

FINTECH BOOTCAMP



Team 2

I-Invest

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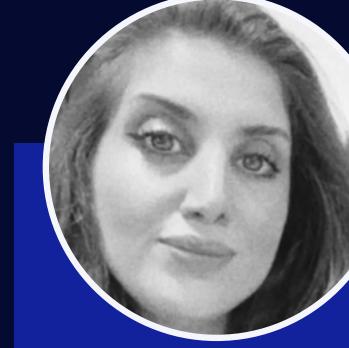
Our Team



Mario
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Alghalia
Alsammak



Luis Rosales
Garcia



Nafeezur
Chowdhury

Problem

- Figuring out an investment portfolio is daunting in a market where there are so many options and overwhelming amount of information.
- Understanding the personal risk tolerance and matching it to a suitable investment portfolio

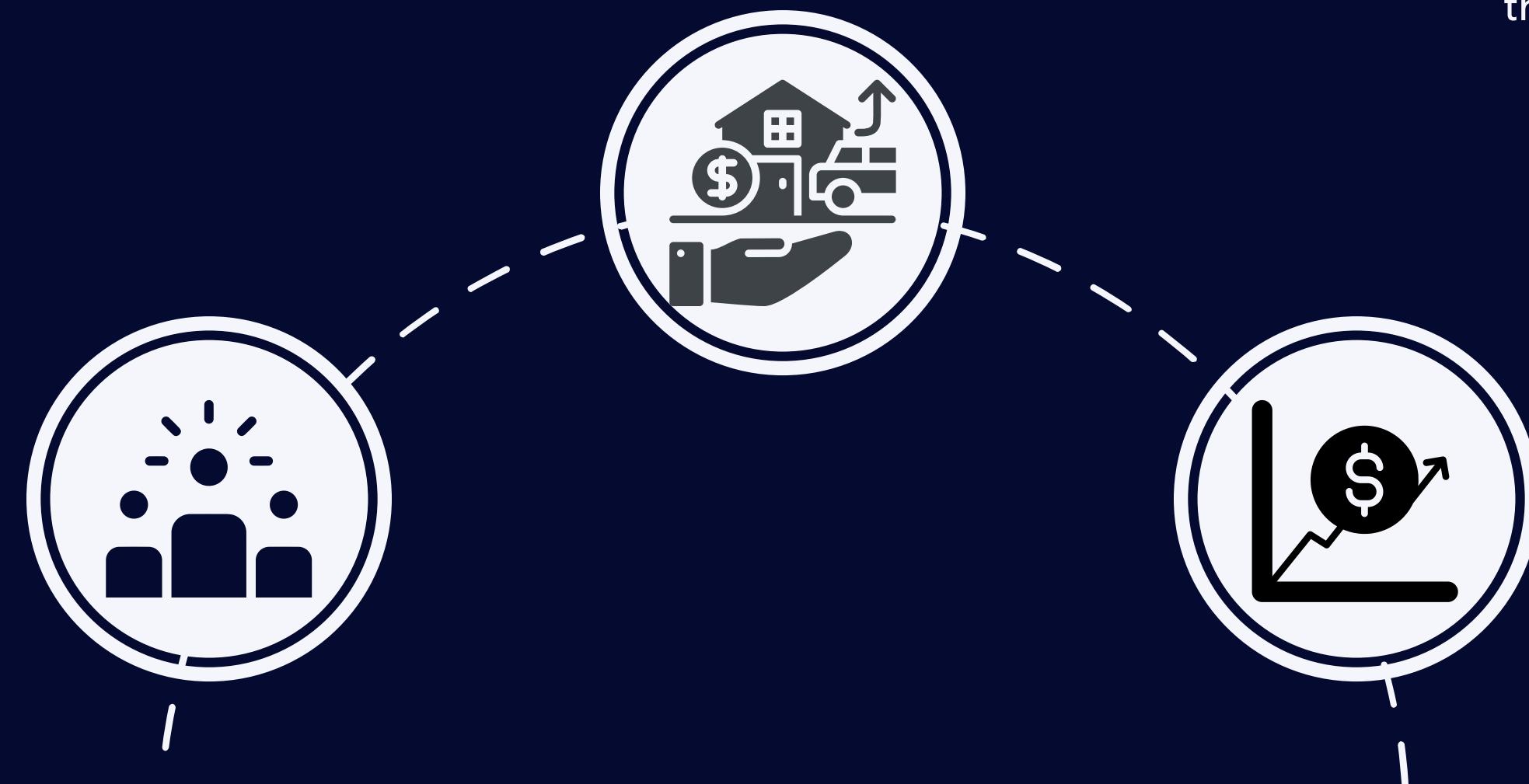


I-Invest Solution

I-invest will advise the users a suitable ETF based portfolio based on their risk assessment profile

USER PROFILE ASSESSMENT

Understand the investor requirements, timelines and magnitude of the investment



ASSET ALLOCATION PER RISK PROFILE

Identify the risk appetite of the investor and align the investment portfolio projections

RISK-RETURN PORTFOLIO

Recommend a portfolio of securities to include bonds, crypto and ETFs based on their historic and predicted future returns

I-Invest Process

Customer is presented with a set of simple questions to provide a impactful investment portfolio



Tools & Technologies

Multiple technologies and statistical models are used to build the I-Invest Application



Python



Pandas, Numpy



Alpaca



Fire and
Questionary



Mean, Standard
Deviation,
Cumulative returns



MonteCarlo
Simulations

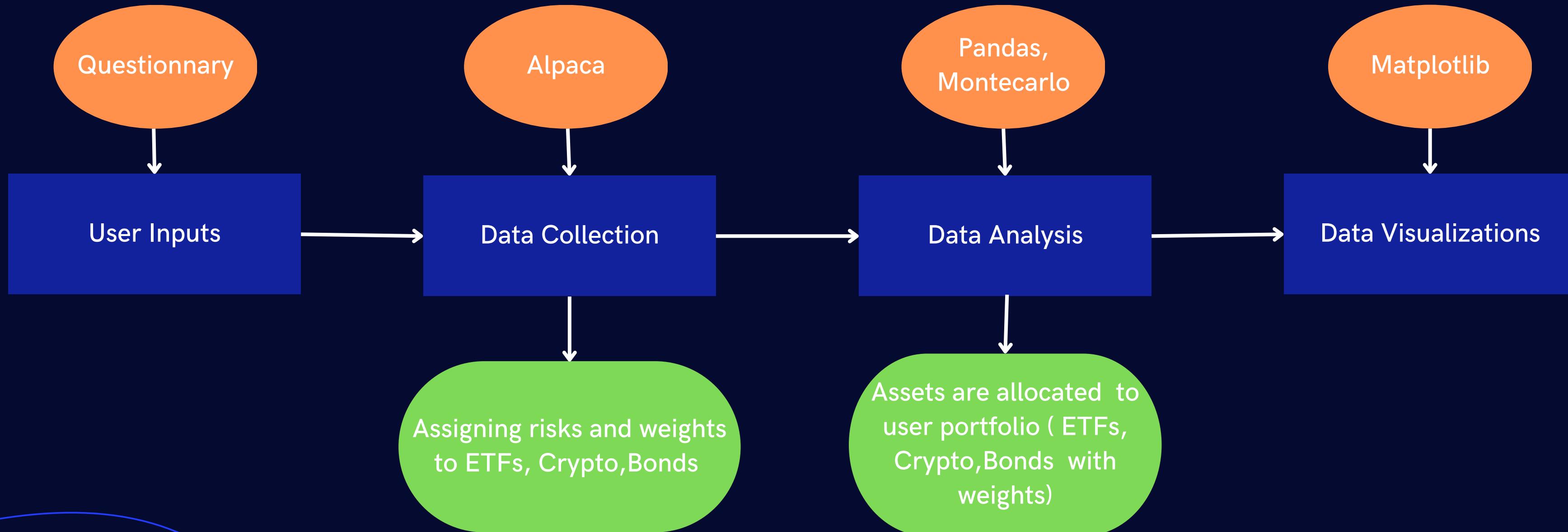


Matplotlib



Github

Data Inputs and Outputs

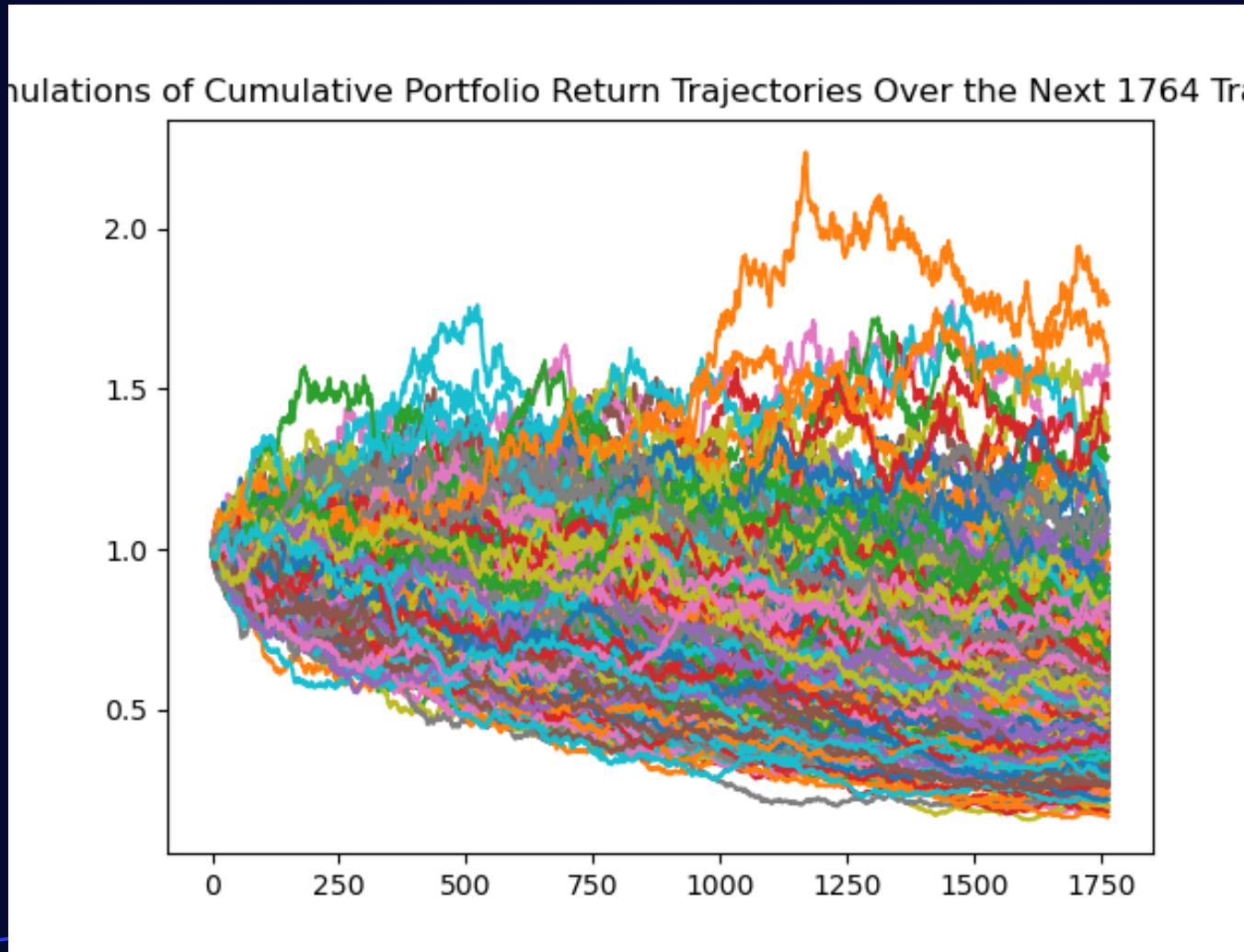


User Inputs

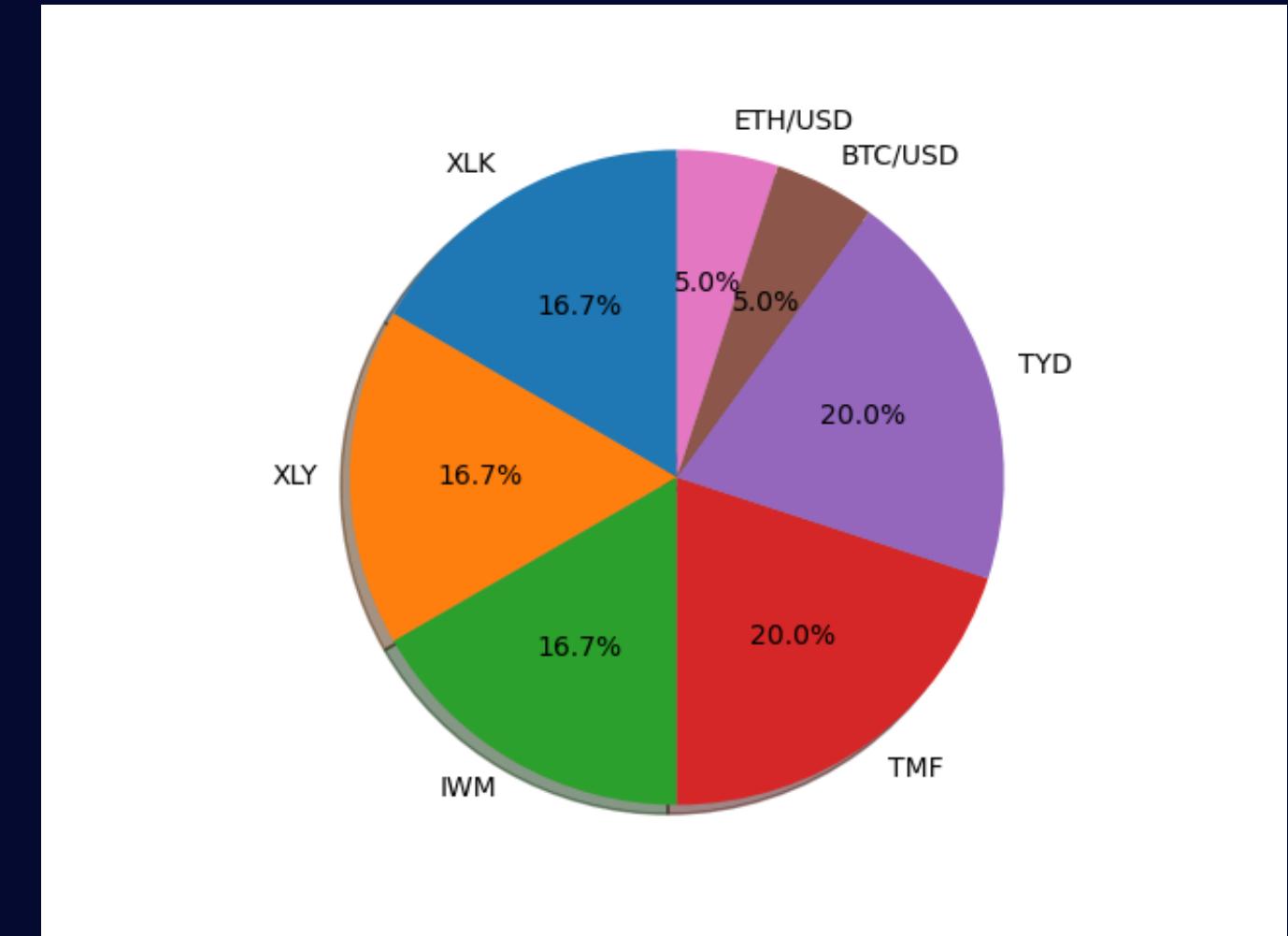
1. What is your name? John James
2. What would you consider your income level to be? Medium
3. Which of the following words do you most associate with risk in the financial context? Uncertainty
4. Which statement describes your expected portfolio performance in the next 2 years? I can tolerate a small loss
5. Do you agree with the following statement?: "Protecting my portfolio is more important than my returns." Neutral
6. If you unexpectedly received \$100,000 to invest today, which of the following best describes you? Invest in a mix of bonds and stocks
7. How long do you want to invest? 7-Years
8. How much do you want to invest? (min \$5000) 10000

Outputs - High Risk

Projected Performance



High Risk Portfolio



-7 year projection

Running Monte Carlo simulation number 400.

Juan, with your current investment of \$9000.0.
You will get an annualized return of 19.1%
with a total between \$8508.0 and
\$16739.96 in 7 years.

Lessons Learned and Next Steps

Challenges faced

- Using graphs in a cli application

Future Improvements

- Increase the selection of funds across multiple sectors
- UI component to make the user experience better
- Provide user the option to input asset selection and incorporate into portfolio
- Incorporate the fund dividends into the returns calculation

Thank You!

