**Project title: Mock Trading**

Description:

Via this trading game, players can learn basic knowledge of stock trading.

To start with, the user can create an account to store their game information. Then, they can choose a stock, get access to historical data, and trade in some specific time period (at least 2 months). The goal of each single game is simply earning profit as much as possible.

While trading, the user can see the change of daily price in a box plot, see the dynamics of different indicators, and see how those indicators informs the potential of the market. The user can buy and sell (with the assumption that you cannot sell without buying before hand), see their account changes (floating profit, holds, etc.), see today's price on the right side of the game board. Also, they can observe the stock’s price graph at different speeds and different scales. For indicators, there are 3 different simple moving averages, 2 different kinds of exponential moving averages, RSI, and MACD. By clicking on the dashed boxes, the user can see explanations of that indicator. Additionally, the user can make annotations on the paused box plot (draw lines, arrows, dashed boxes). When the user starts the game, an AI trader automatically starts to trade as well.

After the game is over, your orders will be shown in the game over board, and so does AI's. See the difference, and then, try to improve your decisions!

**Similar Projects:**

1. <https://youtu.be/JWCqWE1NWCk?si=rfHxa8WPeTLNI0-o>
   1. show AI’s gain and loss alongside (I want to show a gif after game over)
   2. input start and end dates to play
2. <https://youtu.be/JvZewLC8oQY?si=riVkzXe2JR-eUjS4>
   1. similar features that I want to implement,
   2. zoom in and out, draw lines
   3. indicators at the bottom of the game board, etc.
3. <https://youtu.be/AurMQPGYk38?si=ZjEmRnBFYW4aU4X6>
   1. The player’s information will be stored locally—register and log in;
   2. show headlines with negative/ positive/ neutral to a company

**Version Control / Backup Plan**

I will use github and google Drive to store the backups each time I change my code (Daily)

**Tech List**

Library:

Python built-in modules: os (create user file, log in, and fetch the best score, hint history, etc.), Date time, Csv, Simple Namespace

**Story board: See story board.pdf**