

## The Pitch

- The problem at hand is the challenge many individuals face in managing their personal finances effectively. We have come up with a simple but effective solution that goes deeper into the spending and earnings of a user.
- In our app, we include displaying data through visualizations by reading CSV files and exporting those visualizations in a PDF file, adding incomes and expense, having daily summaries of total amounts of money spent/earned and what is most common expense/income, profile page, accessing information about banks through a search bar on a map by using Google Maps and Places API, adding potential stocks to add on to a portfolio of the user by using Alpha Vantage and showcasing the total amounts of money on specific days through use of a calendar.

#### Why this idea is worth approaching.

- Growing Individual Financial Concerns
  - Significant percentage of individuals express worries about financial well-being
  - A notable portion of the population faces challenges in budgeting, saving, and managing expenses effectively.
- Empowering more individuals to save more money while becoming more financially literate
  - Our solution is designed to empower individuals, fostering increased savings and enhancing financial literacy while making it accessible to everyone due to the nature of mobile apps

### Challenges that we overcame and why scope matches group size

- Issues with api configs as we were using both Google Maps and Places APIs
- Configuration of database within firebase as this was first time using it
- Track your stock portfolio within the app, as well as get live PnL updates
- The scope matches our group size as we have many extensive features:
  - Visualization of finances using CSV files and PDF of visualizations being saved
  - Adding incomes and expenses for each specific user
  - Daily summaries of total amount spent/earned
  - Accessing information about banks on a map
  - Showing expenses on a calendar on any given day
  - Showing what is most common expense/income
  - Customization of profile information
  - Adding stocks towards a portfolio
  - Log in/sign up

#### Who did what

- Haris: Profile customization page, Home page that shows total income/expense, pie graph of incomes/expenses and most common expense/income
- Paul: Log in/sign up, visualizations of income and expense using pie and bar charts, exporting visualizations in a PDF that is saved onto user's phone
- Kia: Add Expenses and also connect it to the backend, Investment portfolio tracker, random bug fixes
- Inder: Incorporate Google Maps and Places API to showcase information about banks on a map, show expenses on any given day on a calendar
- Tanjodh: Add Income and connect it to the backend, various animations on splash start up page, and creating/setting up the website

# Lessons learned from doing this project -- both positive and negative

- We learned how to work concurrently without stepping on each others toes by using a version control tool (github)
- We learned how to use firebase for authentication and for saving other informations such income/expenses, user related information
- We learned how to incorporate several APIs such as Alpha Vantage, Google Maps and Places API
- We learned that you have to commit small changes and commit often; else, you have difficult merge conflicts
- We learned that you must discuss and plan before writing any code