Capstone Project Proposal

Purpose:

This program is built for shoe enthusiasts, often referred to as “sneakerheads”, and sneaker resellers. The purpose of this project is to increase the chances of obtaining hard to get shoes through “bots”, for either personal use or reselling. The program should help greatly increase chances of obtaining shoes, as well as assist in optimizing profit potential through gathering relevant data, such as sales history (how often a shoe is sold), average sales price (what the shoe is typically sold for), and current “buy” price (what the shoe could be bought for at the time of running the program on resale sites). By helping obtain the item and compiling relevant data, this should optimize both the buying and selling of items for the most profit possible.

End Goal:

The end goal of this product is to create efficient “bots” that will do most of the work necessary in obtaining and reselling a sneaker. This includes creating emails, creating sneaker accounts (Nike, Adidas, boutiques), entering draws (both “timed” draws and “first come, first served” draws), and gathering “buy/sale” information from resale sites (StockX, GOAT, Ebay). Some of the work will still need to be done by the user, such as actually listing the shoe, but the program should minimize the workload on the user and save them the trouble of having to manually enter multiple accounts into shoe draws. Ideally, this would work on both a computer running any type of operating software (Mac, Windows, Linux) as well as on mobile devices.

Potential Roadblocks:

Some foreseeable roadblocks include the need for a VPN to minimize the risk of a “draw” entry being dismissed as a “bot” entry, “bot” protection such as captchas, and the technologies needed to create the project. After doing some brief research, it looks like Python scripting would be helpful in the creation of this project, but it is not a language I am familiar with. Alternatively, I could use another JavaScript friendly option, such as Robot.JS, but it appears this project has not been updated in four years and may not be compatible with all frameworks/environments. Another potential issue is taking into account that not all users work off the same screen, and the screen size difference could affect how the “bot” moves on the users side, potentially resulting in the bot not moving and clicking on the correct objects. More research will definitely be necessary to make this project succeed. Finally, the data gathered for buying/selling could become irrelevant depending on when the data is gathered. Oftentimes a shoe is more valuable when it is available before the official “drop” of the shoe, declining in price after it becomes available for everyone to try and purchase.

If I were to start on creating this project today, I would start with researching and creating a “bot” that could automate mouse movements and “clicks” in a predefined path, potentially resizing the user’s internet browser window to make this easier.