Assessment Task - Web Scraping using Selenium (Automation)

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Introduction

Tasks are focused on automating web scraping using Selenium. Important task is to think of worst case scenarios when the webpage might not show the particular label, and make it more user friendly.

Task - 1

1. First - finding the search box and clicking enter.
2. Second - finding product characteristics.
3. Third - saving the product details to a text file.

Problems Faced:

1. You need to wait for the page load.

Solutions:

1. So driver.implicitlywait(<time>) is necessary.

Task - 2

1. Repeat everything from Task-1.
2. Take user inputs: Sorting, Price (Low/High), PINCODE, Product Count (max=50, default=10).
3. Click one by one, make sure the elements are found - if not then raise Exception.

Problems Faced:

1. driver.implicitlywait(<time>) not working well.

Solution:

1. Use time.sleep(<time>)

Task - 3

1. Browser scrapping should be like the user is searching for the product on Amazon.

   Problem Faced:

   1. To design a user-friendly GUI.

   Solution:

   1. Used the Tkinter module for creating a GUI application.

Task - 4

1. Need to generate another sheet that gives the lowest rate of the product of that particular model across Amazon.

   Problem Faced:

   1. It will create problems in comparing the currency of different countries.

   Solution:

   1. For comparing USD and INR we have to compare Unicode characters of the currencies.

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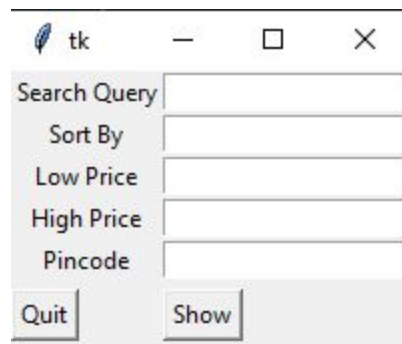
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Task 3 Output:

Task 4 Output:

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Phase 1: Analyse the problem statement, do a review on existing solutions and APIs (31/01/2021)

Phase 2: System setup, install libraries and required APIs. Setup an init solution for Task 1. Work on other tasks (pseudo-codes) (01/02/2021)

Phase 3: Finish rest of the tasks along with GUIs. Analyse worst case scenarios, do error handling using try-except and write outputs to files (02/02/2021)