
INDIAN INSTITUTE OF MANAGEMENT RANCHI

MBA

Data Warehousing & Data Visualization

Project 1

Batch:-2023-25

TERM :- IV

Instructions

- i. Submit a single project report per team.
- ii. Submit the Power BI file by September 4, 2024.
- iii. The Power BI file name should follow the “Project 1_Group#” format.

Questions

Use the Amazon data set provided to you. Create a Power BI dashboard as instructed below. You may have a uniform background design with navigation buttons across the dashboard pages.

All the Pages will contain:

- a. Amazon company logo
- b. A **Website** button upon clicking which users will navigate to their website (URL: <https://www.amazon.in/>).
- c. A **LinkedIn** button through which users can navigate to their LinkedIn site (URL: <https://in.linkedin.com/company/amazon>).
- d. A **Facebook** icon through which users can navigate to their website (URL: <https://www.facebook.com/AmazonIN/>).
- e. All these buttons must have an appropriate tooltip to make users understand their utility.

Dashboard Page 1: Summary Page

Title: Amazon Product Review Dashboard

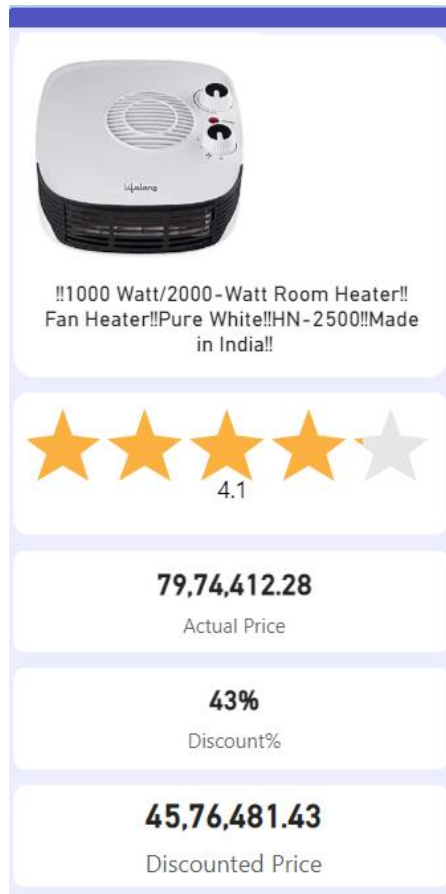
1. This is a summary page that will enable users to select any category from five different category levels. Note that the category field has five levels of category separated by “|.” Transform the data to separate the category levels out and adjust the spaces between words. In the following category, category level 1 = “Computers & Accessories,” category level 2 = “Accessories & Peripherals”, and so on.
Computers&Accessories|Accessories&Peripherals|Cables&Accessories|Cables|USBC
ables

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2. Also, users should have the choice to select any price range to see various details of products through other visuals.
 3. Display the total number of ratings.
 4. Display the average rating of products. Use the Ratings visual (designed by MAQ software).
 5. Use DAX to create a new column: Rating Bucket. The Rating Bucket takes four values (“1 to 2”, “2 to 3”, “3 to 4”, “4 to 5”). If rating ≥ 1 and < 2 , “1 to 2”, rating ≥ 2 and < 3 , “2 to 3”, rating ≥ 3 and < 4 , “3 to 4”, and rating ≥ 4 and ≤ 5 , “4 to 5”.
 6. Which rating bucket did you observe most products fall into? Draw a visual to support your answer.
 7. Display the average rating and the total number of ratings of different category levels. Allow users to drill down from category level 1 to level 2 to level 3 and so on.
 8. Calculate the discount % by using Actual Price and Discounted Price.
Then, use a relevant chart to understand how the user rating varies with respect to the discount % offered.
 9. Also, show how the user rating varies according to the product price.
 10. The visuals #8 and #9 will also allow users to **navigate** from this page to **Product Details** page to see more details about a product.

Dashboard Page 2: Product Table

Title: Amazon Product Review Dashboard

11. This is a product table page. Similar to the first page, this page will also allow users to select different categories from the five category levels and the price range.
12. It will further display in a tabular format the product image, product name, product link, rating, total ratings, actual price, discounted price, and discount %. While doing so, convert the img_link and product link to the image URL and Web URL format, respectively, in Power BI.
13. Whenever users hover over any product on this table, say the 1000/2000 Watt Room heater, the following tooltip pop-up will automatically appear. This tooltip will also appear if the user selects any product from visuals #8 and #9 of dashboard page 1.



Hint: You need a separate page in Power BI to build this tooltip. The tooltip contains the product image, product name, average rating, actual price, discount%, and discounted price, all placed vertically, as shown in the image. This extra dashboard page will be hidden from the users.

Dashboard Page 3: Decomposition Tree

Title: Amazon Product Review Dashboard

14. Have slicers to enable users to select price range, discount range, rating range, and rating count range.
15. Draw a decomposition tree to analyze the average rating with the help of different levels of category and product name.

Dashboard Page 4: Q&A

Title: Amazon Product Review Dashboard

16. Use the Q&A visual to help users ask any questions about your data.

Dashboard Hidden Page: Product Details

17. Have a product details page. It contains the product name, price, discount information, the number of ratings it received, and the average rating value.
18. Additionally, the page will display the product image, product details (about product), and a **Buy Now** button upon clicking, which users will land on Amazon's product page (product link URL).
19. All buttons in this dashboard will have a tooltip. For example, when users hover over the Buy Now button, it will display "Click to jump to Amazon page."

Dashboard Hidden Page: Product Tooltip

20. On this page, you can construct the tooltip that Dashboard Page 1's visuals refer to.