

Data Structures & Algorithms

Mid Term Project Proposal

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| Group-ID | G6 |
| Registration Numbers | 2020-CS-129, 2020-CS-111 |
| Student Names | Noor Atif, Aqsa Riaz |
| Project Title | Laptop Scraper |
| Project Description | The Title of our project is Laptop-Scraper. No matter how you use computers, the overarching reason to own a laptop is portability. Unlike smartphones and most tablets, laptop computers run the same programs as their desktop counterparts, so you can take your work and entertainment with you wherever you go without relying on mobile apps. Depending on your needs, you can either own a laptop alongside a desktop computer or replace your desktop entirely. Now a days laptops are essential for us in our day to day life so that is why we are scrapping laptops, all the latest and old models in a single file so that is becomes easier for a person to compare while buying a laptop. We will basically scrap different sort of laptops including gaming ones and other heavy machines. The data will be scrapped from multiple websites including Daraz.pk, Flipkart, Amazon.com, Ali Baba etc and the scrapped data will be then appended in one single Csv/Excel File. It will have all the basic entities including product name, Brand, Generation, General Description, Price, Rating, colour etc. The UI will be designed by using PY-QT. Scrapping will be done by using Beautiful Soup and various other features. It will have the option to pause, start, resume and stop, with the progress bar showing the progress of tasks or the number of entities scrapped. Now talking about sorting of data. We will apply all the sorting algorithms studies in class including Insertion sort, Merge Sort, Selection Sort, Bubble sort etc The user will have the option to sort the data column wise or row wise in many ways in ascending order or descending order based upon various features. |
| Actors of the System | * User |
| Problem statement | The Problem basically arises when one has to buy a laptop. He/she is much confused that which model and specs will suit them the best according to their requirements. So this software will make their life much easier. It will automatically scrape data from multiple websites. And then it will be much easier for the user to compare the data. |
| Attributes of entity | Product Name, Brand, Description, Color, Generation, Ratings, Price |
| UI Visualization | Login Screen:  C:\Users\Hp\Desktop\Capture.PNG |
| Dashboard | C:\Users\Hp\Desktop\DashBoard.PNG |
| Searching | C:\Users\Hp\Desktop\Searching.PNG |
| Sorting | C:\Users\Hp\Desktop\sorting.PNG |
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