



GOLDEN YEARS



Project Team

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Mau**

Programmer



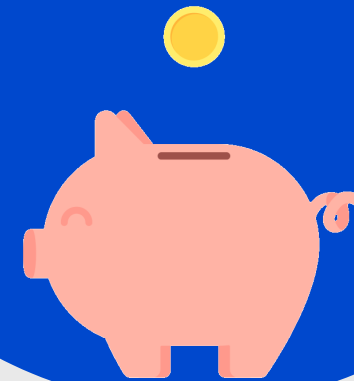
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Programmer



**Robert
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Tengsico**

Programmer

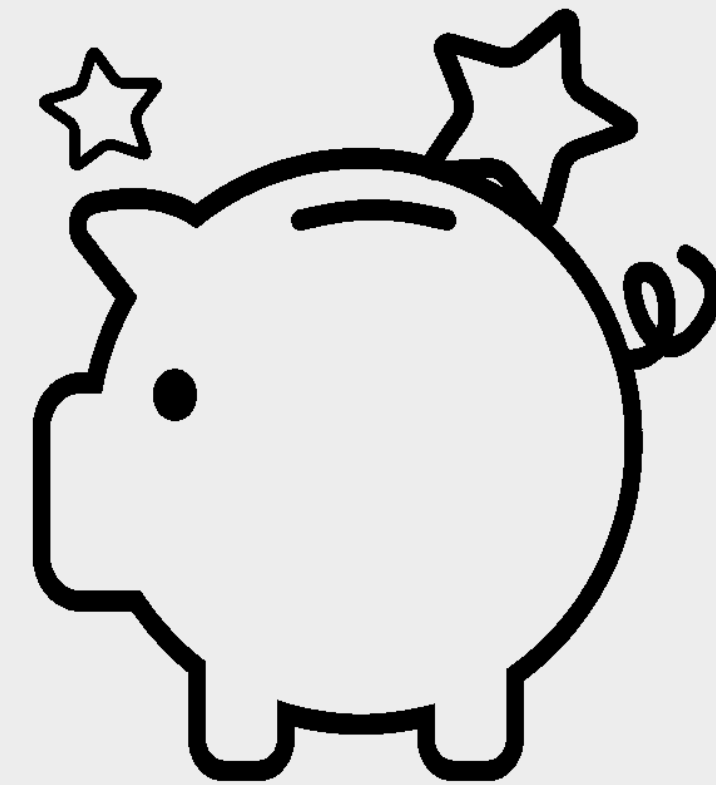




Problems?



Solutions!



What Does Our Product Do?



Data Sources & Analysis



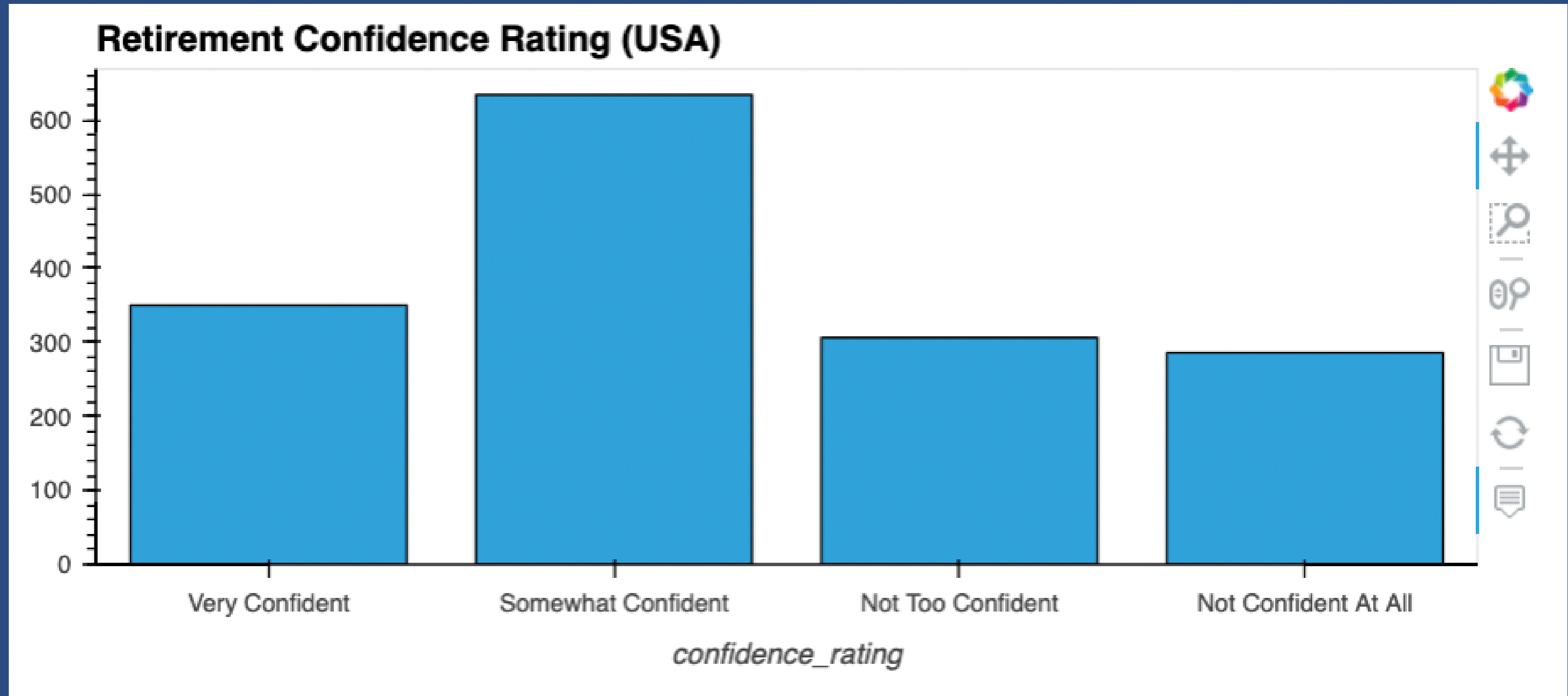
Sources:

Retirement Confidence Data
User Input
Financial Forecast

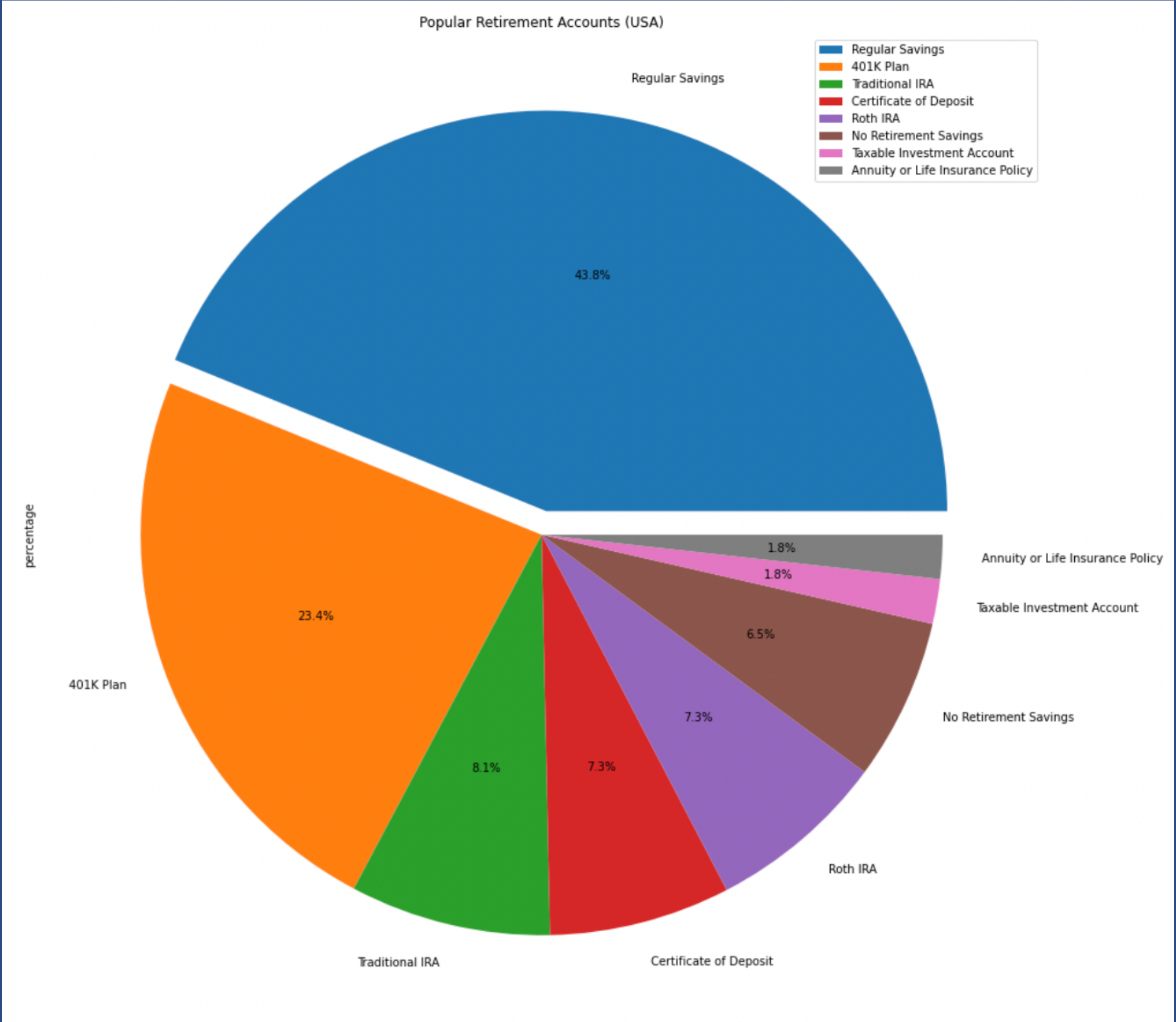
Analysis:

Part 1: Analysis of USA Retirement Data
Part 2: User Input
Part 3&4: Financial Forecast and Simulations

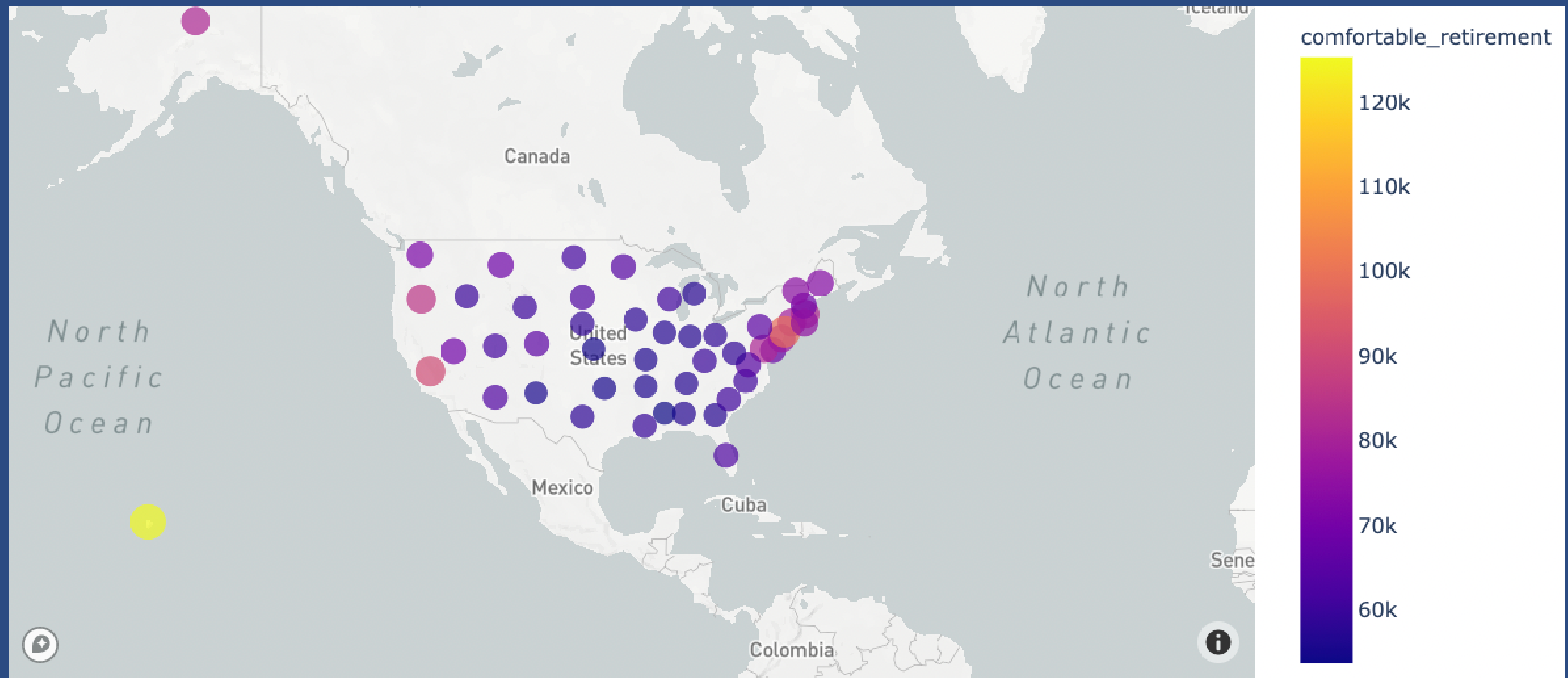
Retirement Confidence Rating - USA



Popular Retirement Accounts - USA



Comfortable Retirement - USA



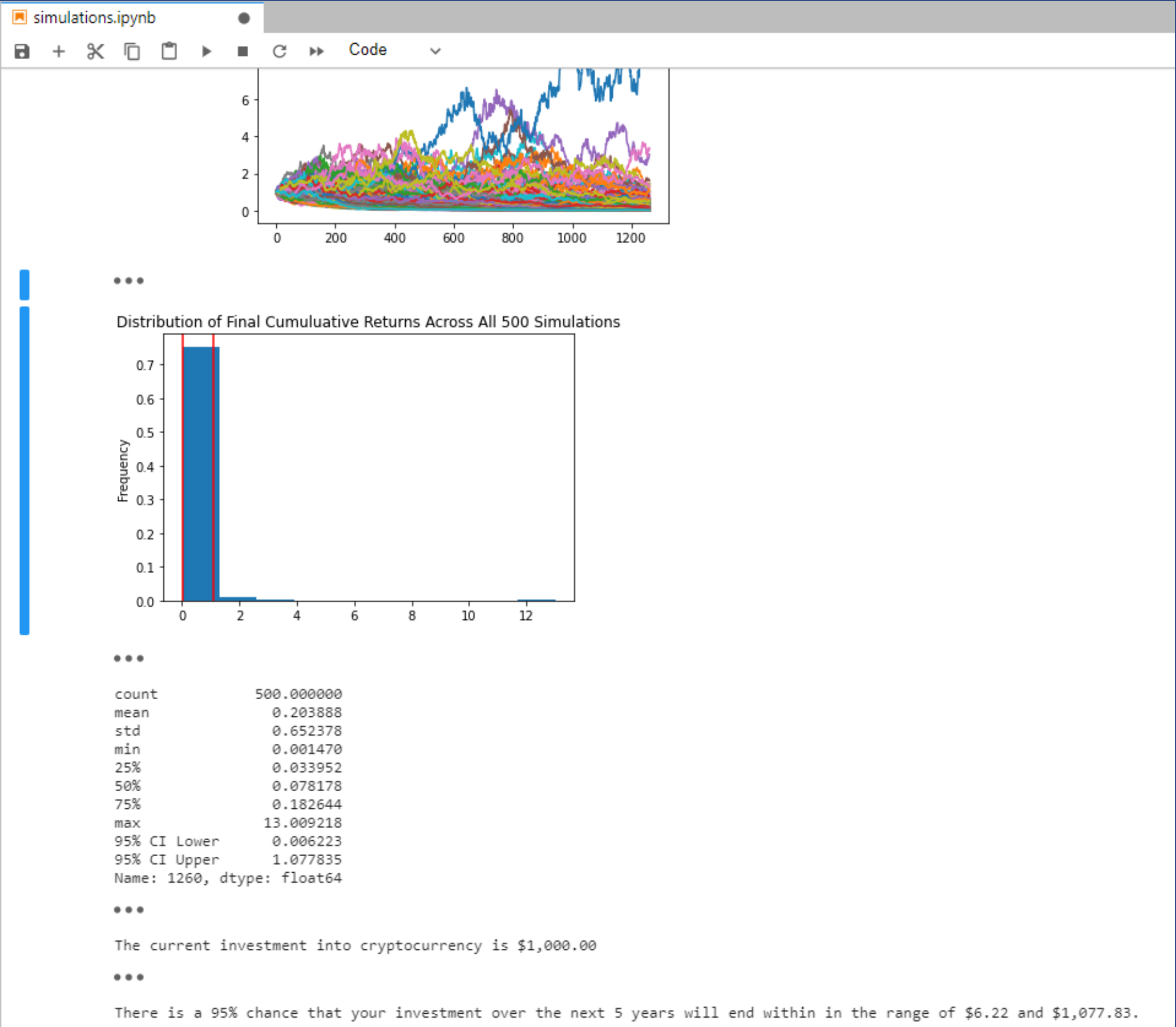
User Input

```
? Select a state to get started Arizona  
Wonderful! This how much you need to live comfortably in Arizona $63453  
? Do you plan to invest to increase your savings? No  
? Would you like to view investment options anyway? Yes  
? Select either 'Stock' or 'Crypto' or 'Both' to get started Crypto  
? Crypto is an amazing way to start saving. Select a crypto to continue: (Use arrow keys)  
  » ETH  
    BTC
```

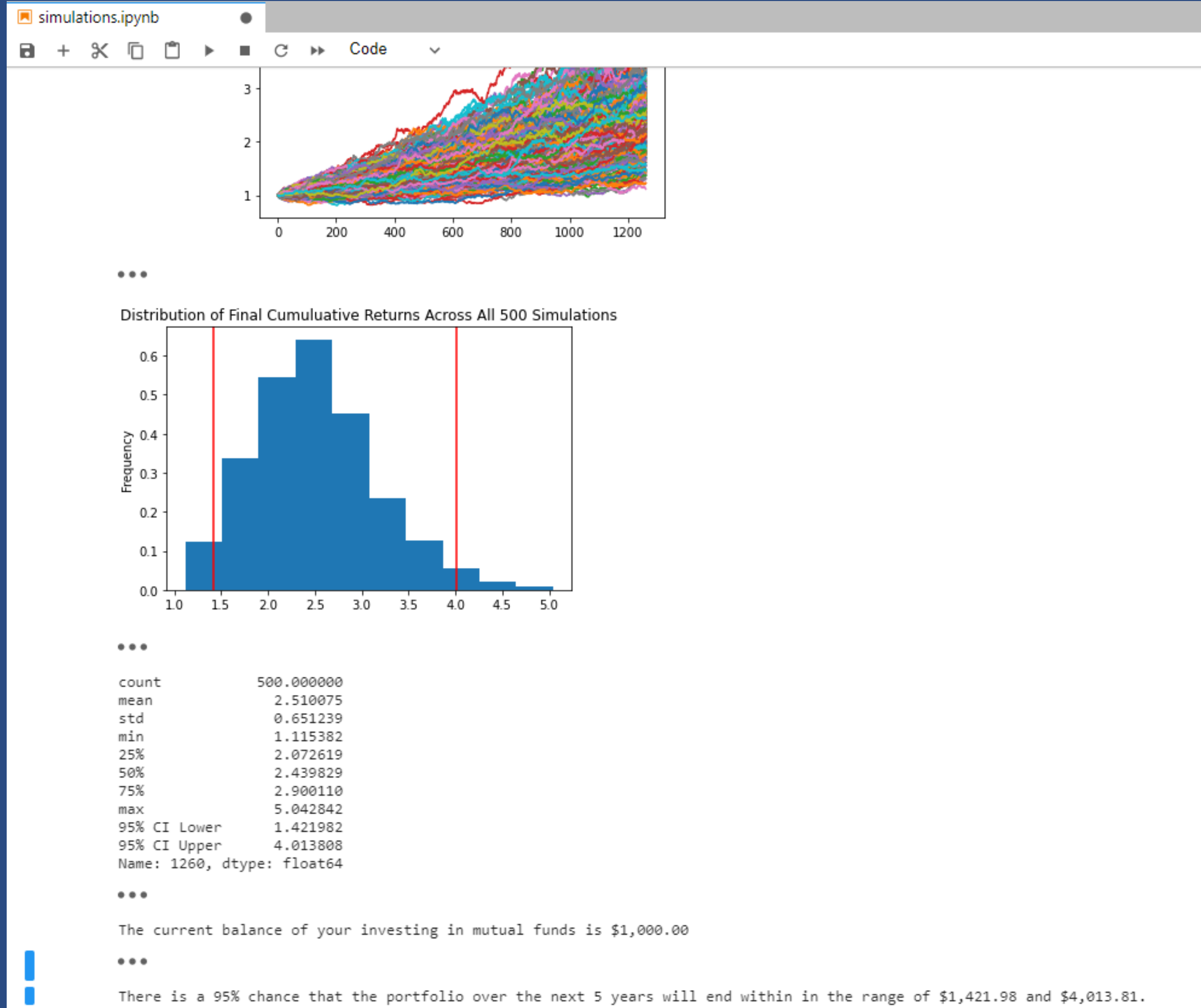
Savings Account Calculation

```
Enter starting principle please. 1000
Enter number of compounding periods per year. 1
Enter annual interest rate. e.g. 15 for 15% 5
Enter the amount of years. 5
The final amount after 5 years is $1,276.28.
```

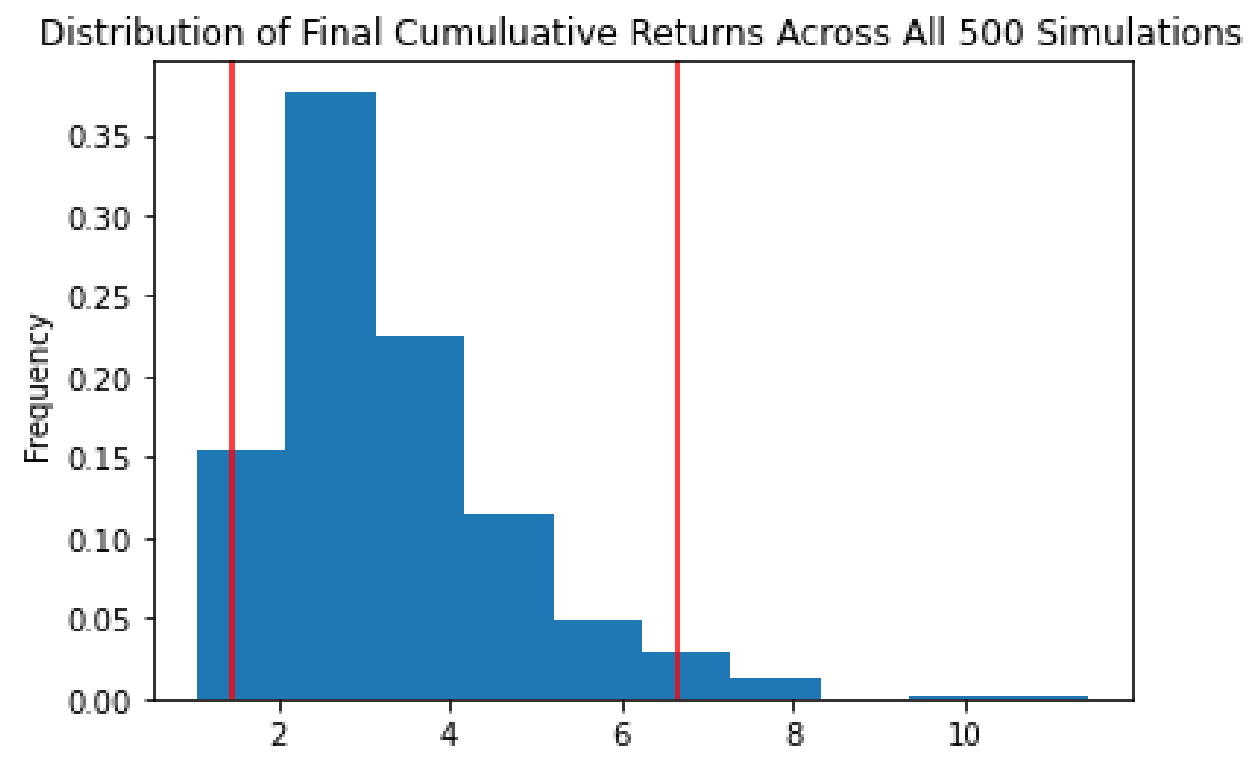
Crypto Simulation



Mutual Fund Simulation



Stocks Simulation



...

...

```
count      500.000000
mean        3.315784
std         1.388407
min         1.048663
25%         2.353841
50%         3.004835
75%         3.989563
max         11.448371
95% CI Lower  1.449550
95% CI Upper  6.666150
Name: 1260, dtype: float64
```

...

...

The current balance of your investing in FAANG stocks is \$1,000.00

...

There is a 95% chance that the portfolio over the next 5 years will end within in the range of \$1,449.55 and \$6,666.15.

Deployment of Program and UI

Step 1

IDENTIFY PROBLEM AND POTENTIAL SOLUTION. USER STORY.

Step 2

LAYOUT COMPONENTS OF CODE. COLLECT RELEVANT DATASETS, APIS, AND CSVS.

Step 3

DEVELOPMENT OF CODE, TESTING, AND DEBUGGING

Step 4

COMBINE CODE. CREATE, TEST, AND DEPLOY UI.

Next Steps!



Free Tier:

- Options for selecting forecast data
- Expansion to mobile and ease of access for users
- Risk analysis

Subscription:

- Financial analysis using premium APIs and for pay data
- AI to track patterns in market data and alert users to anticipated market changes
- Financial data based on lifestyle

Technology

The following was used to create the program:

programming language- python 3.7

text editor- visual studio code

IDE- jupyter lab

repository- Github

APIs: Alpaca (stocks) and Mapbox (maps/navigation)

UI: Anvil

Python libraries used:

Pathlib

Fire

Questionary

Requests

Pandas

Plotly

Matplotlib

Anvil

