Criterion A: Planning

The Scenario

During my consultation with the client (see Appendix), they described the problem they were experiencing that may be remedy through a computational solution. To summarize, the client is currently a user of amazon and often browses the storefront to find products to purchase. Unfortunately, the client will often run into times where they find a product that is a little bit too expensive. Thankfully, Amazon frequently experiences sales, where the products drop to a price that is considerably more affordable. However, the sales tend to be spontaneous and do not follow a predetermined date, and the client will rarely check back on the item as there is no way to know if it has gone on sale or not.

After being told of their problem I suggested that the solution which I will be developing. The solution would comprise of a web scraper that could be used to wait for products of interest to go on sale and would then alert the client of the product going on sale which would allow the client to now re-evaluate whether or not they would make the choice of buying the product.

The Rationale For Solution

My product will solve the issue of the client not being able to purchase items that are out of their price range by telling them when the product goes on sale; when the price of the product they were interested is decreased the client will be notified.

I will be creating my product as a chrome extension. This is because the client often uses this browser across multiple devices due to their work and the synchronous capabilities of chrome extensions can allow for products of interest to be saved across browsers on different devices. Meaning a, "product of interest" saved on their work laptop may be viewed at their in home desktop computer. Since I am developing a chrome extension the languages I will be using are HTML, CSS, and JavaScript as those are the languages required to build a chrome extension. All these languages are immensely popular as they are used in all front-end web development which means that documentation will be plentiful so getting help on an unforeseen problem should be possible.

Success Criteria

- The client can save products from viewing an amazon page.
- The application can save the product page urls across browsers as well as previously found price.
- The application can web scrape the price of a product off of a amazon product web page.
- The application can notify the client of price changes in desired products.
- The application can check product price on chrome browser start up.
- The application can compare the new price with the old price.