Application:

Variables:

* Number of years to run simulation
* Amount to invest
* Number of simulations
* [OPTIONAL] other stocks/ portfolio

Output:

* [For next project] Portfolio recommendation
* Final result deducting bond treasury and inflation
* Having the graphs comparing the simulations

App Rules:

* Limit the number of years till 15
* # of simulations: Min: 500 Max: 5000
* Continuous variable : to still run the app (create at the end)
* Saving the output (look for output information)
* Amount should be >=0

How it works:

* Ask for the number of years – “How many years do you want to simulate (1 – 15)?”
* Validate # of years
* Ask for the number of simulations – “How many simulations do you want to run (500 – 5000)?”
* Validate # of simulations
* Ask for the amount – “How much do you want to invest?”
* Validate Amount
* [OPTIONAL] Structure the portfolio
  + Ask which stocks you want to have
  + Assign the % percentages for each one of the stocks
* Pull information out of dataset (Philip and Bennett)
* Final datasets = Data Cleaning to run MC (Philip and Bennett)
* Run the MC simulation for each dataset (Tiago)
* Display comparison graphs (between investment and 30Y bond) – how then we can save the graph and come back to the app
* Display final output
* Ask if you want to save the output and where
* Ask question if you want to run the simulation again