

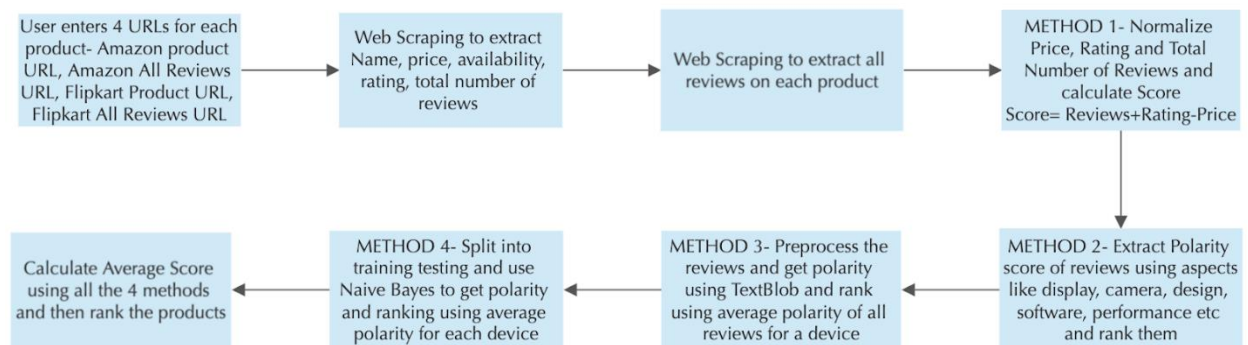
# E-COMMERCE PRODUCT RANKING SYSTEM

- **INTRODUCTION:**

With numerous products launching in almost all e-commercial giants every now and then, and user with limited amount of time in hand, nobody likes to visit each and every website and then, read reviews about it and then again repeat the same task for other product and then, decide which product to buy, wouldn't it be easier if there existed a website which could do all this for you. To make this process hassle free, what we intend to solve these problems and provide user with one stop solution where user can enter products which are in his/her mind, and then we would be able to rank those products while comparing their aspect-based rating on various parameters related to the product.

- **PROJECT WORKFLOW:**

The workflow of the project is depicted by flowchart below,

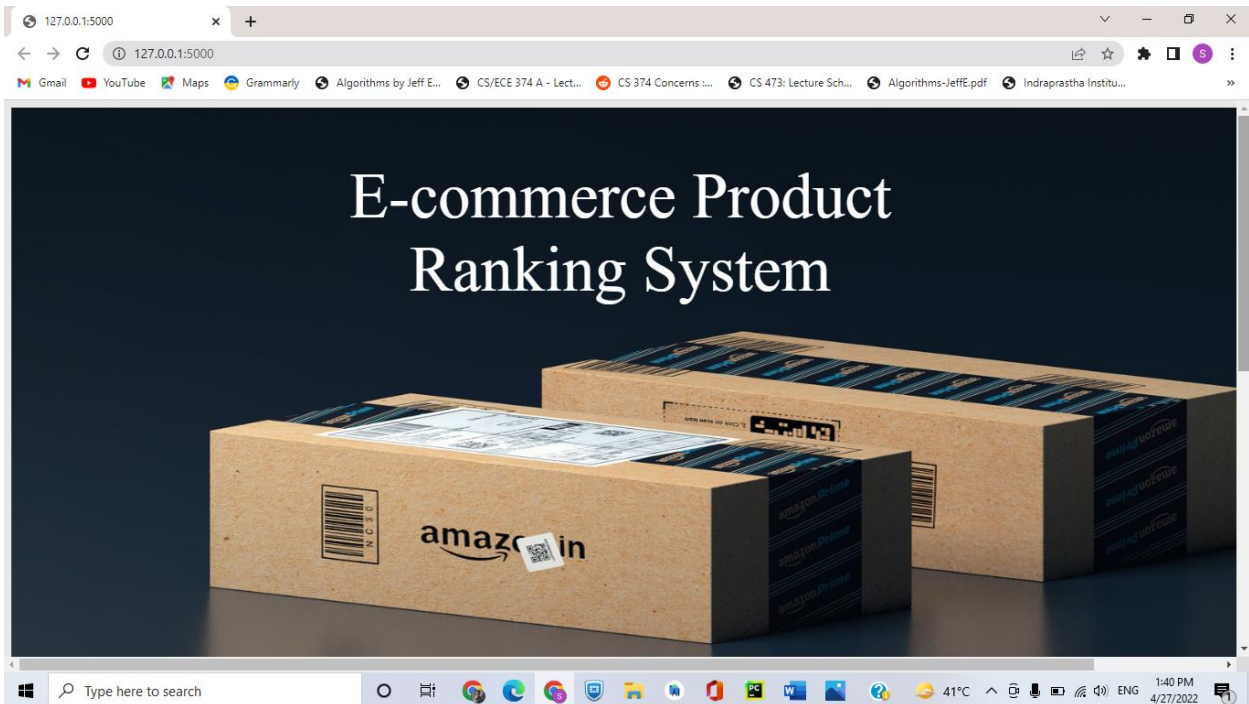


- **LIBRARIES USED:**

- ⇒ BeautifulSoup
- ⇒ matplotlib.pyplot
- ⇒ nlTK
- ⇒ seaborn
- ⇒ pandas
- ⇒ numpy
- ⇒ CountVectorizer
- ⇒ Sklearn
- ⇒ Flask

- **To run the project, execute the 'main.py' python code in the terminal. It will run the web-page on the local server.**

- The webpage will be running at <http://127.0.0.1:5000> (localhost).



- **HOW TO RUN THE PROJECT**

To run the project: -

1. Paste all the Amazon and Flipkart product URL's along with the customer reviews on the four input boxes in the web-page, as shown in the image below.

Enter the following values to get the ranking of the products

For E.g.: -

**Amazon URL's:**

1. [https://www.amazon.in/Redmi-10-Prime-extendable-Adaptive/dp/B09CTZK1V9/ref=sr\\_1\\_1?crid=34S1WOXXS2ET7&keywords=phone%2B10&qid=1649946376&sprefix=phone%2B10%2Caps%2C228&sr=8-1&th=1\n](https://www.amazon.in/Redmi-10-Prime-extendable-Adaptive/dp/B09CTZK1V9/ref=sr_1_1?crid=34S1WOXXS2ET7&keywords=phone%2B10&qid=1649946376&sprefix=phone%2B10%2Caps%2C228&sr=8-1&th=1\n)
2. [https://www.amazon.in/Redmi-Storage-Super-Amoled-Display/dp/B0948NNY3W/ref=sr\\_1\\_3?crid=3GPZ2K1PXCJL4&keywords=redmi&qid=1649947354&sprefix=redmi%2B%2Caps%2C404&sr=8-3&th=1\n](https://www.amazon.in/Redmi-Storage-Super-Amoled-Display/dp/B0948NNY3W/ref=sr_1_3?crid=3GPZ2K1PXCJL4&keywords=redmi&qid=1649947354&sprefix=redmi%2B%2Caps%2C404&sr=8-3&th=1\n)

**Amazon Reviews:**

1. [https://www.amazon.in/Redmi-10-Prime-extendable-Adaptive/product-reviews/B09CTZK1V9/ref=cm\\_cr\\_dp\\_d\\_show\\_all\\_btm?ie=UTF8&reviewerType=all\\_reviews](https://www.amazon.in/Redmi-10-Prime-extendable-Adaptive/product-reviews/B09CTZK1V9/ref=cm_cr_dp_d_show_all_btm?ie=UTF8&reviewerType=all_reviews)
2. [https://www.amazon.in/Redmi-Storage-Super-Amoled-Display/product-reviews/B0948NNY3W/ref=cm\\_cr\\_dp\\_d\\_show\\_all\\_btm?ie=UTF8&reviewerType=all\\_reviews](https://www.amazon.in/Redmi-Storage-Super-Amoled-Display/product-reviews/B0948NNY3W/ref=cm_cr_dp_d_show_all_btm?ie=UTF8&reviewerType=all_reviews)

**Flipkart URL's:**

1. [https://www.flipkart.com/redmi-10-prime-bifrost-blue-128-gb/p/itm9377b4c936baa?pid=MOBG6PB47FHHGTZN&lid=LSTMOBG6PB47FHHGTZNXR1BIA&marketplace=FLIPKART&q=redmi+10+prime+128+gb&store=tyy%2F4io&srno=s\\_1\\_1&otracker=search&otracker1=search&fm=Search&iid=d0956990-6311-415c-b1ae-5179fb70459b.MOBG6PB47FHHGTZN.SEARCH&ppt=sp&ppn=sp&ssid=a7tpj52wjK000001649946497475&qH=9e7772a5d27057ed](https://www.flipkart.com/redmi-10-prime-bifrost-blue-128-gb/p/itm9377b4c936baa?pid=MOBG6PB47FHHGTZN&lid=LSTMOBG6PB47FHHGTZNXR1BIA&marketplace=FLIPKART&q=redmi+10+prime+128+gb&store=tyy%2F4io&srno=s_1_1&otracker=search&otracker1=search&fm=Search&iid=d0956990-6311-415c-b1ae-5179fb70459b.MOBG6PB47FHHGTZN.SEARCH&ppt=sp&ppn=sp&ssid=a7tpj52wjK000001649946497475&qH=9e7772a5d27057ed)
2. [https://www.flipkart.com/redmi-note-10s-deep-sea-blue-64-gb/p/itmdd3b943d713b8?pid=MOBGAHD8GWKMFWFG&lid=LSTMOBGAHD8GWKMFWFGVPKQ12&marketplace=FLIPKART&q=redmi+note+10s+64+gb+&store=tyy%2F4io&srno=s\\_1\\_1&otracker=search&otracker1=search&fm=organic&iid=62c26845-0db6-4d1f-9d15-9dfa2cde149c.MOBGAHD8GWKMFWFG.SEARCH&ppt=dynamic&ppn=dynamic&ssid=qi05qqatpc0000001649947416984&qH=643a1a8eb838ddf9](https://www.flipkart.com/redmi-note-10s-deep-sea-blue-64-gb/p/itmdd3b943d713b8?pid=MOBGAHD8GWKMFWFG&lid=LSTMOBGAHD8GWKMFWFGVPKQ12&marketplace=FLIPKART&q=redmi+note+10s+64+gb+&store=tyy%2F4io&srno=s_1_1&otracker=search&otracker1=search&fm=organic&iid=62c26845-0db6-4d1f-9d15-9dfa2cde149c.MOBGAHD8GWKMFWFG.SEARCH&ppt=dynamic&ppn=dynamic&ssid=qi05qqatpc0000001649947416984&qH=643a1a8eb838ddf9)

**Flipkart Reviews:**

1. <https://www.flipkart.com/redmi-10-prime-bifrost-blue-128-gb/product-reviews/itm9377b4c936baa?pid=MOBG6PB47FHHGTZN&lid=LSTMOBG6PB47FHHGTZNCRHGVR&marketplace=FLIPKART>

2. <https://www.flipkart.com/redmi-note-10s-deep-sea-blue-64-gb/product-reviews/itmdd3b943d713b8?pid=MOBGAHD8GWKMFWFG&lid=LSTMOBGAHD8GWKMFWFGVPKQ12&marketplace=FLIPKART>

- After pasting the reviews, click on the **get ranking button**, to get the product rankings. The product rankings will be displayed on a table format, as shown in the image below,

https://www.amazon.in/Redmi-10-Prime-extendable-Adaptive/product-reviews/B09CTZK1V5/ref=cr\_dp\_d\_show\_e

https://www.flipkart.com/redmi-10-prime-bifrost-blue-128-gb/p/itm9377b4c936baa?pid=MOB66PB47FHHGT2N&lid=LSTMOB66PB47FHH

https://www.flipkart.com/redmi-10-prime-bifrost-blue-128-gb/product-reviews/itm9377b4c936baa?

Device Name	Availability	Website	Score(Price+Rating+Reviews)	Design Score	Battery Score	Camera Score	VFM Score	performance score	Software Score	Display Score	Review Sentiment Score	Overall Score
Redmi-10-Prime-extendable-Adaptive	In stock	Amazon	-0.25	0.0	0.0	0.0	0.0	0.0	0.0	3.483333333333345	0.457916666666671	1.172
Redmi-Storage-Super-Amoled-Display	In stock	Amazon	0.1745147419405491	0.0	0.0	0.5000000000000001	0.0	0.0	0.0	0.0	0.0833333333333386	0.4394
Samsung-Galaxy-Storage-Months-Replacement	In stock	Amazon	0.25	0.0	0.0	0.2363636363636361	0.0	0.0	0.0	0.0	-0.005606060606060528	0.370
Samsung-Galaxy-M12-Storage-Processor	In stock	Amazon	-0.21749838860394355	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1956

- In case we just put a single product URL, the only the scores of that particular product is shown on the web-page.

**Enter the following values to get the ranking of the products**

Enter Amazon URL's

Enter Amazon Reviews

Enter Flipkart URL's

Enter Flipkart Reviews

Device Name	Availability	Website	Score(Price+Rating+Reviews)	Design Score	Battery Score	Camera Score	VFM Score	performance score	Software Score	Display Score	Review Sentiment Score	Overall Score
Redmi-10-Prime-extendable-Adaptive	In stock	Amazon	-0.25	0.0	0.0	0.0	0.0	0.0	0.0	3.483333333333345	0.457916666666671	1.172812500000004

