Advance Database Technologies Final Project Part 1 - Project Proposal

Spring 2024

Project Title:

Amazon: A2Z AmazeComparator

Team Names:

- Kabir Chaturvedi (kschatur@iu.edu) (Team Leader)
- Dhyey Joshi (dhyjoshi@iu.edu)
- Vedika Halwasiya (<u>vhalwasi@iu.edu</u>)

Project Summary:

Our website, "A2Z AmazeComparator," leverages a comprehensive dataset that encompasses detailed information on products listed on Amazon, including product ID, name, category, pricing, ratings, and product descriptions. Designed to empower consumers and online shoppers, "A2Z AmazeComparator" aims to revolutionize the way users engage with e-commerce by enabling product comparisons, facilitating the addition of new products, and offering in-depth insights into consumer review analytics.

This platform is made for anyone looking to shop smarter online. Its easy-to-use interface offers detailed product analyses, insights into consumer reviews and sentiments, as well as information on discounts and price changes. It's the perfect tool for making well-informed purchase decisions.

Project Objectives:

The objective of the project "A2Z AmazeComparator", is designed to be a go-to online tool for shoppers looking specifically at Amazon products. It aims to simplify the decision-making process by letting users compare different products side by side. By focusing on key features, prices, user ratings, and review sentiments, it provides a comprehensive view that helps shoppers choose the best product for their needs. The tool is especially handy for those who find themselves overwhelmed by the vast options on Amazon or for anyone looking to get the best deal without spending hours researching. A2Z AmazeComparator stands out by offering an easy-to-use platform where all the important product information is available at a glance, making shopping on Amazon a breeze.

Technical Stack:

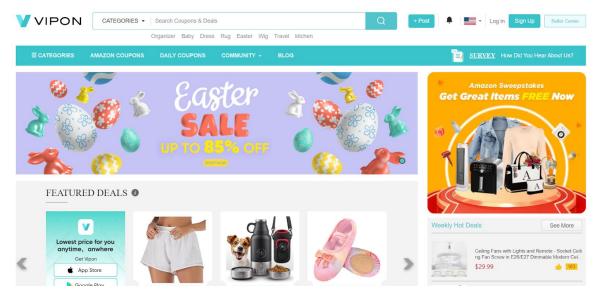
- 1. Frontend Development: Bootstrap, HTML, JavaScript, React.js, CSS/SCSS.
- 2. Backend Development: Python, Flask or Django, Pandas and Numpy.
- 3. Natural Language Processing (NLP): NLTK or SpaCy.
- 4. Data Visualization and Dashboard: Dash or Plotly.
- 5. Database: MySQL, SQLite.
- 6. Deployment and Version Control: Git / Github, AWS or any deployment platforms.
- 7. Data Processing Tools: Jupyter Notebook.

Project Description:

Usefulness:

This website makes it easy to choose between products by letting you compare them quickly, saves you time, helps you understand what other buyers think, lets you find deals that suit your needs, is great for *people who likes to compare product before making a deal and want to know all the details, and overall, helps you shop smarter and with more confidence.*

There are very few websites that offer similar features, but they are not specifically for Amazon products. Instead, they are based on trader websites that allow users to search for products and buy them at lower prices, such as Vipon, found here: https://www.myvipon.com/

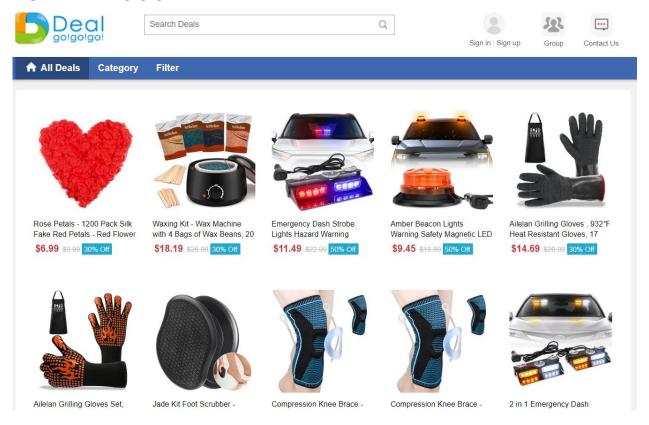


The website, named "Vipon," is one of the oldest and most popular sites for finding Amazon deals, offering some of the best sales available. However, the existing website we discovered online only

showcases the best deals, lacking features for comparison, review sentiment analysis, or dashboards for visualizing trending products with maximum discounts. Our website aims to fill this gap by providing all these exclusive features to users, making it an easy-to-use comparison tool.

Another website was developed by DealGoGoGo

https://www.dealgogogo.com/



The website named "Deal Go Go" hosts a vast array of product categories but is considered unsafe to use, as many of the products displayed are fake and not accurately represented. This website offers an additional filtering feature that allows buyers to easily navigate through the categories to find what they want. However, this website has a non-user-friendly UI, and its server stability is questionable. The features we will provide on our website are far more user-friendly and advanced than those of any existing websites, including "Deal Go Go Go."

The targeted stakeholders are smart online shoppers who want a simple way to compare Amazon products. Our features, like side-by-side comparisons and review analysis, help users quickly understand which product is the best for them. This means less guesswork and more confident shopping decisions.

Question: Are there any similar or equivalent databases out here? If so, what are they and how is yours different?

There are several databases and datasets available that are similar to our *Amazon sales dataset*. For example, Datarade and iMerit offers a wide range of databases and datasets that provide information on Amazon sellers, products, and customer reviews, among other data points.

Compared to other existing databases, our *Kaggle Amazon Sales Dataset* is raw, unprocessed, and unstructured; it requires preprocessing before being utilized in applications. It contains data for over 1,000 Amazon products, including ratings and reviews as listed on Amazon's official website. This *dataset was recently published in 2023*, ensuring that the data and product details are up to date. Specifically *focused on Amazon's inventory in the United States*, our database provides a concentrated view of Amazon's offerings in that region.

Comparison with Existing Databases:

Let's compare our database with the existing database with the same name, "Amazon Sales Dataset," and I will walk you through how our database is more complex than the one on the Kaggle platform.

Our Amazon Sales Dataset: RAW/Require Normalization & Pre-Processing

https://www.kaggle.com/datasets/karkavelrajaj/amazon-sales-dataset/data ***** *** ***** Fill ∨ ≡ ≡ ≡ ≡ ⊞ Merge & Center B I U - H - A - A -\$ - % 9 58 -88 В rating_coun about_product Wayona Nylon Braided USB to Lightr Computer: Ambrane Unbreakable 60W / 3A Fat Computer: Sounce Fast Phone Charging Cable Computer: Beguder abadical outcome. Laster all observations of some experiments of the some analysis Accessories | Acce s&Accessories|Accessories&Pe s&Accessories|Accessories&Pe B08HDJ86NZ boAt Deuce USB 300 2 in 1 Type-C & Computer Accessories | Accessories & Per rals | Cables&Access a, 1329 16,905 [CHARGE & SYNC AE3Q6KSU rahus6999, Swasat Borg/LA] R1BPAL2H As good 24,871 Fast Charging & D AEQ2YMX; Jayesh, Rajesh k.,306py, ama R758ANNS It's prett 15,188 It Ensures High Sp AG7C6DA/Vivek kumar, Amazon Custon R8E73K2K) Long du B08CF3B7N1 Portronics Konnect L 1.2M Fast Cha Computers&Accessories | Acces ories&Per rals | Cables&Acces B08Y1TFSP6 B08WRWPM pTron Solero TB301 3A Type-C Data Computers&Accessories | Accessories | als | Cables&Acc B08DDRGWTJ MI Usb Type-C Cable Smartphone (E Computers&Accessories | Accessories&Per als | Cables&Access(å, 23% 30,411 1m long Type-C USAHW6E5L(Pavan A H, Jayesh bagad, Shr R2X090D1 Worth B008IFXQFU TP-Link USB WiFi Adapter for PC(TL-Computers&Accessories | NetworkingDevices | Network workAdapters | Wire a, 1499 USB WiFi Adapter AGV3IEFAI Azhar JuMan, Anirudh Sood, FR1LW6NW Works B082LZGK39 B08CF3D7QR B0789LZTCJ 43,994 Universal Compat AECPFYFC, Ardkn, Nitribnay kumar, Sagar i ROIQEGOY A Good 13,391 [CHARGE & SYNC AGYLPKPZ Tarrya, Anu, Akshay, Vishal Sa; R11MQS7/ Good fo 94,363 The boAt rugged c AEWAZDZ/ Omkar dhale, JD, HEMALATH, R3EEUZKKI, Good pri B07KSMBL2H AmazonBasics Flexible Premium HI Electronics I HomeTheater, IV&Video | Accessories | Cables | HDMICabi a, 1219 4.4 4.26,973 Flexible, lightweig AEYJ5I6JZZ Rishay Gossain, Shashank Mr R1FKOKZ3 It's quite Annacionates reactive remaini la Ecución in Sprindir indexi, y a Vandeo pica sessione (Ladiuse) in principalo 4, 22 o Portronies Konnect L 1.2M POR-14C Computers&Accessories | Accessories&Peripherals | Cables&Access à, 350 Portronics Konnect L 1.2M POR-14C Computers&Accessories | Accessories&Peripherals | Cables&Access à 3, 349 MI Braided US8 Type-C Cable for Ch Computers&Accessories | Accessories&Peripherals | Cables&Access à 3, 349 2,262 [20W PD FAST CH AQUVQH Priya, Mansi, Plaban, Vivek, Ta R1QETDIPI Works, N 4,768 [CHARGE & SYNC AF2XXVO7 Deepaak Singh, siva k., MUNIC R20XIOU2! Great bit 18,757 1M Long Cable, U. AGSGSRTE Birendra ku Dash, Aditya Gup R2JPQNKC Good pr BOSSDTN6R2 6196 B0B6F7LX4C MI 80 cm (32 inches) 5A Series HD F Electronics | HomeTheater, TV&Video | Televisions | SmartTelevisions 32,840 Note: The brands AHEVOQA Manoj maddheshiya, Manoj K R13UTIA6k It is the B082LSVT4B Ambrane Unbi akable 60W / 3A Fa: Computers&Accessories | Accessories&Peripherals | Cables&Access (â, 1249 3896 43,994 Compatible with a AECPFYFC ArdKn. Nirbhay kumar. Sagar RGIOEG07 A Good $bott Type CA325 Tangle-free, Sturd Computers Accessories | Accessories APeripherals | Cables Access \hat{\alpha}, 199 \\ LG 80 cm (32 inches) HD Ready Smx Electronics | Home Theater, IV & Video | Televisions | SmartTelevisions | \hat{\alpha}, ^13.4 \\$ 43,535 Companies in ACCPT FT, Archityling ay Lumari, Sagar Rolyccov A Good 13,045 Type C A 25 Cabit AFRSKIR Rohan Narar, JAGWINDER S R2BP8YS G Good for 11,976 Resolution: HD Rc AHBNKB7. NIRMAL.N, Manoj kumar, SOI R2PNR69C Sound q 815 Supports los Devic AFNYIBWK Prasannavijayaraghavan G., IR12D1BZF Good ci Duracell USB Lightning Apple Certifi Computers&Accessories | Accessories&Peripherals | Cables&Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater, TV&Video | Televisions | Smart Televisions 8, 13.4 |

Duracell USB Lightning Apple Certifi Computers&Accessories | Accessories&Peripherals | Cables&Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater, TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater, TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater, TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater, TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | Accessor 8, 970 tizum HDMI to VGA Adapter Cable 1 Electronics | HomeTheater TV&Video | HomeTheater TV B08DPLCM6T B09C6HXFC1 tizum HDMI to VGA Adapter Cable 1 Electronics|HomeTheater,TV&Video|Accessories|Cables|HDMICabl & '279
Samsung 80 cm (32 Inches) Wonder Electronics|HomeTheater,TV&Video|Televisions|SmartTelevisions & '13.4
Fill Micro Ub & Cable For Smartphon Computers&Accessories|Accessories&Peropherals(Cables&Accessories)
Acer 80 cm (32 inches) | Series HD F Electronics|HomeTheater,TV&Video|Televisions|SmartTelevisions & '1.11.4 B085194JFL 10,962 Superior Stability: AEO5FHW aditya d., Paranth man, ashil R1GYK05N Good p B09F6S8BT6 ā,113,490 41% 16,299 Resolution: HD Re AHEVO4Q Rah nan Ali, MARIYA DASS, M R1SN0D4F Good, S 25 B09NHVCHS9 26 B0B1YVCJ2Y 27 B01M4GGIVU 9,378 Micro usb cable is AHIKIUDT \$@ [\|TO\$| -|, Sethu madhav R3F415TR\ Worker 4,703 Resolution : HD R\ AFSMISGE Ayush, ROHIT A., Kedar, Harai R1EBS356\ Wonde Tizum High Speed HDMI Cable with Electronics | HomeTheater, TV&Video | Accessories | Cables | HDMICab| à, 199 12.153 Latest Standard H AGVUE2NI Yashpreet Singh, Abiram, Aak R2DIHMH(Cheap of 34.899 Resolution: HD Re AFUT7ANZ ATHARVA BONDRE, Sujitkum R3COVVO Worthy 28 B08B42I WKN OnePlus 80 cm (32 inches) Y Series Electronics | HomeTheater, TV&Video | Televisions | SmartTele 2,766 Blazing Charging - AFYR53OT Anand sarma, lokeshnist, C,S R249YCZV Ok

Other Amazon Sales Dataset on kaggle: Structured / Normalized / Require slight Pre-Processing

 $\underline{https://www.kaggle.com/datasets/the devastator/unlock-profits-with-e-commerce-sales-profits-profit$

data/data

Repeared Fig. Fig	ome Ir	nsert Pag	ge Layo	ut For	mulas I	Data Re	view View Auto	mate H	elp						□ Co	mments	☆ Share
B T U	Apto	os Narrow	~ 11	~ A^	A" =	= = *	→ ab Wrap Text		General				H DELLA	_ /			
A B C	В	I <u>U</u> →	⊞ -	01 - A	· =	= = =	Merge & C	enter v	\$ - % 9 1 18 4			Insert Delete Form					alyze ata
A B C D E F G H I J K L M N O P Q R S T U	Fs.	F	ont		15		Alignment	F _S	Number	Fs.	Styles	Cells	Editin	9	Sensitivity	Add-ins	
Order ID	v 1	× v	fx	index													
Order ID Date Status Fulfiment State Chara-thlp-service Style StU Caregory Size ASN Courier Str. Qty currency Amount ship-city ship-state ship-posts ship-state ship-state ship-posts ship-state ship-posts ship-state ship-state ship-posts		В		C	D	F	F G	н	1 1 1	К	I M	N O	PO	R	S T	U	V
0.405-0807874-5731 4/30/2022 Shipped EMerchant Amazon.in Standard I 171-1918151-1101 4/30/2022 Shipped EMerchant Amazon.in Standard I 182571 NES571-1 Kaurta 3N BO9K3WFS Shipped 1 INR 406 BENGALUI KARNATAK 560085 IN Amazon. 182571 NES571-1 Kaurta 3N BO9K3WFS Shipped 1 INR 329 ANJ HUMP MAHARAS 400081 IN OCcre 1 4/30/2022 Shipped Amazon Amazon.in Standard INSS71-1 NES571-1 Kaurta 3N BO9K3WFS Shipped 1 INR 753.33 NQUCHE PUDUCHE 605086 IN Accre 1 1 NR 14/30/2022 Shipped Amazon Amazon.in Standard INSS71-1 Top 3N BO9K3WFS Shipped 1 INR 753.33 NQUCHE PUDUCHE 605086 IN N Core 1 August 1 NR 14/30/2022 Shipped Amazon Amazon.in Standard INSS71-1 Top 3N BO987148 Shipped 1 INR 54 CheNnat Institute 60508 IN N Core 1 August 1 NR 14/30/2022 Shipped Amazon Amazon.in Standard 1 0055 1 0055-51-51 NR 14/30/2022 Shipped Amazon Amazon.in Standard 1 0055 1 0055-51-51 NR 14/30/2022 Shipped Amazon Amazon.in Standard 1 NR 14/30/2022 Shipped Amazon Amazon.in S	Order		Date			Fulfilment			SKU Category								
1171-9198151-1101 4/30/2022 Shipped Amazon in Expedited NE3571 kivurta	0 405-80	078784-573	1 4	/30/2022	Cancelled												FAL
2 404-0887676-7272 4/30/2022 Shipped	1 171-91	198151-110	1 4	/30/2022	Shipped -	Merchant	Amazon in Standard	JNE3781	JNE3781-K kurta	3XI	B09K3WF5 Shipped	1 INR	406 BENGALUE	KARNATAK	560085 IN	Amazon PL	FAL
4 407-109790-724C 4/30/2022 Shipped Amazon in Expedited ST206 4 SE1264 SE1264 SE1 XL B087N7XI Shipped 1 INR 624 CHRNNAI TAMIL NAC 600073 IN 1N Core f 6 408-5748499-6855 4/30/2022 Shipped Amazon in Expedited ST206 SE1264 SE1 XL B087N7XI Shipped 1 INR 624 CHRNNAI TAMIL NAC 600073 IN 1N Core f 7 406-7807733-738C 4/30/2022 Shipped Amazon in Expedited ST206 SE1264 SE1 XL B087N7XI Shipped 1 INR 632 CHRNNIOL CHANDIG IN 100-65 SE1 SE1 L B087N7XI Shipped 1 INR 632 CHRNNIOL CHANDIG IN 100-65 SE1 SE1 L B087N7XI Shipped 1 INR 632 CHRNNIOL CHANDIG IN 100-65 SE1 SE1 L B087N7XI Shipped 1 INR 939 HYDEABU TELANGAN 500032 IN Amazon in Standard INE305 INE306-Keuta 5 B081W7KI Shipped 1 INR 939 HYDEABU TELANGAN 500008 IN IN Core f 9 402-439376 I-0311 4/30/2022 Shipped Amazon in Expedited ST200 SE1	2 404-06	687676-727	3 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3371	JNE3371-K kurta	XL	B07WV4JV Shipped	1 INR	329 NAVIMUM	MAHARAS	410210 IN	IN Core Fre	TRU
4 407-1069780-724.4																	FAL
6 408-5748499-6855 4/30/2022 Shipped I Marzon in Srandard New York States of	4 407-10	069790-724									B098714B; Shipped	1 INR	574 CHENNAI	TAMIL NAC	600073 IN		FAI
7.406-7807733-3786 4/30/2022 Shipped F.Merchant Amazon in Standard NEAD	5 404-14	490984-457	ε 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	SET264	SET264-KR Set	XL	B08YN7XD Shipped	1 INR	824 GHAZABA	UTTAR PRA	201102 IN	IN Core Fre	FAI
8 407-5443024-5233	6 408-57	748499-685	9 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	J0095	J0095-SET-Set	T	B08CMHN Shipped	1 INR	653 CHANDIGA	CHANDIGA	160036 IN	IN Core Fre	FAI
9 402-4393761-0311 4/30/2022 Shipped Amazon Mazon.in Expedited in NE3461 - Neutral S B078379(L Shipped 1 INR 365 Chemal IAMIL NAL 600041 IN 1171-4638481-6326 4/30/2022 Shipped Amazon Amazon.in Expedited in NE3460 - NE3460 - Kurta S B078379(L Shipped 1 INR 364 NOIDA UTTAR PN 201303 IN 1171-4638481-6326 4/30/2022 Shipped - Marzon Amazon.in Expedited in NE3460 - NE3460 - Kurta S B098117D Shipped 1 INR 364 NOIDA UTTAR PN 201303 IN 364 NOIDA UTTAR PN 2	7 406-78	807733-378	5 4	/30/2022	Shipped-	Merchant	Amazon.in Standard	JNE3405	JNE3405-K kurta	S	B081WX4C Shipped	1 INR	399 HYDERABA	TELANGAN	500032 IN	Amazon PL	FAI
10 407 -8633625-8977	8 407-54	443024-523	3 4	/30/2022	Cancelled	Amazon	Amazon.in Expedited	SET200	SET200-KR Set	3XL	B08L91ZZX Cancelled	0	HYDERAB4	TELANGAN	500008 IN	IN Core Fre	FAI
11 171.4638481-6326	9 402-43	393761-031	1 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3461	JNE3461-K kurta	XXL	B08B3XF5 Shipped	1 INR	363 Chennai	TAMIL NAC	600041 IN		FAI
12 405 5513694-8145 4/30/2022 Shipped - Merchant Amazon.in Standard MEABD MEADD	0 407-56	633625-697	0 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3160	JNE3160-K kurta	S	B07K3YQL Shipped	1 INR	685 CHENNAI	TAMIL NAC	600073 IN		FAI
13 408-7955685-3085	1 171-46	638481-632	E 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3500	JNE3500-K kurta	XS	B098117D Shipped	1 INR	364 NOIDA	UTTAR PRA	201303 IN		FAI
14.469.1298370-1920	2 405-55	513694-814	€ 4	/30/2022	Shipped -	Merchant	Amazon.in Standard	JNE3405	JNE3405-K kurta	XS	B081XCMY Shipped	1 INR	399 Amravati.	MAHARAS	444606 IN	Amazon Pl	FAI
15 403-4965581-9522	3 408-79	955685-308	3 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	SET182	SET182-KR Set	XS	B085HS94 Shipped	1 INR	657 MUMBAI	MAHARAS	400053 IN		FAL
16 466-6379318-6555	4 408-12	298370-192	0 4	/30/2022	Shipped -	Merchant	Amazon.in Standard	J0351	J0351-SET Set	L	B09CSSQY Shipped	1 INR	771 MUMBAI	MAHARAS	400053 IN	Amazon Pl	FAL
17 405-9013803-8005	5 403-49	965581-952	0 4	/30/2022	Shipped -	Merchant	Amazon.in Standard	PJNE3368	PJNE3368-kurta	6XL	B09PY99S' Shipped	1 INR	544 GUNTAKAL	ANDHRA F	515801 IN	Amazon Pl	FAL
18 402-4030358-5835	6 406-93	379318-655	5 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3721	JNE3721-K kurta	XXL	B099FCT6 Shipped	1 INR	329 JAIPUR	RAJASTHA	302020 IN	IN Core Fre	FAL
19 405-5957858-1051 4/30/2022 Shipped Amazon Amazon.in Expedited SE125 SE1254-KFSet XS B0993DDF Shipped 1 INR 517 IRIUCHIR/TAMILARA 60017 IN NC ore f 1 4/40-69434550-5866 4/30/2022 Shipped Amazon Amazon.in Expedited NE3795 NE3795-K kurta XI B0994XVV Shipped 1 INR 517 IRIUCHIR/TAMILARA 600017 IN NC ore f 1 4/40-69434550-5866 4/30/2022 Shipped Amazon Amazon.in Expedited NE3795 NE3795-K kurta XI B0994XVV Shipped 1 INR 517 IRIUCHIR/TAMILARA 600017 IN NC ore f 1 4/40-69434550-5866 4/30/2022 Shipped Amazon Amazon.in Expedited NE3795 NE3795-K kurta L B0994XVV Shipped 1 INR 376 HYDERAB/TELANISATA 500072 IN NC ore f 1 4/40-69434550-5866 4/30/2022 Shipped Amazon Amazon.in Expedited NE3873 NE3873-K kurta L B0994XVV Shipped 1 INR 376 HYDERAB/TELANISATA 500072 IN NC ore f 1 4/40-69434550-14 1 4/40-6943450-14 1 4/40-69434550-14 1 4/40-6943450-14 1 4/40-69434550-14 1 4/40-6943450-14 1 4/40-	7 405-90	013803-800	9 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3405	JNE3405-K kurta	XL	B081WT6C Shipped	1 INR	399 NEW DELF	DELHI	110074 IN		FAI
20 405-0607769-0716 4/30/2022 Shipped Amazon. Amazon.in Expedited NES795 NE3795-Kurta 3XL B09HMXIV Shipped 1 INR 517 TIRUCHIR/TAMIL.NAC 620018 N IN Core f 24 4/30/2022 Shipped Amazon. Amazon. Expedited NES795 SC1345-KRSet M B099XV4B Shipped 1 INR 666 BENOALUI-KANNATAK 500040 N IN Core f 24 10-130/2072 Shipped 4 Amazon. Amazon. Expedited NeS795 NE373-Kurta L B0827V/G7 Shipped 1 INR 376 HYDERAB/ FLANGAM 500072 N IN Core f 24 402-3384007-4005 4/30/2022 Shipped 4 Amazon. Expedited MeNS002 MENS002-kurta L B087YYON Shipped 1 INR 376 HYDERAB/ FLANGAM 500072 N IN Core f 24 402-3384007-4005 4/30/2022 Shipped 4 Amazon. Amazon. Expedited MeNS002 MENS002-kurta L B087YYON Shipped 1 INR 499 TEZPUR ASSAM 784001 IN N Core f 25 403-639134-5175 4/30/2022 Shipped 4 Merchant Amazon. In Standard NW030 NW030-1F Set X S B096ZW0X Shipped 1 INR 582 RANCH JHARKHAM 634002 IN Amazon f 26 403-9320474-9655 4/30/2022 Shipped 4 Merchant Amazon. In Standard INES415 NW3415-Kurta X SL B082YWSI Shipped 1 INR 299 BILASPUR CHHATIS 459001 IN Amazon f 26 403-9320474-9655 403-9320474-9655 AUG AMAZON CHARCHAM Amazon. In Standard INES415 NW3415-Kurta X SL B082YWSI Shipped 1 INR 299 BILASPUR CHHATIS 459001 IN Amazon f 24 403-2034 NW300	8 402-40	030358-583	E 4	/30/2022	Shipped-	Merchant	Amazon.in Standard	JNE3697	JNE3697-K kurta	XXL	B098133P Shipped	1 INR	458 Gurgaon	HARYANA	122004 IN	Amazon PI	FAI
21 404-8494550-8666 4/30/2022 Shipped Amazon Mazon.in Expedited SE1345 S SE1345-KRS t M B098XV4B Shipped 1 INR 666 BBNOALUI.KAINATAK 560040 IN N Core I 22 171-1305077-2812 4/30/2022 Shipped Merchant Amazon.in Expedited NE3373 NE3373 - Keut a L B099XV5F Shipped 1 INR 376 HYDERAB/TELANGAK 5000072 IN 23 404-6019946-2906 4/30/2022 Shipped Merchant Amazon.in Standard SE1291 S	9 405-59	957858-105	1 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	SET254	SET254-KR Set	XS	B0983DDF Shipped	1 INR	886 BENGALUF	KARNATAK	560017 IN		FAL
22 171-1305077-2815	0 405-06	607769-071	€ 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3795	JNE3795-K kurta	3XL	B09HMXJV Shipped	1 INR	517 TIRUCHIR	TAMIL NAC	620018 IN	IN Core Fre	FAI
23 404 6019946 2995 4/30/2022 Cancelled Merchant	1 404-84	494550-586	0 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	SET345	SET345-KR Set	M	B09KXV4B Shipped	1 INR	666 BENGALUI	KARNATAK	560040 IN	IN Core Fre	FAI
24 402-3384097-4005 4/30/2022 Shipped Amazon Amazon.in Expedited MEN5002 MEN5002-kurta L B08YYYDN Shipped 1 INR 499 TEZPUR ASSAM 784001 IN IN Core f 26 409-8191138-917 4/30/2022 Shipped - I Merchant Amazon.in Shandard NW030 NW030-IFSet XS B096ZMQ/Shipped 1 INR 502 RANCHI JHARKHAP 634002 IN Amazon. Shandard INES9115 NIES9115-klurta 3 NJL B096ZMQ/Shipped 1 INR 299 BILASPUR CHHATITIS 450001 IN Amazon.	2 171-13	305077-281	3 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	JNE3373	JNE3373-K kurta	L	B082W7G\Shipped	1 INR	376 HYDERABA	TELANGAN	500072 IN		FAI
25 405-8191138-517€ 4/30/2022 Shipped - [Merchant Amazon.in Standard NW030 NW030-TF Set XS B0902RQ! Shipped 1 INR 582 RANCHI JHARKHAM 834002 IN Amazon 20 403 9230474-9657 4/30/2022 Shipped - [Merchant Amazon.in Standard NE3415 JNE3415-Kiurta 3XL B082WBIX Shipped 1 INR 299 BILASPUR CHHAITIS 495001 IN Amazon	3 404-60	019946-290	5 4	/30/2022	Cancelled	Merchant	Amazon.in Standard	SET291	SET291-KR Set	M	B099NK55YG	0 INR	570.48 pune	MAHARAS	411044 IN		FAI
26 403-9230474-9657 4/30/2022 Shipped - [Merchant Amazon.in Standard] NE3415 NE3415-Kkurta 3XL B082W8JX Shipped 1 INR 299 BILASPUR CHHATTIS 495001 IN Amazon	4 402-33	384087-400	5 4	/30/2022	Shipped	Amazon	Amazon.in Expedited	MEN5002	MEN5002- kurta	L	B08YYYDN Shipped	1 INR	499 TEZPUR	ASSAM	784001 IN	IN Core Fre	FAI
	5 405-81	191138-517	€ 4	/30/2022	Shipped -	[Merchant	Amazon.in Standard	NW030	NW030-TP Set	XS	B09G2RQ: Shipped		582 RANCHI	HARKHAN	834002 IN	Amazon Pl	FAL
				/30/2022	Shipped -	E Merchant	Amazon.in Standard	JNE3415	JNE3415-K kurta		B082W8JX Shipped		299 BILASPUR	CHHATTIS		Amazon Pl	
27 408-3484/251-6901 4/30/2022 Shipped Amazon Amazon.in Expedited PJNE2199 PJNE2199 Furta 4XL B09LD2WS Shipped 1 INR 459 PUNE MAHARAS 411052 IN Amazon Sale Report 6				/30/2022	Shipped	Amazon	Amazon.in Expedited	PJNE2199	PJNE2199-kurta	4XL	B09LD2WS Shipped	1 INR	459 PUNE	MAHARAS	411052 IN		FAL

The dataset we're using stands out from others on the market because of the following reasons:

- Our dataset is primarily focused on products listed on Amazon, including details such as product ID, name, category, pricing information, ratings, rating count, and product descriptions. It has more unnormalized structure, where information about products is combined into single rows, potentially leading to data redundancy if the same product appears multiple times. On the other hand, the second dataset from Kaggle, "Amazon Sale Report," is a sales report containing details such as order ID, purchase date, order status, fulfillment, sales channel, SKU, product category, amount, shipping information, and B2B indicators. This dataset seems to have a more normalized structure aimed at tracking sales transactions, which could include multiple products per order.
- Both datasets include categorical and numerical data, but they are applied to different types of
 analysis. Our dataset contains more descriptive data about products, while the other one (Amazon
 Sales Report) is transactional and includes dates, numerical identifiers, and financial figures. The
 structure of our dataset, focusing on product details and reviews, lends itself more to product
 analysis but requires more preprocessing to handle redundant data effectively if the same product
 is listed multiple times.

Target User Group:

The targeted stakeholders are *smart online shoppers* who want a simple way to compare Amazon products. Our features, like side-by-side comparisons and review analysis, help users quickly understand which product is the best for them. This means less guesswork and more confident shopping decisions.

Dataset:

For this project we have chosen to utilize a comprehensive dataset from Kagle titled <u>"Amazon Sales Data"</u>. This dataset includes detailed record of product listings and customer reviews across various categories on Amazon, featuring 1465 entries with 16 distinct attributes such as product name, category, price, discount rate, rating, and user review.

This dataset enables us to extract and compare key product features, pricing, ratings, and sentiment analysis of reviews – essential components for our "A2Z AmazeComparator". It is specifically curated to assist users in navigating the extensive product options on Amazon, simplifying the decision-making process by providing a side-by-side comparison of products.

This aligns perfectly with our project's aim to enhance shopping experience by offering a user-friendly platform where important product information is readily accessible, thereby saving time and effort in finding the best deals on Amazon.

Sharing:

We have set up a GitHub repository to store the code for the project. We also use Microsoft Teams to chat and host team meetings.

GitHub repository: Click Here!

Group Contribution:

Name	Tasks	Average Time Spent (per milestone)
All three team members	Brainstorming of project ideas	3 hours

All three team members	Researching existing applications & finding a right database	More than 2 days		
All three team members	Inspect database and what further processing is needed. Planed how we will use the database to create an end-to-end application	4 hours		
All three team members	Researched tools and technologies required to build the application such as React.js / Flask/ Python libraries, such as Dash etc.	2.5 hours		
All three team members	Project proposal draft collaboration	5 hours		