ARTexceptionals

Basic Prototype

Requirements

❖ The gathered requirements have been analyzed and categorized as Essential, Necessary and Desirable Requirements.

1. **Essential Requirements:**

❑ Customizable category, deleting option.

❑ Payment method of income and expenditure.

❑ Free text note.

❑ Date

❑ Security feature(Pin for the app)

❑ Statistics

2. **Necessary Requirements:**

❑ Security question to retrieve forgotten password. Take the answer for security question while setting the pin.

❑ The data needs to be filtered based on time, type of payment, category, range of money.

❑ Currency change support.

Requirements I

3. **Desirable Requirements:**

- Sharing expense with other users

- Summarize monthly expenses in mail

- Store data on server/firebase

- Sync at particular time with firebase serve

❖ **Estimated Time:**
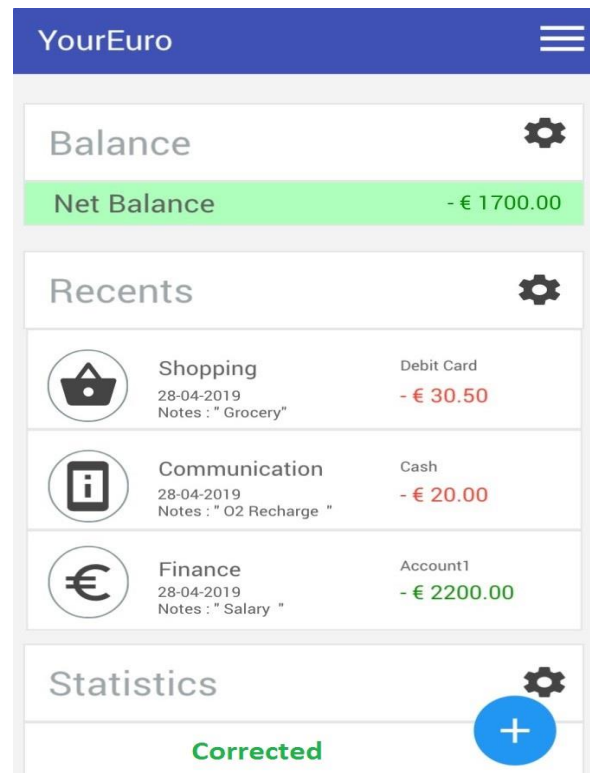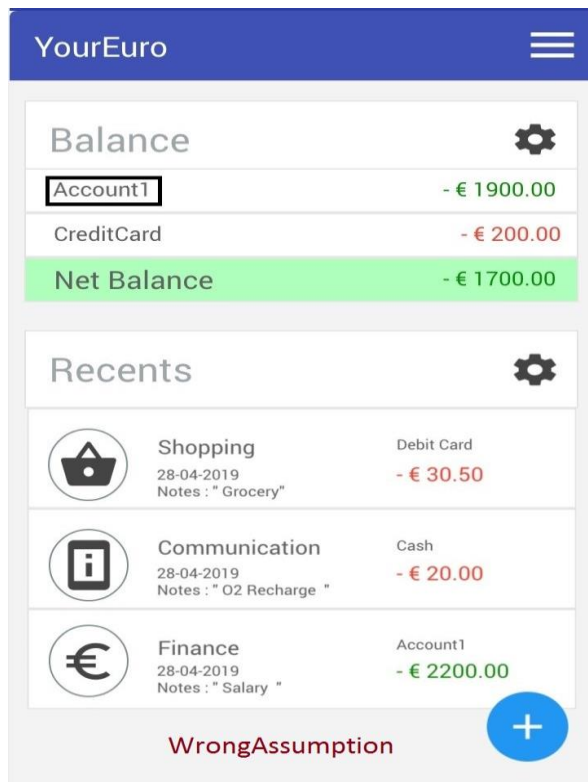
- Divided our User stories into four Epics

- Each Epic is categorized into Stories and Stories are further categorized into multiple tasks

- Have provided three sprints for each Epic, one and a half sprints for each story

- For fast and smooth purpose of our work, we have divided our development teams into two groups, each working on one Epic

- The time estimation of two other Epics will be re-calculated depending on first two Epics
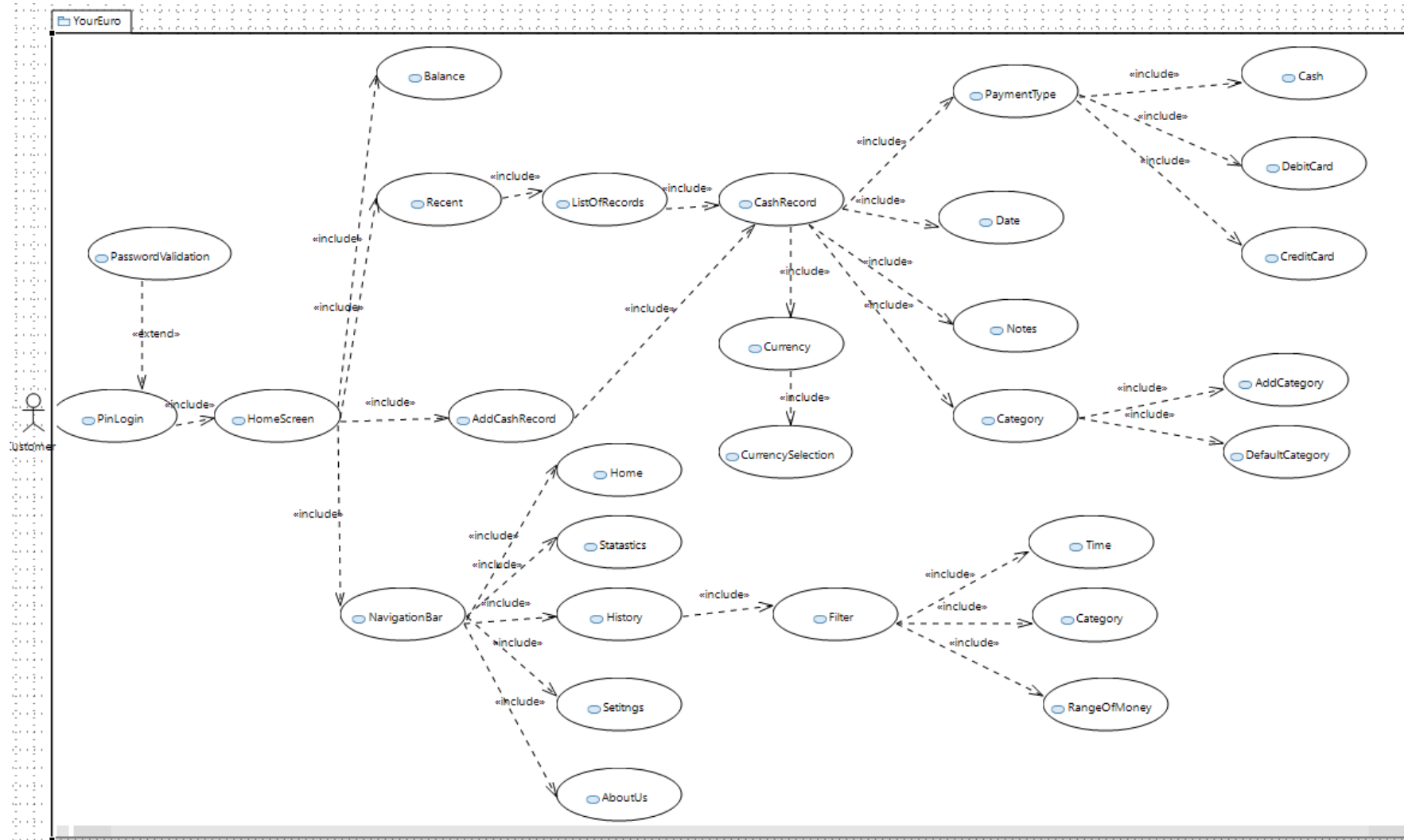
User Story

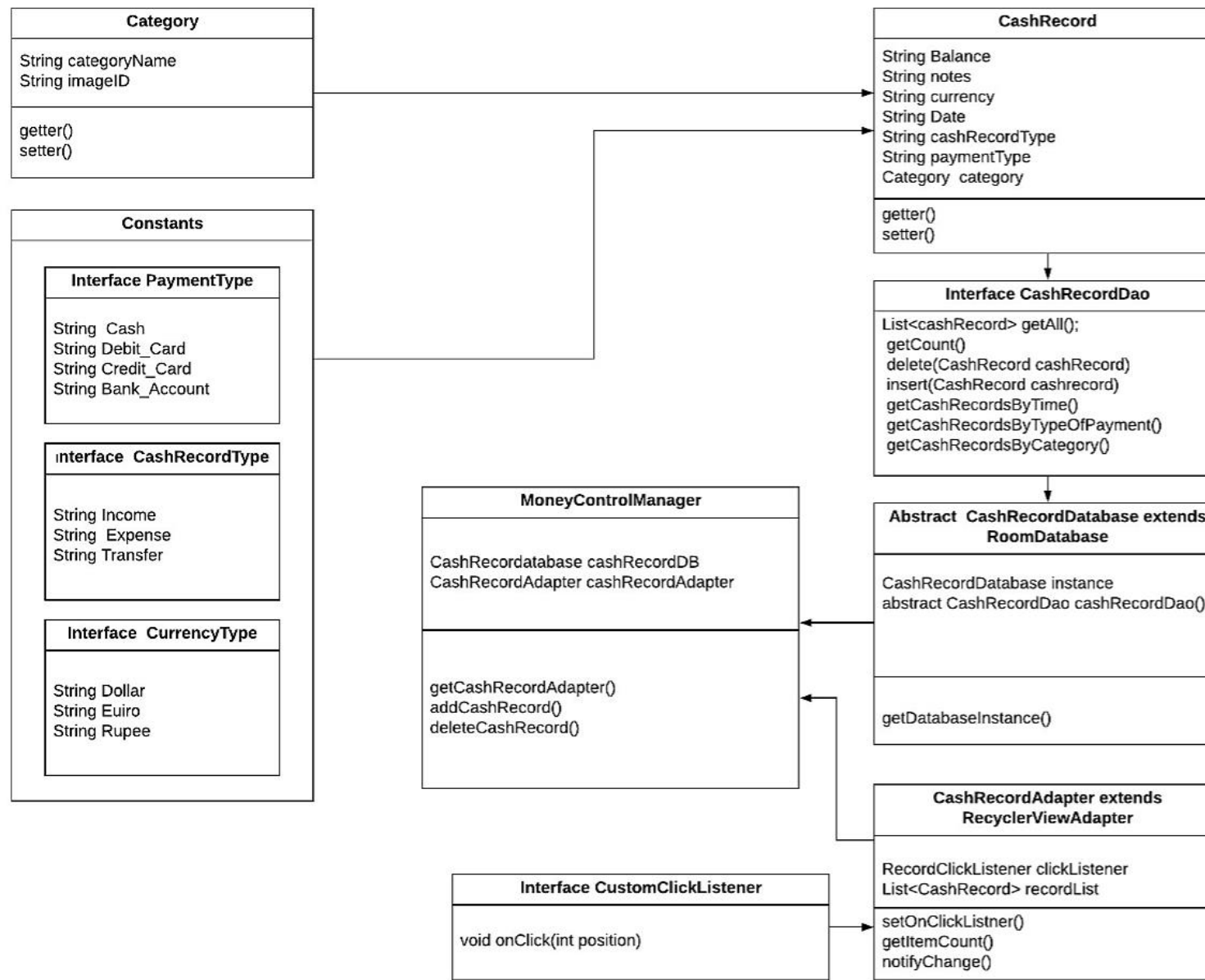| EPIC 1	EPIC 2	EPIC 3	EPIC 4
User should be able to record monetary transaction.	User should be able to view history of transactions.	User should be able to configure the app via settings.	User should be able to view the Statistics of transactions in Graphical format.
Story 1: User should be able to give details about the transaction.(Date, Payment Type).	**Story 1:** Display recent transaction.	**Story 1:** Setup security features.	**Story 1:** User should be able to visualize his expenses.
Task 1: Designs details activity	**Task 1:** Design how a record must be displayed.	**Task 1:** Enable security	**Task 1:** Explore the graphical library.
Task 2: Store records in database.	**Task 2:** Design recent view in Home screen.	**Task 2:** Setup pin.	**Task 2:** Display summary in different graphical format.
Story 2: User should keep a track of repetitive transactions.	**Story 2:** Display records in a given span of time.	**Story 2:** Currency Selection.	**Story 2:** User should be able to filter the summary.
Task 1: Filter based on name with time.	**Task 1:** Filter based on date-daily, weekly, monthly, yearly.	**Task 1:** Default currency	**Task 1:** Filter based on time period.
	Task 2: Filter based on category, range of money, payment type.	**Task 2:** Explore and implement currency conversion library.	

Wrong Assumptions

❖ Barcode scanning is not required

❖ We assumed that Login authentication should be given using Google, Facebook or email whereas the client requirement is just pin authentication

❖ We got to know filtering the expenses based on Payment type, Range of money and category is required along with just date (initial assumption)

❖ Our assumption was to include multiple bank accounts in the app but the requirement is to monitor transactions of only one account as shown below.
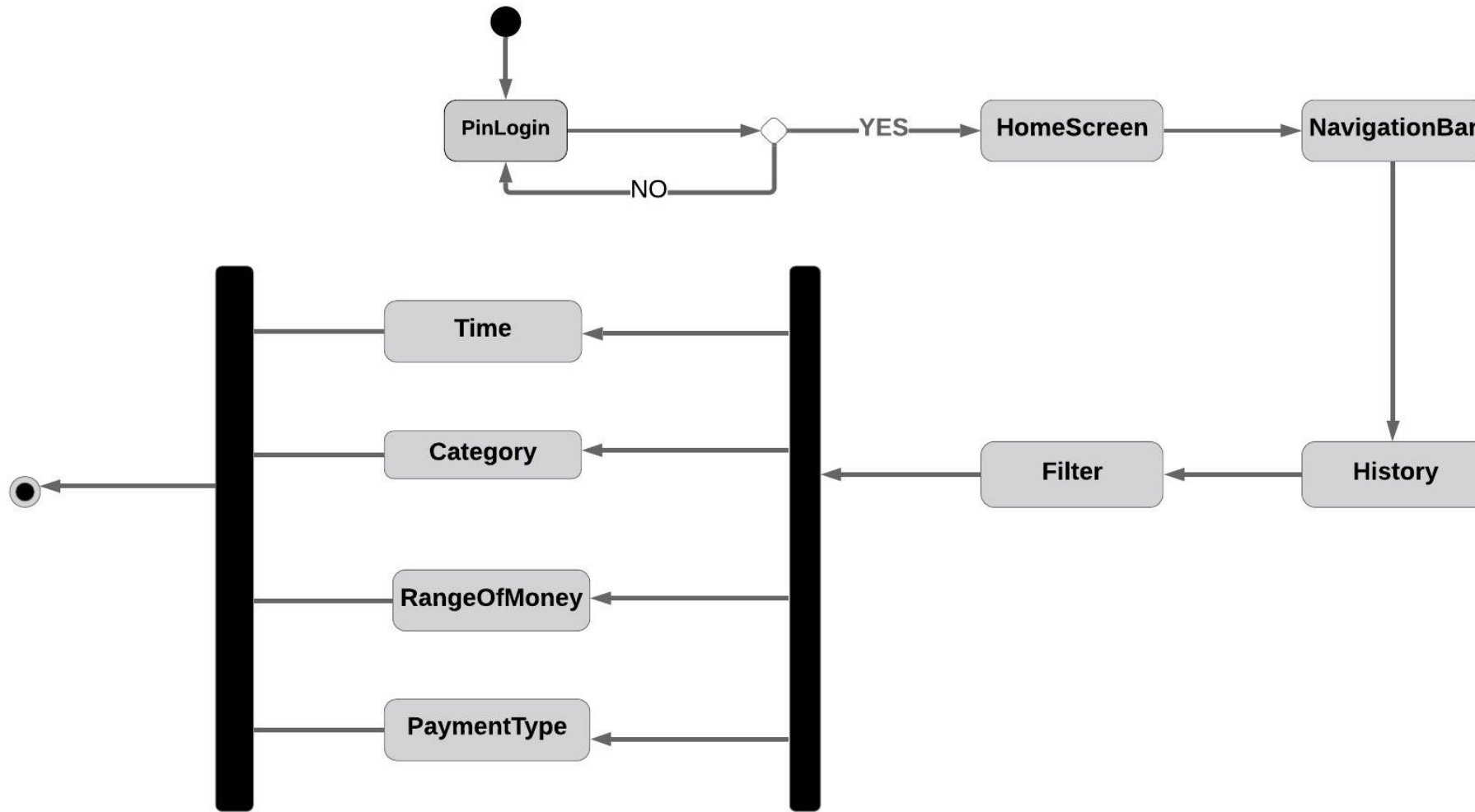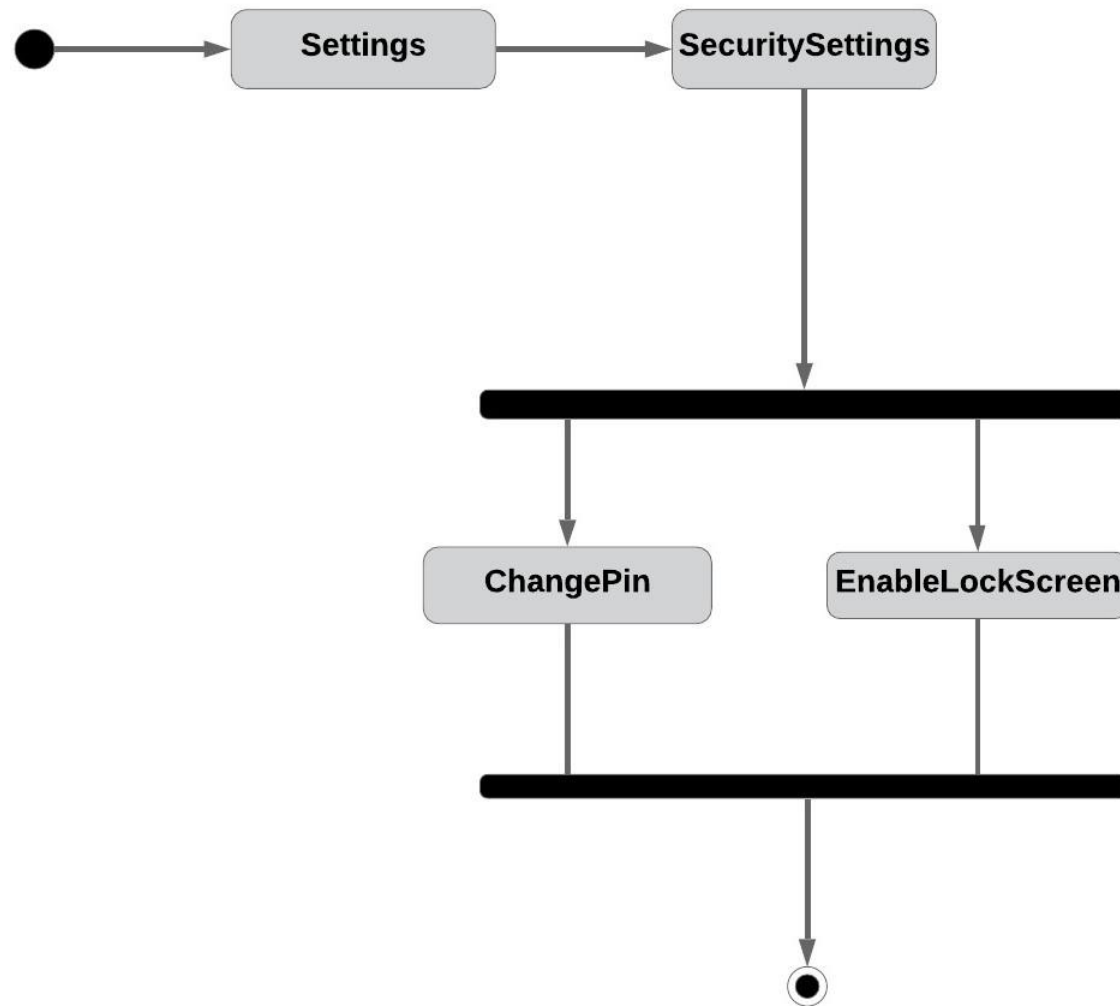
Use Case Diagram

Class Diagram

Category

String categoryName
String imageID

getter()
setter()

CashRecord

String Balance
String notes
String currency
String Date
String cashRecordType
String paymentType
Category category

getter()
setter()

Constants

Interface PaymentType

String Cash
String Debit_Card
String Credit_Card
String Bank_Account

Interface CashRecordType

String Income
String Expense
String Transfer

Interface CurrencyType

String Dollar
String Euiro
String Rupee

Interface CashRecordDao

List<cashRecord> getAll();
getCount()
delete(CashRecord cashRecord)
insert(CashRecord cashrecord)
getCashRecordsByTime()
getCashRecordsByTypeOfPayment()
getCashRecordsByCategory()

MoneyControlManager

CashRecordatabase cashRecordDB
CashRecordAdapter cashRecordAdapter

getCashRecordAdapter()
addCashRecord()
deleteCashRecord()

Abstract CashRecordDatabase extends RoomDatabase

CashRecordDatabase instance
abstract CashRecordDao cashRecordDao()

getDatabaseInstance()

CashRecordAdapter extends RecyclerViewAdapter

RecordClickListener clickListener
List<CashRecord> recordList

setOnClickListner()
getItemCount()
notifyChange()

Interface CustomClickListener

void onClick(int position)

Activity Diagram- Navigation Bar

Activity Diagram- Settings Page

Development Strategy

Development Strategy I

Development Strategy II

Active branches

`development_Madhu`	Updated 6 days ago by sirivellamadhugopal	2 | 6	#1 🛠 Open 🗑
`development_Kartik`	Updated 10 days ago by kartikprabhu20	2 | 5	🛠 New pull request 🗑
`development_Avinash`	Updated 10 days ago by kartikprabhu20	2 | 5	🛠 New pull request 🗑
`development_Anitha`	Updated 10 days ago by kartikprabhu20	2 | 5	🛠 New pull request 🗑
`development_1`	Updated 10 days ago by kartikprabhu20	2 | 5	🛠 New pull request 🗑

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Filters ▾   🔍 is:pr is:open   🏷 Labels 8   🚩 Milestones 0   **New pull request**

☐ 🛠 1 Open ✔ 0 Closed   Author ▾   Labels ▾   Projects ▾   Milestones ▾   Reviews ▾   Assignee ▾   Sort ▾

☐ 🛠 **#Added pin activity**   💬 1
#1 opened 7 days ago by sirivellamadhugopal

💡 **ProTip!** Click a checkbox on the left to edit multiple issues at once.

Questionnaire

❖ **Please answer In Yes/No:**

❑ **Are libraries any allowed?**

❑ **Can we use barcode scanning used as input?**

❑ **Is Enabling of sharing the expenses with others required?**

❑ **App must support the currency change?**

❑ **Do we need to provide the Ads feature in our App?**

❖ **Check the following based on the requirement:**

1) **Login Authentication using**

a) **Locally**

b) **Google and Facebook**

c) **Others**

2) **How does the data need to be stored?**

a) **Locally**

b) **Server/firebase**

c) **Others**

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Questionnaire I

3) What is the duration of history needs to be saved?

a) One day

b) One week

c) One month or more

4) How the statistics of the expenses must be displayed?

a) Pie chart

b) Bar graph

c) Designer choice

5) Make the working prototype available as

a) Downloadable ask file

b) As a separate release branch in the git repo

c) other

❖ **Fill the answers:**

1) Please specify the minimum version of android that our app must support.

2) Do we need to handle tab design.

Thank You