INTERVIEW ACTIVITY

Frontend Developer

@ALDI Data & Analytics Services





TASK INTRODUCTION Dash Coding

An imaginary grocery store chain is attempting to detect losses. The data can be found in the "Sample - Superstore.xlsx" file.

The application implementation should adhere to Clean Code standards, and its content should be organised at least into pages.

Try to fulfill all tasks; where it's not possible or the effort is not feasible, please note where and why you encountered problems and suggest possible solutions.



TASK INSTRUCTION Dash Coding

Create following 3 pages:

Page 1: Landing Page

- Upon entering the base URL (Localhost) of the app, the user should be redirected to this landing page.
- The content of this page should provide an overview of the most recent data (e.g. accumulated Sales or Profit Ratio) and two cards that link to the other pages.
 - Inspiration can be drawn from the Super Sample Superstore Dashboard -> Descriptive View.

Page 2: Table Page

- At the beginning of the page, there should be a Dash DataTable containing the data described in the introduction.
- The table should be filterable by three dropdowns with properties of your choice.
 - (Optional) Include dropdowns that form a hierarchy and interact with each other (e.g., excluding an option if the first dropdown is filled. Hierarchy example Country > State > City).
- At the bottom of the page, there should be five input fields with properties of your choice and an "Add" button.
 - On clicking "Add", the entry should be added to the table above.
 - One of the input fields should be a primary key suitable property.
 - (Optional) Prevent adding duplicated entries.

Page 3: Graph Page

- On the left side of the page, try to find a fitting timeline graph for the following properties: Days to Ship, Discount, Profit, Profit Ratio, Quantity, Returns, Sales.
- On the right side of the page, place a Bubble chart.
 - Next to the Bubble chart, include two-axis dropdowns containing the following properties: Days to Ship, Discount, Profit, Profit Ratio, Quantity, Returns, Sales.
 - By selecting one dropdown, the option should be excluded in the other.
 - The dropdowns should set the values for the Bubble chart.
 - Add a third dropdown that breaks down the bubble chart and contains the following properties: Segment, Ship Mode, Customer Name, Category, Sub-Category, Product Name.
- At the top of the page, include a date filter and a granularity dropdown (Week, Month, Quarter, Year)

Add a sidebar, which navigates to the three pages and has icons per next to the page title.



FOLLOW-UP QUESTIONS

- 1 | Where did you face challenges with the implementations or struggle to find a clean solution? Why?
- 2 | Where do you perceive limitations in the current layout of the app?
- 3 | How can the app be extended (rough vision)?