



User Story Mapping

User Story Mapping is a collaborative technique used in agile software development and product design to visualize the user's journey and prioritize features and tasks.

 4 - 7 members

 Time  
1 hour

People

How it works

1

10 mins

Arrange the backbone stories in a horizontal line, placing the most crucial user activities on the left and less critical ones on the right. This represents the flow of user interaction.

2

10 mins

For each activity, break down the associated user activities into smaller tasks.

3

40 mins

Place the user stories related to each backbone story vertically beneath it. This represents the different tasks required to achieve each user activity.

Drag and drop sticky notes

User story

Task

Activity

Project Name: HFT Algorithmic Trading using Zipline

Team Members	Christopher De Leon	Dino Krezovikj	Mike West	Victor Andujar
Requirements	1.Use Pandas to clean and format your dataset 2.Use Jupyter Notebook describing the data exploration and cleanup process 3. Create a Jupyter Notebook illustrating the final analysis 4. PyViz, GeoView, and Hvplot to create a total of six to eight visualizations of your data (ideally, at least two per "question" you ask of your data 5. Save PNG images of your visualizations to distribute to the class and instructional team			
Tasks	1.Use Pandas to clean and format the dataset 2. Learn how to use zipline and/or pyfolio or something else 3. HFT Algorithmic Trading (we all can try our own algorithm and test the performance of all 4 and pick the best one) 4. Learn how to use streamlit to integrate the 6 to 8 visualizations required 5. Use Pandas to import dataset? PyFiancial 6. backtest algorithm with live data	1. Define the Trading Strategy 2. Preprocessing the Data 3. developing the Algorithm 4. backtesting the Algorithm 5. Evaluate Performance  6. Understanding the Basics 7. Run it on Paper Trading 8. Identifying potential issues and areas for improvement.		
Project description/outline	To outline the basic principles of how to implement a HFT (High-Frequency Trading) algorithm. The algorithm will be tested using a back test. A backtest is the process of testing strategy on historical data to assess its accuracy. The data visualizations will be displayed in Streamlit.			
Research questions to answer	Which API/library to use? Does Zipline-reloaded work, what are alternatives? How do we actually create a algorithm that will be profitable?	What source should we use? What Financial instruments will the Algorithm trade? How will the Algorithm enter and exit trades?	What specific trading strategies will the HFT system employ?  How can these strategies be optimized?	What are the risks of HFT trading?
Datasets to be used	S&P500? Crypto? Nasdaq Data Link? Alpaca? Yahoo Finance? Google Finance ?	Yahoo Finance		
Rough breakdown of tasks	Use Pandas to format the data to put into zipline.  Use a library/API (Can be zipline or something else) to implement the algorithm. PyFianance?  Jupyter Notebook will display 6 to 8 visualizations -if we have time we can use Streamlit to make it pretty.	Formulating a Trading Strategy Optimization		