Customer Personality Analysis

Wireframe Documentation

Home Page

We have implemented a user-friendly form on our homepage, allowing users to provide essential input for accurate cluster predictions. The form consists of five mandatory fields:

Income: Users are required to input their monthly income.

Number of days customer for: Users should specify the duration they have been our customer.

Age: Users need to enter their age.

Spending Amount: Users are prompted to input the amount they have spent.

Number of Children: Users are asked to provide the number of children they have.

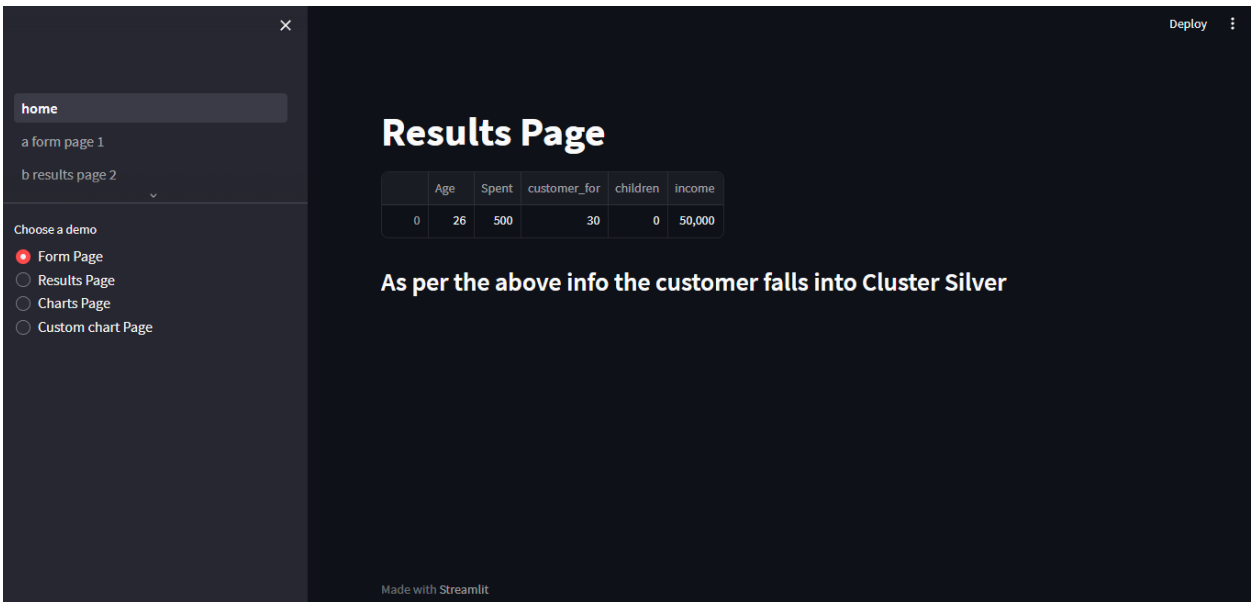
Once all the fields are completed, users can simply click the submit button to be redirected to the result page where they will receive cluster predictions based on the provided information.

Results Page

On this page, we present users with the predicted outcomes based on their input. These predictions are divided into four distinct clusters:

1. Bronze
2. Silver
3. Gold
4. Platinum

Below these predicted results, we also display a Data Frame containing the user's input details for reference and transparency. This allows users to see the specific data that was used to generate their cluster prediction.

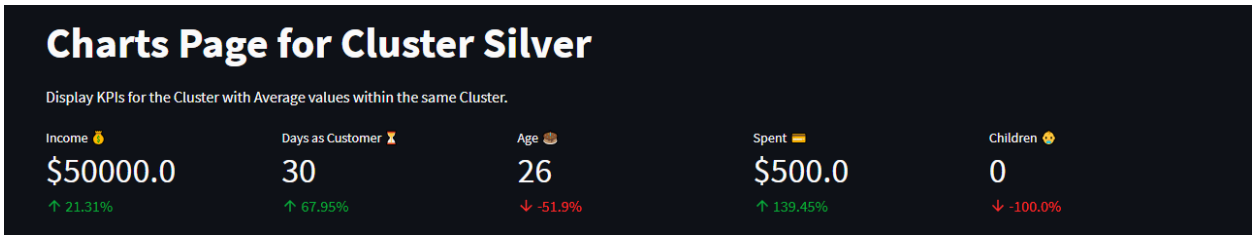


Charts Page

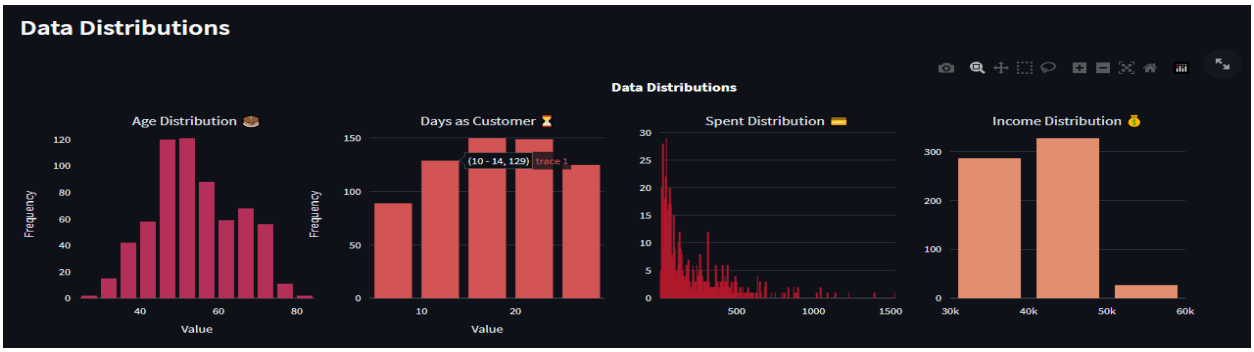
In our dedicated dashboard for predicted clusters, we provide users with key performance indicators (KPIs) specific to their cluster. These KPIs include:

1. **Income**: Users can view the income they provided and, below that, the percentage change compared to the mean income within the same cluster.
2. **Days as a Customer**: Users can find the duration they have been our customer, followed by the percentage change compared to the mean duration within the same cluster.
3. **Age**: This section displays the age of the customer and, beneath it, the percentage change in age compared to the mean age within the same cluster.
4. **Spending**: Users can see their spending amount, and below it, the percentage change in spending compared to the mean spending within the same cluster.
5. **Children**: In this part, users can observe the number of children they have, along with the percentage change in this number compared to the mean number of children within the same cluster.

This dashboard provides users with a clear and concise overview of how their individual data compares to the cluster's average values, helping them understand their position within the specific cluster.



Following the KPIs blocks, we offer users a visual representation of the data distribution through a Column graph. This graph provides a graphical insight into how their individual data points align with the overall distribution within their respective cluster, further enhancing their understanding of their position within the cluster.



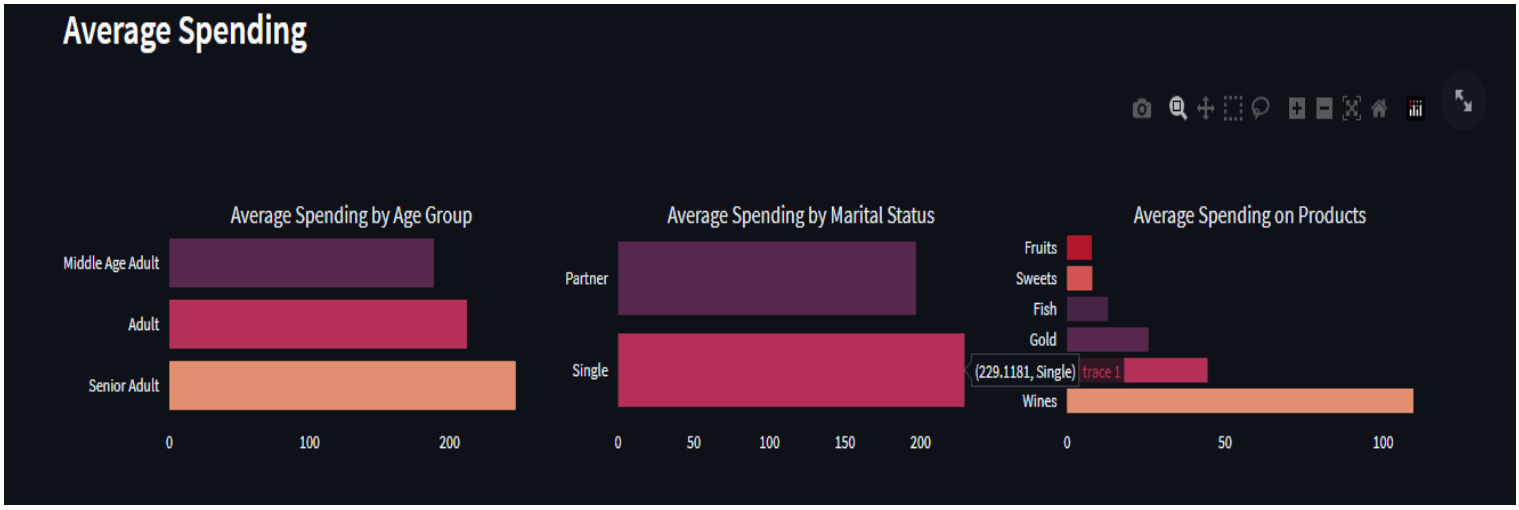
Continuing with our dashboard, we present users with an informative Average Spending bar chart. This chart depicts the average spending categorized by three significant factors:

- Age Group: Users can see how average spending varies across different age groups, helping them gain insights into spending patterns related to age.

- Marital Status: The chart provides a breakdown of average spending based on marital status, allowing users to understand spending differences between married and unmarried individuals.

- Products: Users can explore how average spending varies across different products or categories, enabling them to identify their spending preferences in relation to specific products.

This Average Spending bar chart offers valuable insights into spending trends within the cluster, enhancing users' understanding of their spending behavior in comparison to others in the same cluster.

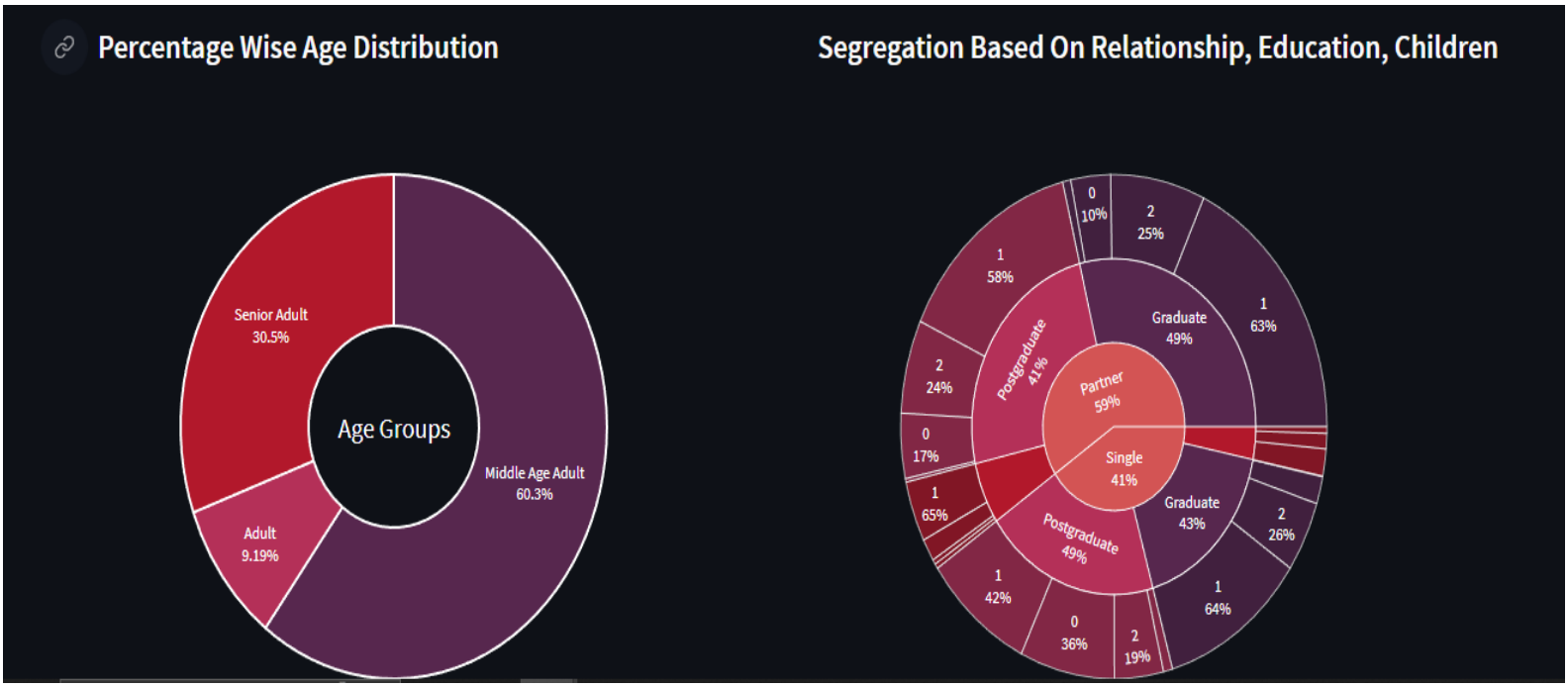


In this section, we provide users with two informative charts:

1. **Pie Chart** for Percentage-Wise Age Distribution: This chart visually represents the age distribution within the cluster, showing the percentage of individuals in different age groups. Users can easily grasp the age demographics of their cluster from this pie chart.

2. **Sunburst Chart** for Segregation Based on Relationship, Education, and Children: The sunburst chart offers a comprehensive view of how the cluster's individuals are segmented based on their relationship status, education levels, and the number of children they have. This dynamic chart provides users with a deeper understanding of the diverse characteristics within their cluster.

These charts collectively contribute to a well-rounded and insightful dashboard, enabling users to explore and comprehend various aspects of their cluster's demographics and characteristics.



In this section, our dashboard offers users three valuable visualizations:

1. **Segment-Wise Distribution of Total Purchase** - Two-Column Chart: This chart provides a side-by-side comparison of the segment-wise distribution of total purchase amounts. Users can easily compare how different segments within the cluster contribute to the overall total purchase.

2. **Campaign Distribution** - Two-Column Chart: The second chart in this section displays the distribution of campaigns within the cluster. Users can see the participation and response rates for each campaign, helping them understand campaign effectiveness.

3. **Scatter Plot of Income and Spending**: The final visualization is a scatter plot that illustrates the relationship between income and spending among cluster members. This scatter plot allows users to identify any potential trends or patterns in their income and spending behavior within the cluster.

These visualizations enhance users' ability to analyze and interpret important data points related to their cluster's purchasing behavior, campaign engagement, and the relationship between income and spending.