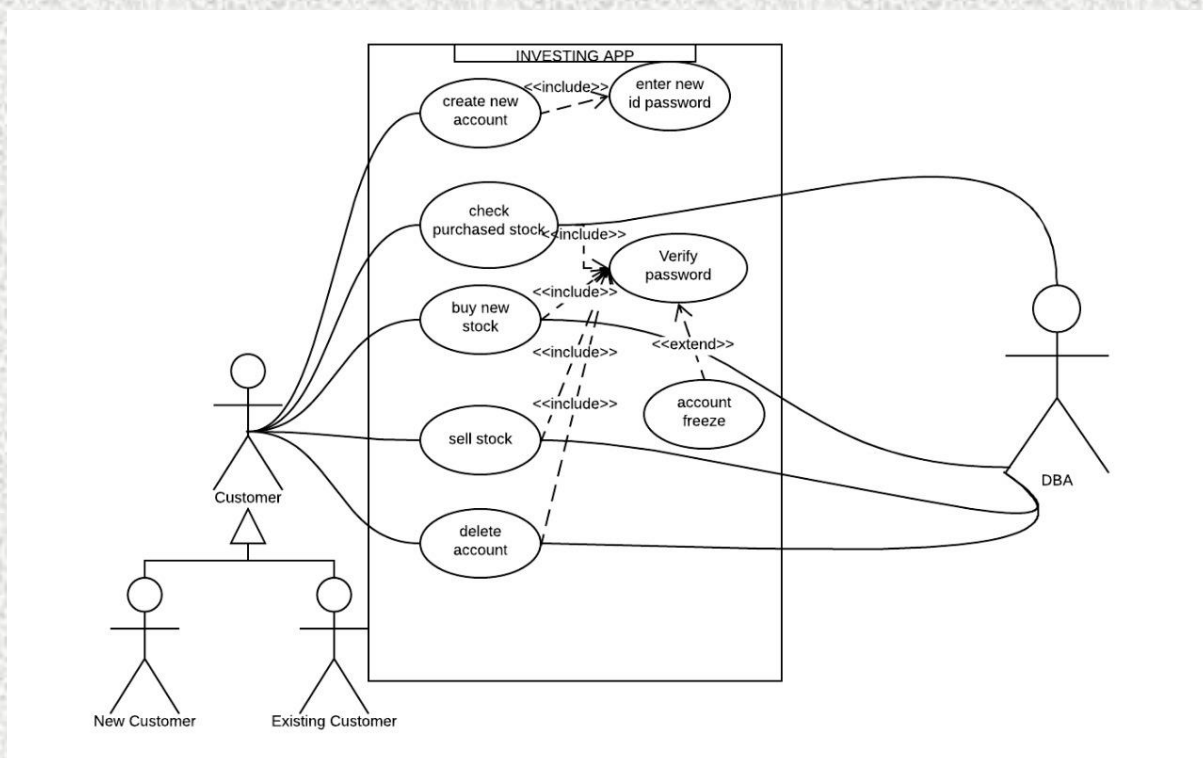# Capstone: First Mentor Evaluation

THE MONEY TREE

(A Personal Finance and Investment Application)

## To identify system behavior and requirements:

1. **To draw Use Case diagram(s)**

2. **To identify the set of complete tasks of the project:**

- Building and analyzing the risk profile of the user.
- Analysis of specific categories of stocks.
- Custom stock portfolio recommendation based on the risk profile.
- Tax saving recommendations based on personal profile.
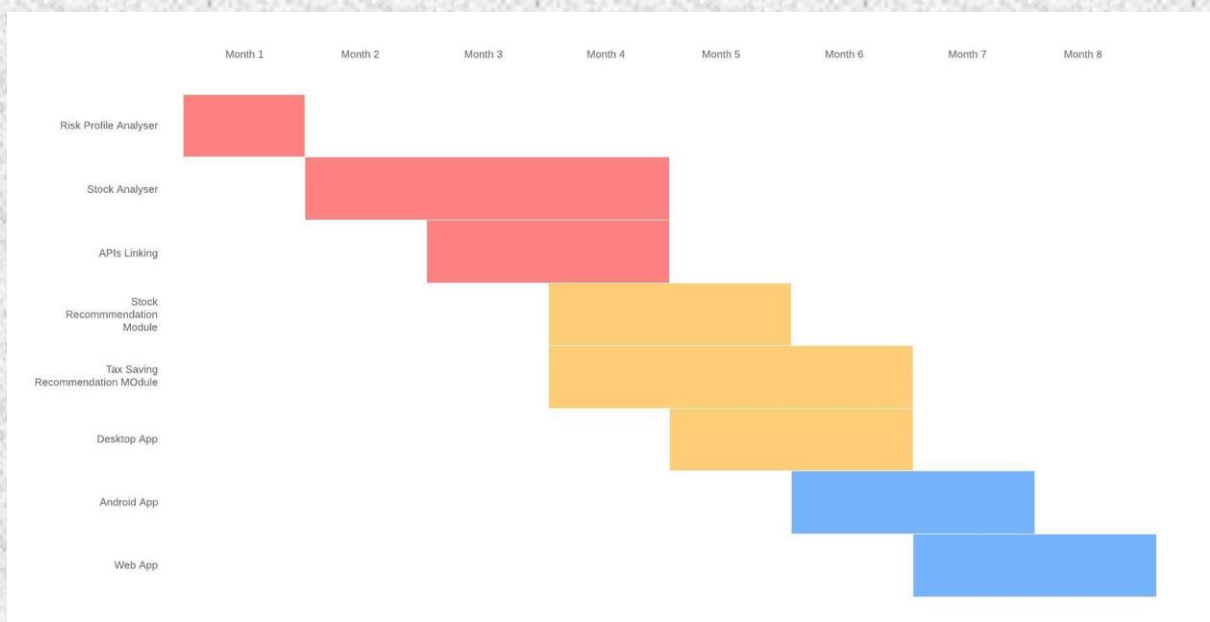- Developing an android/Web application as a user interface.

3. To create Swimlane diagrams/Activity diagrams
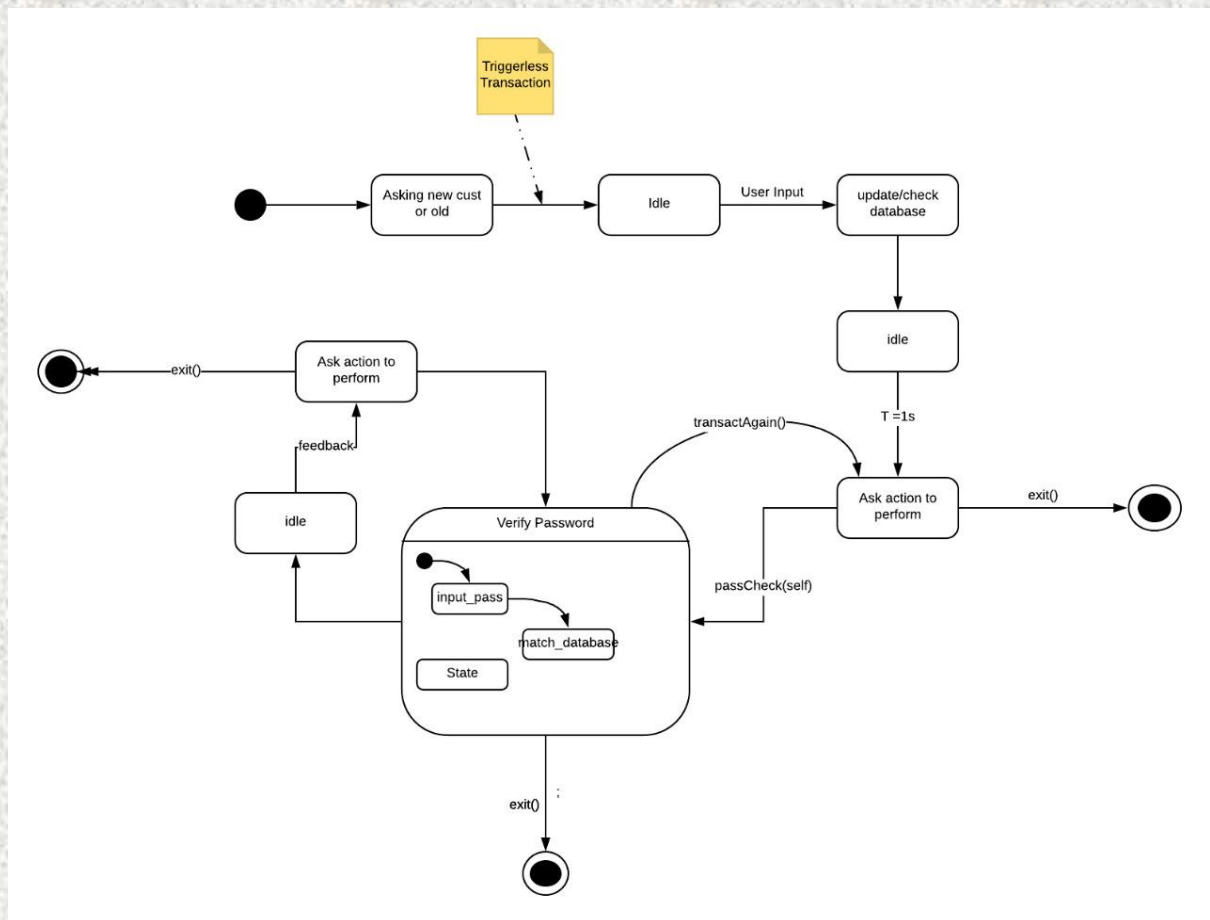
4.   To create Work Breakdown Structure:
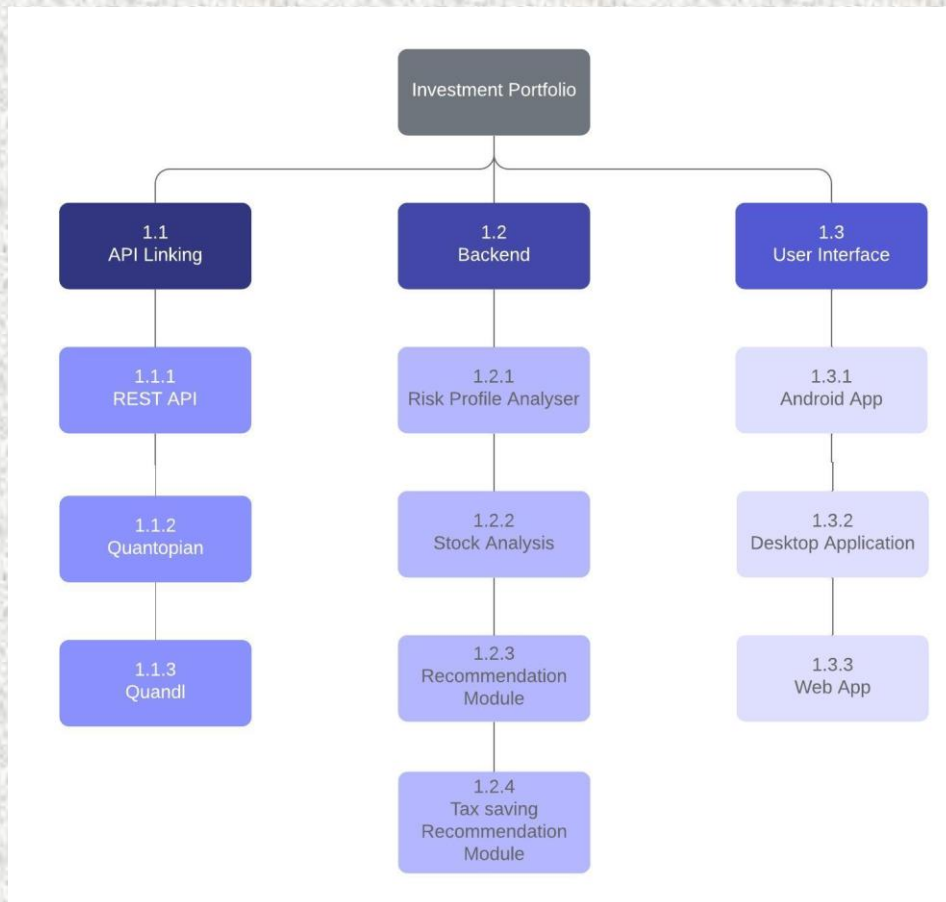
5.   To schedule all the tasks in Work Breakdown Structure using Gantt chart:

6. **To identify all the requirements of the Project and to classify them into Functional and Non-Functional requirements**

Functional Requirements

- User Interface

The main requirement with the user interface is to have a quite minimal and simple design, but with all the necessary features at hand. User should be easily able to locate different features and not get overwhelmed.

- Hardware Interfaces

Hardware needs are of Linux servers, which are all managed by the hosting service provider – Amazon Web Services. As such there is no hardware need according to our current estimation.

- Software Interfaces

A. Operating System: Windows, Linux, Android
B. Tools: Sublime text editor, Jupyter Notebook, Netbeans IDE, Eclipse IDE, Anaconda
C. Database: MySql Database
D. Language: Java ,Python, Javascript, Html, CSS
E. Plugins & libraries: TensorFlow, ExpressJS, ReactJS, beautiful soup

Non Functional Requirements

- Performance Requirements

The main performance requirement is of having a application which responds quickly to the traffic and it must be fast enough to keep the user engaged. The financial data will be exchanged with server using the APIs developed and external APIs which provide financial data to the server.

- Security Requirements

Outmost attention needs to be paid to user privacy and data security. The user's authentication details need to store in encrypted format (SHA 256). JWT tokens would be used for authentication process. Suitable measures will be used to detect intrusion and prevent data leak events.