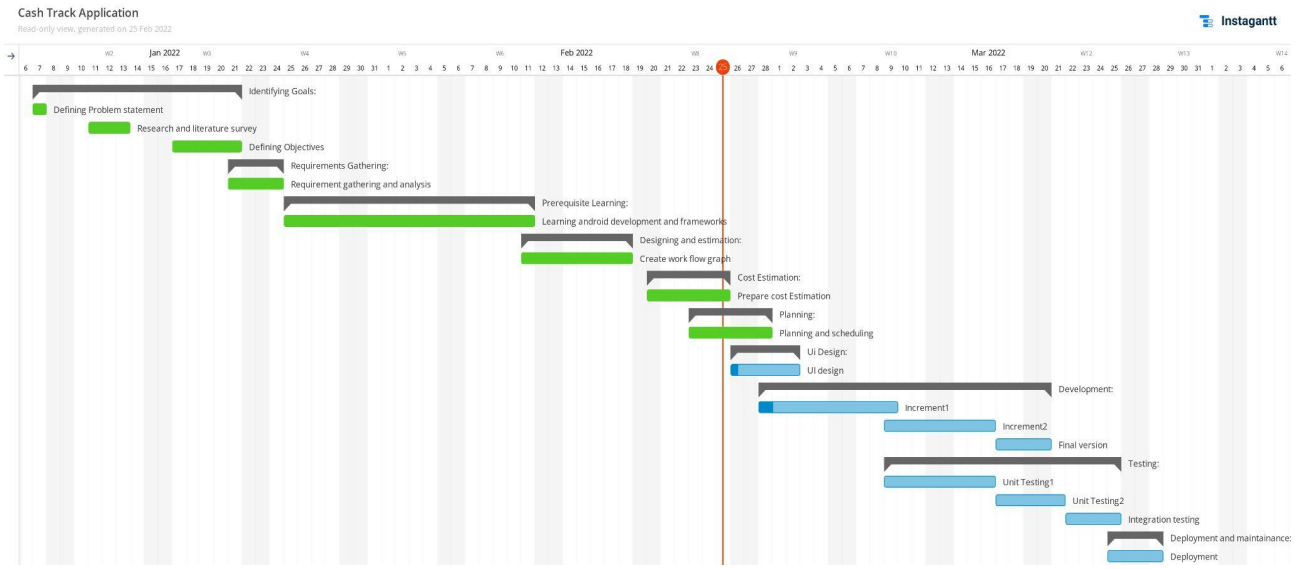
2.7 Workflow



2.8 Cost Estimation

Work	Type	Start date	End date	Period of time	Efforts	Costs
Identifying Goals :	**Analysing**	**7-01-2022**	**21-01-2022**	**15 days**		
Defining Problem Statement	Analysing	7-01-2022	7-01-2022	1 days	10 hrs	100 /hr
Research and literature survey	Analysing	11-01-2022	13-01-2022	3 days	8 hrs	100 /hr
Defining Objectives	Analysing	17-01-2022	21-01-2022	5 days	8 hrs	100 /hr
Requirement Gathering :	**Analysing**	**21-01-2022**	**24-01-2022**	**4 days**		
Requirement gathering and analysis	Analysing	21-01-2022	24-01-2022	4 days	8 hrs	100 /hr
Prerequisite Learning :	**Learning**	**25-01-2022**	**11-02-2022**	**18 days**		
Learning android development	Learning	25-01-2022	11-02-2022	18 days	25 hrs	100 /hr
Designing and estimation :	**Designing**	**11-02-2022**	**18-02-2022**	**8 days**		
Create work flow graph	Designing	11-02-2022	18-02-2022	8 days	15 hrs	200 /hr
Cost Estimation :	**Designing**	**20-02-2022**	**25-02-2022**	**6 days**		
Prepare cost estimation	Designing	20-02-2022	25-02-2022	6 days	20 hrs	300 /hr
planning :	**Designing**	**23-02-2022**	**28-02-2022**	**6 days**		
planning and scheduling	Designing	23-02-2022	28-02-2022	6 days	15 hrs	300 /hr
UI design :	**Designing**	**26-02-2022**	**2-03-2022**	**5 days**		
UI design	Designing	26-02-2022	2-03-2022	5 days	15 hrs	200 /hr
Development :	**Development**	**26-02-2022**	**20-03-2022**	**23 days**		
Increment 1	Development	28-02-2022	9-03-2022	10 days	30 hrs	350 /hr
Increment 2	Development	9-03-2022	16-03-2022	8 days	20 hrs	350 /hr
Final version	Development	17-03-2022	21-03-2022	5 days	15 hrs	400 /hr
Testing :	**Testing**	**9-03-2022**	**25-03-2022**	**17 days**		
Unit Testing 1	Testing	9-03-2022	16-03-2022	8 days	10 hrs	200 /hr
Unit Testing 2	Testing	17-03-2022	21-03-2022	5 days	10 hrs	200 /hr
Integration Testing	Testing	22-03-2022	25-03-2022	4 days	12 hrs	300 /hr
Deployment and maintainance :	**Deploy**	**25-03-2022**	**28-03-2022**	**4 days**		
Deployment	Deploy	25-03-2022	28-03-2022	4 days	4 hrs	200 /hr
Total					**225 hrs**	**54300**

2.9 Project Timeline



2.10 Advantages

- Managing Finances will allow users to record transactions with specific time and date, users can differentiate his/her expenses with different categories and can also set expenses limits
- User Authentication will allow users to enter the credentials for login which will prevent accessing sensitive information from unauthorized users.
- Managing Debts through users can track his/her borrowed and lent money and also users can review his/her history of borrowed and lent money in chronological order.
- In-built To-do list, where users can set future financial goals with the help of inbuilt to-do list, will provide users an option to list out things for user's feasibility also will allows user to pre-plan and set reminders of payments
- History and Insightful reports through users can review his/her history and filter the records. Easy-to-understand graphs and financial overviews will give you actionable finance insights about the state of your finances, across debts and cash.You can get your statistical report

2.11 Disadvantages

- Your information is less secure, and prone to cyber frauds.
- Automating everything to do with your finances can make you financially lazy.
- Your personal data is being used by the companies for purposes like ads recommendation.

3. System Features

3.1 Software Requirements

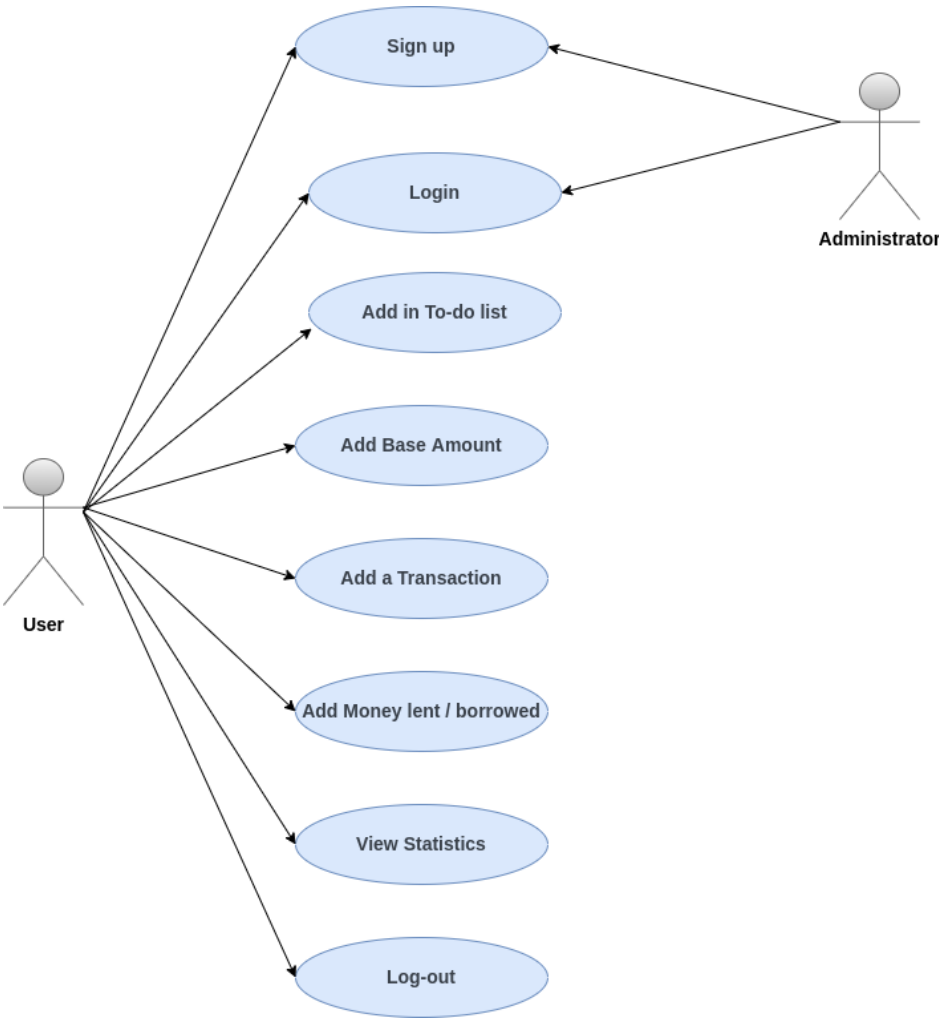
1) Android Operating System
2) Gmail Account

3.2 Hardware Requirements

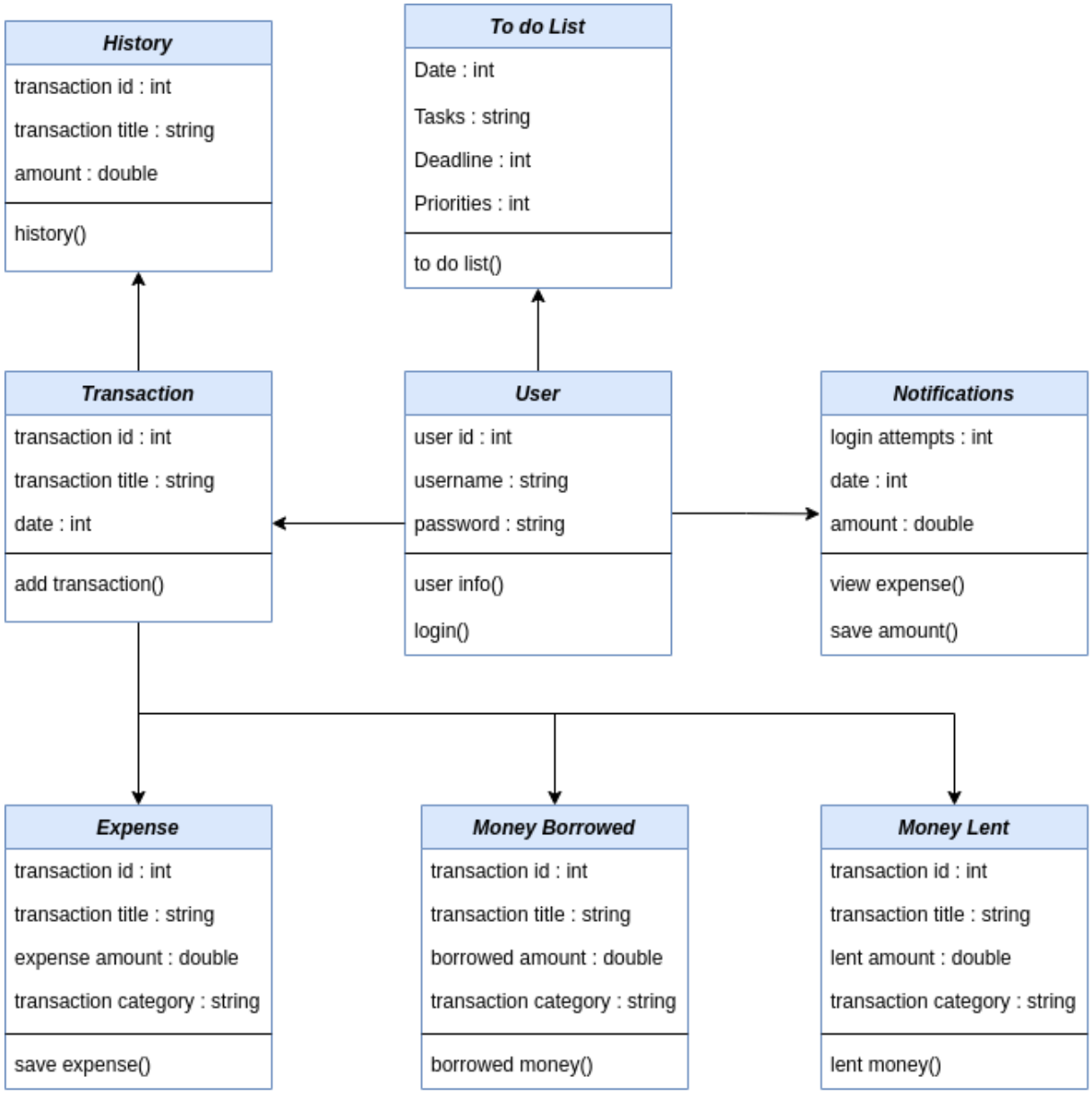
1) Android Phone
2) 3 GB RAM

4. System Design

4.1 Use Case Diagram

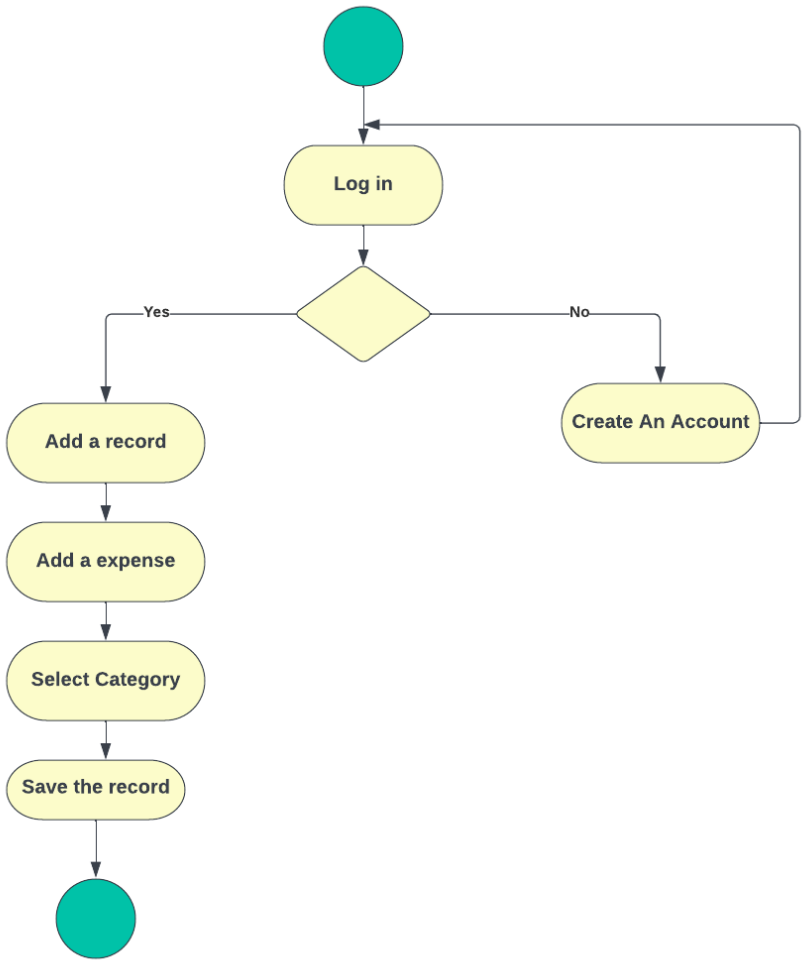


4.2 Class Diagram

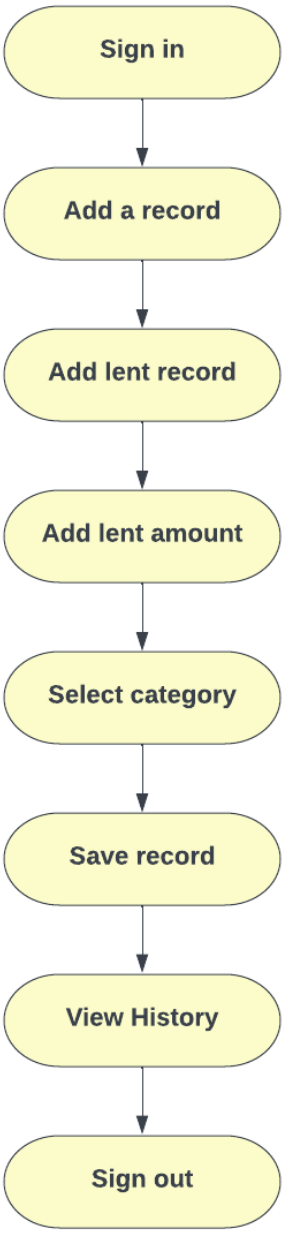


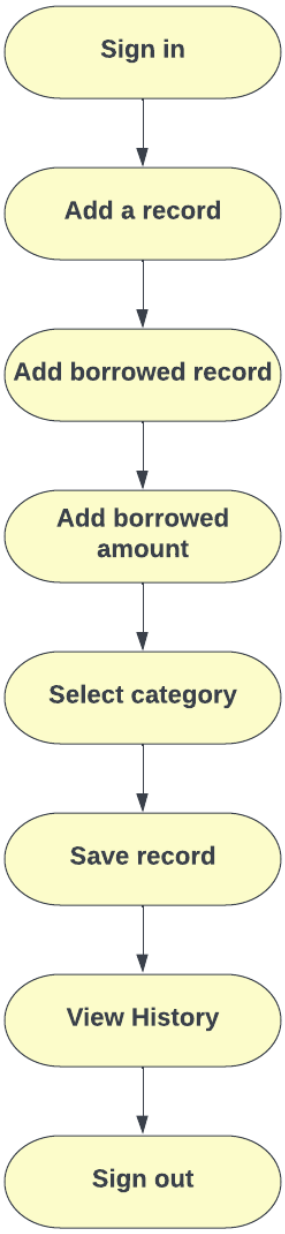
4.3 Activity Diagram

- Add Expense Record Activity



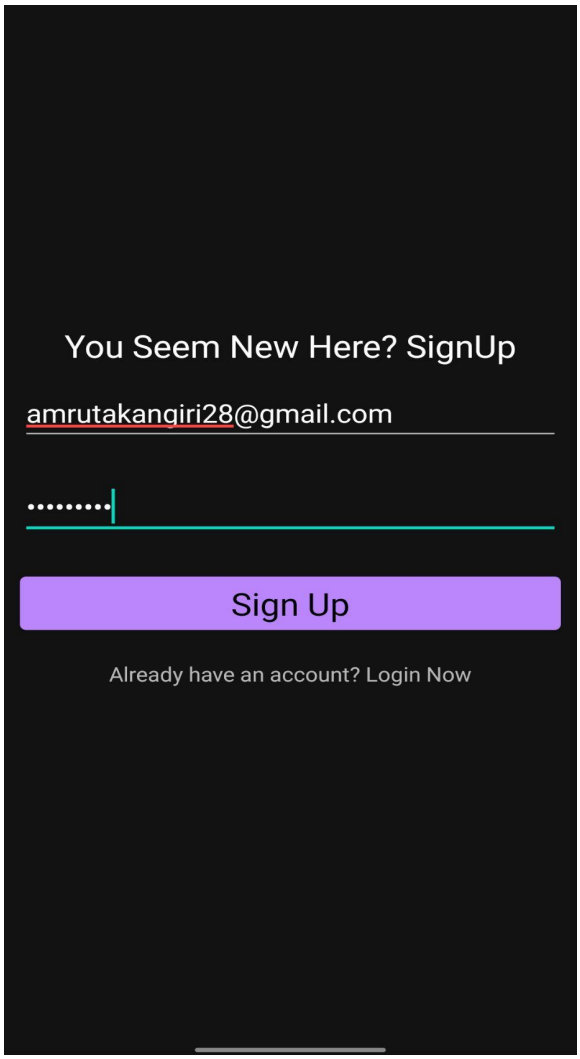
- Add Lent/Borrowed Money Record

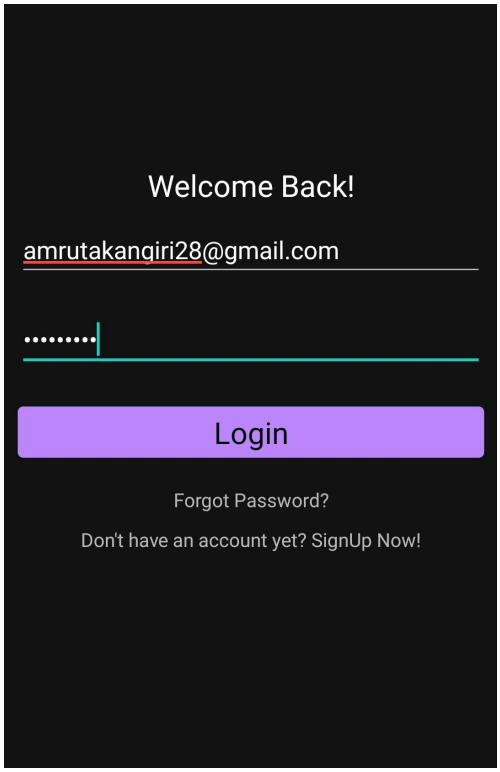


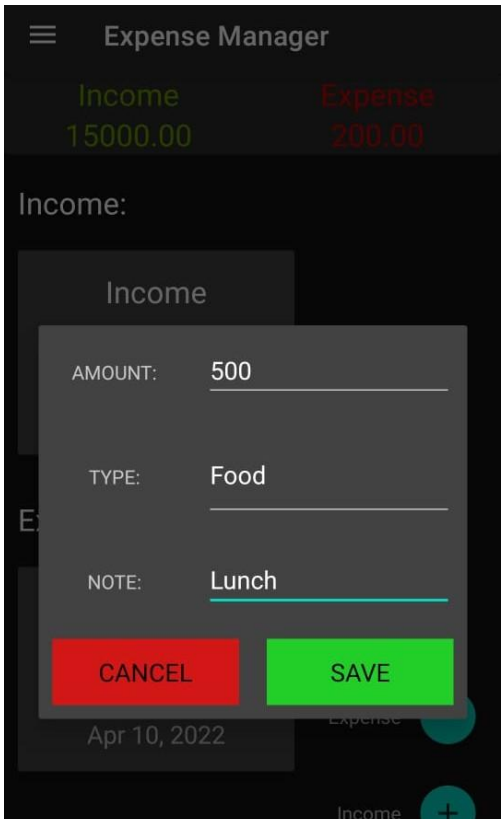


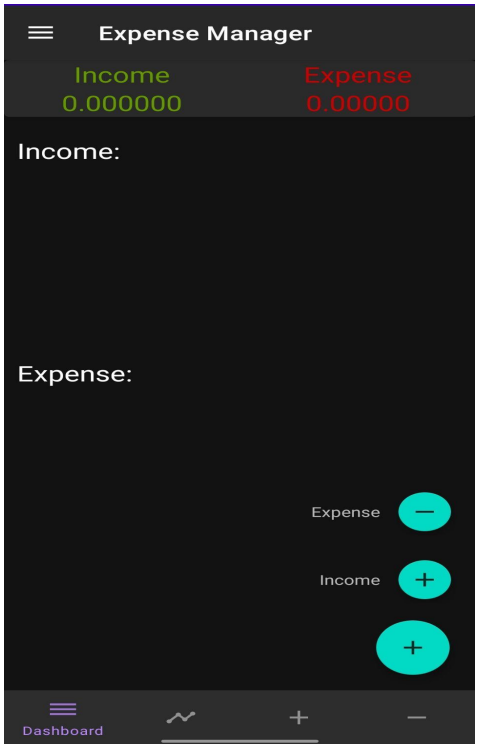
- In-built To-Do list

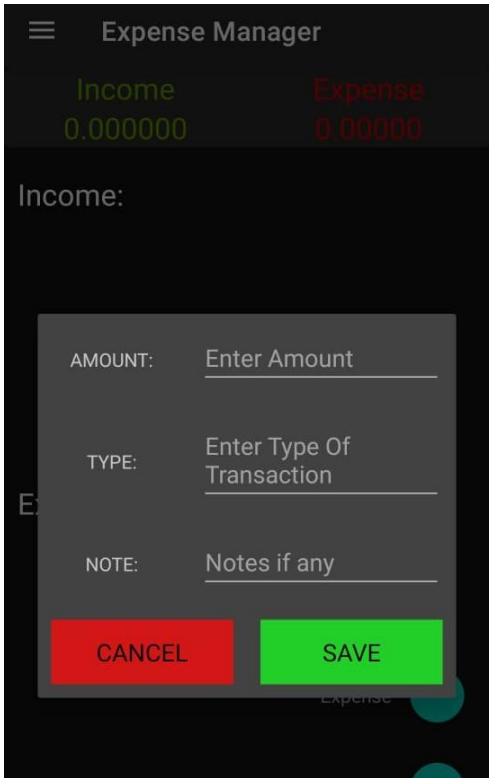
5. Coding and Snapshot

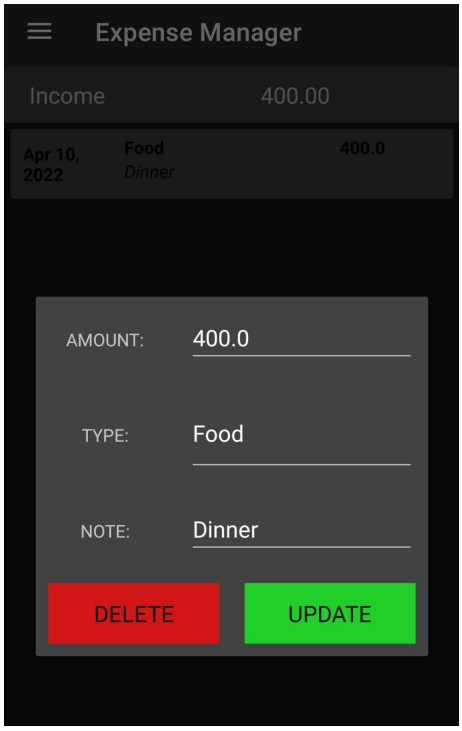


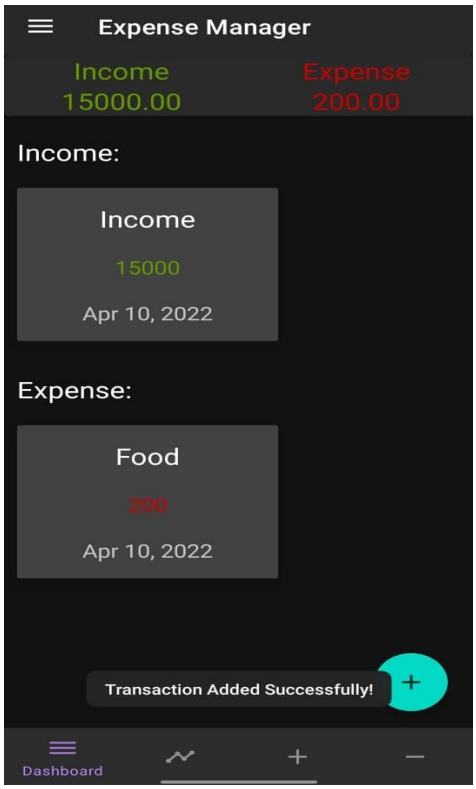

Welcome Back!
amrutakangiri28@gmail.com
Login
Forgot Password?
Don't have an account yet? SignUp Now!

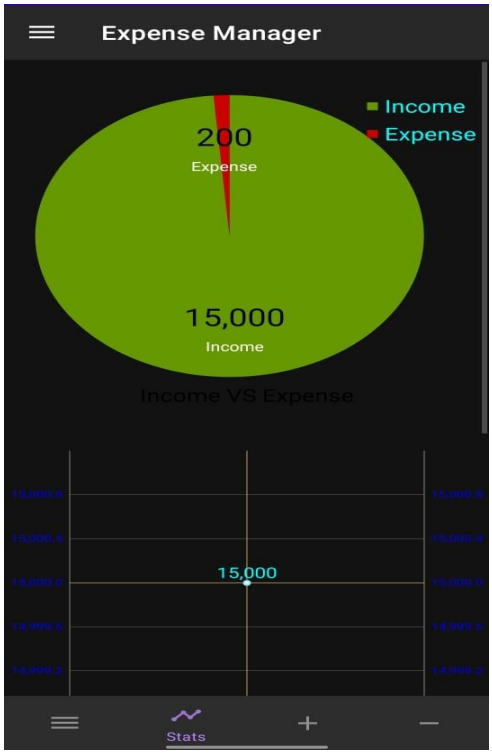

Expense Manager
Income
15000.00
Expense
200.00
Income:
Income
AMOUNT:
500
TYPE:
Food
NOTE:
Lunch
CANCEL
SAVE
Apr 10, 2022


Expense Manager
Income
0.000000
Expense
0.00000
Income:
Expense:
Expense
Income
Dashboard


Expense Manager
Income
0.000000
Expense
0.00000
Income:
AMOUNT:
Enter Amount
TYPE:
Enter Type Of Transaction
NOTE:
Notes if any
CANCEL
SAVE


Expense Manager
Income
400.00
Apr 10, 2022
Food
Dinner
400.0
AMOUNT:
400.0
TYPE:
Food
NOTE:
Dinner
DELETE
UPDATE


Expense Manager
Income
15000.00
Expense
200.00
Income:
Income
15000
Apr 10, 2022
Expense:
Food
200
Apr 10, 2022
Transaction Added Successfully!
Dashboard


Expense Manager
Income
Expense
200
Expense
15,000
Income
Income VS Expense
15,000
Stats

6. Testing

6.1 Login Test Cases

	Test id:	Test objectives	Pre requisite	Steps	Data	Expected result	Actual result	Status
4	login_01	to check for all fields of login page with valid data	our developed application	1.enter a userid 2.enter password 3.Click on submit	prajakta_25 378@8r4A	logged in successfully and control will goes to main activity of application	logged in successfully and control went to main activity of application	PASS
5	login_02	to check for all fields of login page, with invalid password & valid userid	our developed application	1.enter a userid 2.enter password 3.Click on submit	prajakta_25 78bhgk	It will show the error message as invalid password &control remains on the same activity.	It showed the error message as invalid password &control remained on the same activity.	PASS
6	login_03	to check for all fields of login page, with invalid userid and password	our developed application	1.enter a userid 2.enter password 3.Click on submit	prajakta_ 78bhgk	It will show the error message that invalid userid and password &control remains on the same page.	It showed the error message that invalid userid and password &control remained on the same page.	PASS
7	login_04	to check for all fields of login page, with blank userid and password	our developed application	1.enter a userid 2.enter password 3.Click on submit		It will show the error message as fill out the both the fields & control remains on the same page.	It showed the error message as fill out the both the fields & control remained on the same page.	PASS
8								
9								

6.2 Sign Up Test Cases

12	Test id:	Test objectives	Pre requisite	Steps	Data	Expected result	Actual result	Status
13	signup_01	to check for all fields of login page, with valid data	our developed application	1.enter a name 2.enter gmail 3. enter contact no 4. create userid 5. enter password 6.Click on submit	Amruta Kangiri ak@gmail.com 8597887645 Amruta@12 AmK@1234	Sign up successfully and control will goes to Login page activity of application	Sign up successfully and control went to Login page activity of application	PASS
14	signup_02	to check for all fields of login page, with blanks	our developed application	1.enter a name 2.enter gmail 3. enter contact no 4. create userid 5. enter password 6.Click on submit		It will show the error messages & control remains on the same page.	It showed the error messages & control remained on the same page.	PASS
15	signup_03	to check for all fields of login page, with invalid userid format	our developed application	1.enter a name 2.enter gmail 3. enter contact no 4. create userid 5. enter password 6.Click on submit	Amruta Kangiri ak@gmail.com 8597887645 Ak3 AmK@1234	It will show the error messages & control remains on the same page.	It showed the error message & control remained on the same page.	PASS
16	signup_04	to check for all fields of login page, with invalid password format	our developed application	1.enter a name 2.enter gmail 3. enter contact no 4. create userid 5. enter password 6.Click on submit	Amruta Kangiri ak@gmail.com 8597887645 Amruta@12 AmK	It will show the error messages & control remains on the same page.	It showed the error message & control remained on the same page.	PASS
17	signup_05	to check for all fields of login page, with invalid contact no format	our developed application	1.enter a name 2.enter gmail 3. enter contact no 4. create userid 5. enter password 6.Click on submit	Amruta Kangiri ak@gmail.com 859788 Amruta@12 AmK	It will show the error messages & control remains on the same page.	It showed the error message & control remained on the same page.	PASS
18	signup_05	to check for all fields of login page, with invalid gmail format	our developed application	1.enter a name 2.enter gmail 3. enter contact no 4. create userid 5. enter password 6.Click on submit	Amruta Kangiri ak_gmail.com 8597889067 Amruta@12 AmK@1234	It will show the error messages & control remains on the same page.	It showed the error message & control remained on the same page.	PASS

6.3 Add Transaction Test Cases

4	Test id:	Test objectives	Pre requisite	Steps	Data	Expected result	Actual result	Status
5	baseamt_01	to check current amount with remaining of base amount limit	our developed application	1.enter expense amount	1000 (baseamount limit = 5000)	expense added successfully and control will goes to nest page activity of application	expense added successfully and control went to nest page activity of application	PASS
6	baseamt_02	to check current amount with remaining of base amount limit	our developed application	1.enter expense amount	1000 (baseamount limit = 500)	It will show the error messages & control remains on the same page.	It showed the error message & control remained on the same page.	PASS

7. Future Scope

1. Automatic Bank Updates where transactions can be automatically and securely synced with your bank, smartly categorized and factored into your budget.
2. You can import all your transaction data from sources of your choice to CashTrack.
3. You can login multiple user accounts simultaneously.
4. You can set reminders of payments in advance.

8. Conclusion

Our project is only a venture to satisfy the needs of a classroom. Several user-friendly coding has also been adopted. This package shall prove to be a powerful package in sa sfying all the requirements of a class. The results obtained from the experiments and testing ensures that the proposed method is efficient and user-friendly. This project which yields centralized system that makes Management is easier.

9. Project URL

https://github.com/Prajakta4555/CashTrack.git