

Execution of Streamlit Application

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Anaconda Prompt - streamlit  X + ▾

(base) C:\Users\jveda>cd DesktopP
(base) C:\Users\jveda\Desktop>cd BIA
(base) C:\Users\jveda\Desktop\BIA>cd "Capstone pro"
(base) C:\Users\jveda\Desktop\BIA\Capstone pro>cd "Streamlit application"
(base) C:\Users\jveda\Desktop\BIA\Capstone pro\Streamlit application>conda activate streamlit_env
(streamlit_env) C:\Users\jveda\Desktop\BIA\Capstone pro\Streamlit application>streamlit run app.py

You can now view your Streamlit app in your browser.

Local URL: http://localhost:8501
Network URL: http://127.0.0.1:8501

C:\Users\jveda\anaconda3\envs\streamlit_env\lib\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator StandardScaler from version 1.6.1 when using version 1.7.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
C:\Users\jveda\anaconda3\envs\streamlit_env\lib\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator KMeans from version 1.6.1 when using version 1.7.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
C:\Users\jveda\anaconda3\envs\streamlit_env\lib\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator DecisionTreeClassifier from version 1.6.1 when using version 1.7.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
C:\Users\jveda\anaconda3\envs\streamlit_env\lib\site-packages\sklearn\base.py:442: InconsistentVersionWarning: Trying to unpickle estimator RandomForestClassifier from version 1.6.1 when using version 1.7.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
    warnings.warn(
```

Home Page of Streamlit application

The screenshot shows a web browser window titled "Customer Segmentation" with the URL "localhost:8501". The page has a dark theme and features a logo of a shopping bag. The title "E-commerce Customer Segmentation App" is displayed prominently. Below the title, there is a sub-instruction: "Enter customer RFM values to predict their segment". A form titled "Enter Customer RFM Values" contains three input fields: "Recency (Days since last purchase)" with a value of "30", "Frequency (Number of purchases)" with a value of "5", and "Monetary (Total spend)" with a value of "1000.00". At the bottom of the form is a button labeled "Predict Customer Segment". The browser's address bar also shows other tabs like "upgradPayton P...", "HackerRank - O...", "HackerEarth | O...", "The Course O...", and "Imported From...".

Predication:-

Low Value Customer

The screenshot shows the "E-commerce Customer Segmentation App" interface. At the top, there's a header with the app name and a "Deploy" button. Below the header, there's a sub-header "Enter Customer RFM Values". Underneath this, there are three input fields: "Recency (Days since last purchase)" set to 400, "Frequency (Number of purchases)" set to 1, and "Monetary (Total spend)" set to 10.00. A "Predict Customer Segment" button is located below these fields. To the right, under "Prediction Results", it shows "KMeans Cluster" as 3 and "RF Predicted Segment" as "Low-Value Customers". Both "Segment: Low-Value Customers" are listed. A "Business Insight" section at the bottom contains the message "Low engagement & spending. Risk of churn ▲".

Regular Customers

The screenshot shows the "Segmentation App" interface. At the top, there's a header with the app name and a "Deploy" button. Below the header, there's a sub-header "Enter Customer RFM Values". Underneath this, there are three input fields: "Recency (Days since last purchase)" set to 44, "Frequency (Number of purchases)" set to 3, and "Monetary (Total spend)" set to 1349.00. A "Predict Customer Segment" button is located below these fields. To the right, under "Prediction Results", it shows "KMeans Cluster" as 1 and "RF Predicted Segment" as "Regular Customers". Both "Segment: Regular Customers" are listed. A "Business Insight" section at the bottom contains the message "Average engagement. Target with promotions 🔔".

High-Value Customers

The screenshot shows the E-commerce Customer Segmentation App interface. At the top, there's a header with the title "E-commerce Customer Segmentation App". Below it, a sub-header says "Enter customer RFM values to predict their segment". A form titled "Enter Customer RFM Values" contains three input fields: "Recency (Days since last purchase)" with value 15, "Frequency (Number of purchases)" with value 22, and "Monetary (Total spend)" with value 12425.00. A "Predict Customer Segment" button is below the inputs. To the right, under "Prediction Results", it shows "KMeans Cluster 0" and "RF Predicted Segment High-Value Customers". Both "Segment: High-Value Customers" are highlighted in blue. Under "Business Insight", a callout box says "Strong customers with good spending. Upsell premium products! 🚀".

VIP Customers

The screenshot shows the E-commerce Customer Segmentation App interface. The layout is identical to the previous one, with the title "E-commerce Customer Segmentation App" and the sub-header "Enter customer RFM values to predict their segment". The "Enter Customer RFM Values" form has different input values: "Recency (Days since last purchase)" with value 7, "Frequency (Number of purchases)" with value 82, and "Monetary (Total spend)" with value 127188.00. The "Predict Customer Segment" button is present. On the right, under "Prediction Results", it shows "KMeans Cluster 2" and "RF Predicted Segment VIP Customers". Both "Segment: VIP Customers" are highlighted in blue. Under "Business Insight", a callout box says "High spending & highly frequent customers. Offer loyalty rewards! 💰".