PROMPT 1

- I want to build a dashboard using google sheets apps script.
- I have created a google spreadsheet named “DASHBOARD” and my apps script is tied to this spreadsheet.
- Inside the “DASHBOARD” spreadsheet I have a google sheet named “dataset” with the following columns;
    - “Date” (“Column A”) | Date format is “DD-MM-YYYY” so please manage accordingly when you fetch data on front-end to create dashboard.
    - “Entity Name” (“Column B”)
    - “Product” (“Column C”)
    - “Category” (“Column D”)
    - “Location” (“Column E”)
    - “Sales” (“Column F”) | amount formatted in $ currency
    - “Cost” (“Column G”) | amount formatted in $ currency
    - “Margin” (“Column H”) | amount formatted in $ currency
    - “Expenses” (“Column I”) | amount formatted in $ currency
    - “Profit” (“Column J”) | amount formatted in $ currency
    - “Margin %” (“Column K”) | values formatted as %
    - “Profit %” (“Column L”) | values formatted as %
- I am providing a sample data from my “dataset” sheet.
- Please analyze and suggest me the dashboard design including what key numbers to display and what charts to create.

I want to show;

- Some key numbers on top of the dashboard in cards.
- Different cards to create charts.

PROMPT 2

index.html

· Here are the instructions to design the dashboard.

· You need to display charts so please use appropriate chart library such as apexcharts.js as appropriate.

· The script is tied to the google sheet named “DASHBOARD” and inside “DASHBOARD” spreadsheet I have a sheet named “dataset”

(a) Main heading

· Heading: “Dashboard” | Subheading: “Key trends and business insights” | Align Center | background color #021640 |

· Sheet index.html | main entry point.

(b) Calculated Number Cards

!IMPORTANT INSTRUCTIONS FOR “Calculated Number Cards”

· Create a separate row container after **(a) Main heading** and create 6 small cards (horizontal dimension). Fit all of these 6 cards in a single row container with 24px gap

· Font color for heading, results and icons = #021640

· **Card 1**

  - Card Heading (H1): “Total Sales” (aligned top left) with font awesome icon
  - Width: 290px | Height 100px
  - Go to “dataset” sheet and access “Column F” (“Sales”)
  - Sum the values in this column and fetch on “Total Sales” card with “$” currency sign (aligned left) (H2).

· **Card 2**

- Card Heading (H1): “Total Cost” (aligned top left) with font awesome icon
- Width: 290px | Height 100px
- Go to “dataset” sheet and access “Column G” (“Cost”)
- Sum the values in this column and fetch on “Total Cost” card with “$” currency sign (aligned left) (H2).

- **Card 3**
  - Card Heading (H1): “Average Margin” (aligned top left) with font awesome icon
  - Width: 290px | Height 100px
  - Go to “dataset” sheet, access “Column H” (“Margin”) and sum the values in this column.
  - Then go to “dataset” sheet, access “Column F” (“Sales”) and sum the values in this column.
  - Divide the result from “Column H” (“Margin”) with the result from “Column F” (“Sales”).
  - And display the result on “Average Margin” card with “%”sign (aligned left) (H2).
- **Card 4**
  - Card Heading (H1): “Top Sales Location” (aligned top left) with font awesome icon
  - Width: 290px | Height 100px
  - Go to “dataset” sheet, access “Column E” (“Location”), and get unique “Location” values from all the entries in this column.
  - For each unique “Location” in “Column E” of “dataset” sheet, sum the amounts from “Column F” (“Sales”) of “dataset” sheet (like sumif formula).
  - For the “Location” with highest sales amount, get that “Location” from “Column E” (“Location”) of “dataset” sheet.
  - And display the result on “Top Sales Location” card (aligned left) (H2)

- **Card 5**
    - Card Heading (H1): “Top Selling Product” (aligned top left) with font awesome icon
    - Width: 290px | Height 100px
    - Go to “dataset” sheet, access “Column C” (“Product”), and get unique “Product” values from all the entries in this column.
    - For each unique “Product” in “Column C” of “dataset” sheet, sum the amounts from “Column F” (“Sales”) of “dataset” sheet (like sumif formula).
    - For the “Product” with highest sales amount, get that “Product” name from “Column C” (“Product”) of “dataset” sheet.
    - And display the result on “Top Selling Product” card (aligned left) (H2)
- **Card 6**
    - Card Heading (H1): “Top Customer” (aligned top left) with font awesome icon
    - Width: 290px | Height 100px
    - Go to “dataset” sheet, access “Column B” (“Entity Name”), and get unique “Entity Name” values from all the entries in this column.
    - For each unique “Entity Name” in “Column B” of “dataset” sheet, sum the amounts from “Column F” (“Sales”) of “dataset” sheet (like sumif formula).
    - For the “Entity Name” with highest sales amount, get that “Entity Name” name from “Column B” (“Entity Name”) of “dataset” sheet.
    - And display the result on “Top Customer” card (aligned left) (H2)

- **CSS AND STYLING INSTRUCTIONS FOR “Calculated Number Cards”**
    - Heading font color: #021640
    - Font awesome icon font color: #021640
    - Card result / values font color: #021640

(c) Charts

!IMPORTANT INSTRUCTIONS FOR CHARTS

- Use these color codes for charts, titles, headings, subheadings, and axes fonts #021640, #0066CC, #0099CC, #4572C4, #558ED5, #1F4E79
- Create 3 columns
- Place “Chart 1” in 1st column (take 100% of column width)
- Place “Chart 2” and “Chart 3” in 1st column (below chart 1) - take 50% of column width for each chart.
- Place “Chart 4” in 2nd column. Set this chart equal to 1st column’s height.
- Place “Chart 5” and “Chart 6” in 3rd column (take 50% of column width for each chart).
- Place “Chart 7” in 3rd column (below chart 5 and chart 6). Take 25% of column width.
- Place “Chart 8” in 3rd column (below chart 5 and chart 6). Take 75% of column width.

- **Chart 1**
    - Card Title: “Sales Trend” (aligned top left)
    - Width 700px | Height 300px
    - Go to “dataset” sheet, access “Column A” (“Date”) and “Column F” (“Sales”)
    - Based on “Date” in “Column A” and “Sales” amounts in “Column F”, create a smoothed “SPLINE AREA CHART”.
    - Plot “D-hgate” values on X Axis and “Sales” amount on X Axis
    - Group “Date” by “Month” and “Year”.
    - **!IMPORTANT:** *Date format on “Column A” is “DD-MMM-YYYY” so please adjust accordingly while fetching data from “dataset” sheet.*
    - Line color (#021640), area color #021640 (80% transparency), marker size (1px).
    - Display Y axis amounts in thousands

- **Chart 2**

- Card Title: “Sales By Location” (aligned top left)
- Width 350px | Height 350px
- Go to “dataset” sheet, “Column E” (“Location”), and get all the unique values from this column.
- For each unique “Location” in “Column E”, sum the amounts from “Column F” (“Sales”) of “dataset” sheet (like sumif formula).
- For each unique “Location” in “Column E” and “Sales” amount calculated from “Column F” of “dataset” sheet, create a “COLUMN CHART”.
- Plot “Location” values on X Axis and “Sales” amount on Y Axis
- Display Y axis amounts in thousands

· **Chart 3**

- Card Title: “Sales By Category” (aligned top left)
- Width 350px | Height 350px
- Go to “dataset” sheet and access “Column D” (“Category”) and “Column F” (“Sales”)
- For each unique “Category” in “Column D” of “Sales” sheet, sum the amounts from “Column F” (“Sales”) of “dataset” sheet (like sumif formula).
- Based on each unique “Category” and “Sales” amount, create a “PIE CHART”.

· **Chart 4**

- Card Title: “Top 10 Customers” (aligned top left)
- Width 300px | Height 650px
- Go to “dataset” sheet and access “Column B” (“Entity Name”) and “Column F” (“Sales”)
- For each unique “Entity Name” in “Column B”, sum the amounts from “Column F” (“Sales”) of “dataset” sheet (like sumif formula).

- Then get the top 10 “Entity Name” from “Column B” based on the calculated “Sales” amount.
- Create a “BAR CHART” (Horizontal bars).
- Plot “Sales” amount from “Column F” on X Axis and top 10 “Entity Name” from “Column B” on Y axis.
- Display X axis amounts in thousands

- **Chart 5**
  - Card Title: “Sales, Expense and Profit” (aligned top left)
  - Width: 400px | Height 300px
  - Go to “dataset” sheet and access “Column A” (“Date”), “Column F” (“Sales”), “Column G” (“Cost”) “Column I” (“Expenses”) and “Column J” (“Profit”).
  - Sum “Column F”, “Column G”, “Column I” and “Column J”
  - Group the values by “Year” based on “Date” in “Column A”. Date format on “Column A” is “DD-MMM-YYYY” so please manage accordingly while fetching data from “dataset” sheet.
  - Create a “100% STACKED BAR CHART” from this data
  - Plot “Year” on Y Axis and “Percentage” X Axis.
  - Auto update “Sales, Expense and Profit” chart when new data is entered on “dataset” sheet.
- **Chart 6**
  - Card Title: “Profit By Category” (aligned top left)
  - Width: 400px | Height 300px
  - Go to “dataset” sheet and access “Column A” (“Date”), “Column D” (“Category”) and “Column J” (“Profit”)
  - Get unique values from “Column D” (“Category”).

- For each unique “Category” in “Column D”, sum the amounts from “Column J” (“Profit”) of “dataset” sheet (like sumif formula) AND;
- Create a “STACKED COLUMN CHART”
- Group the “Profit” and “Category” by “Year” based on “Date” in “Column A”
- Plot “Year” on X Axis and “Profit” amount on Y Axis.
- Display Y axis amounts in thousands

- **Chart 7**
  - Card Title: “Profit By Location” (aligned top left)
  - Width: 350px | Height 350px
  - Go to “dataset” sheet, access “Column E” (“Location”), and get all the unique “Location” values from this column.
  - For each unique “Location” in “Column E” of “dataset” sheet, sum the amounts from “Column J” (“Profit”) of “dataset” sheet (like sumif formula).
  - And calculate the percentage (%) for each unique “Location” corresponding to total “Profit” amount calculated from “Column J” (“Profit”) of “dataset” sheet.
  - Based on each unique “Location” and “Profit” amount, create a “SEMI DONUT CHART”.
- **Chart 8**
  - Card Title: “Sales and Profit Trend” (aligned top left)
  - Width: 450px | Height 350px
  - Go to “dataset” sheet and access “Column A” (“Date”), “Column F” (“Sales”) and “Column J” (“Profit”)
  - Based on “Date” in “Column A”, “Sales” amount in “Column F”, and “Profit” amount in “Column J”, create a “STACKED AREA CHART”
  - Plot “Date” values on X Axis
  - Plot “Sales” amount and “Profit” amount on X Axis (2 series).

- Group “Date” by “Month” and “Year”.
- **!IMPORTANT:** *Date format on “Column A” is “DD-MMM-YYYY” so please adjust accordingly while fetching data from “dataset” sheet.*

· Act as a professional full stack developer. Carefully analyze the details and provide a complete and fully working Google Apps Script code to create the dashboard.

· Write HTML, CSS and JAVASCRIPT in a single index.html file.

· Write .gs code in Code.gs file.