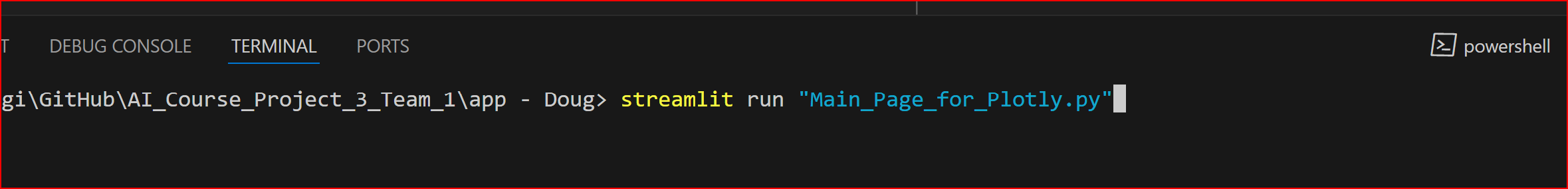
**Plotly Usage Instructions**

**Project 3: ASU AI Course.**

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1. In your terminal, navigate to the directory with the file “main\_page\_for\_plotly.py”. Execute “streamlit run “Main\_Page\_for\_plotly.py”. Hit enter.



1. Your browser should open (we only tested in Chrome) and you should see the following:

A screenshot of a computer

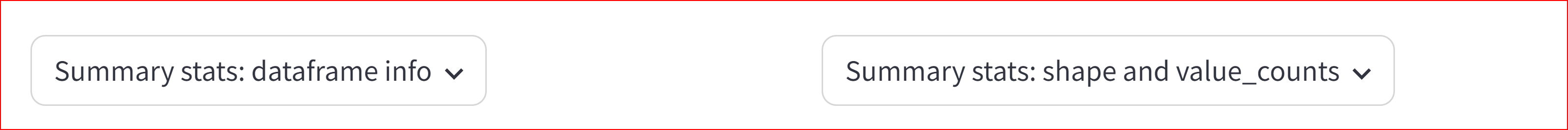
Description automatically generated

1. Click on the only button (Click Here to select…). You should then see the following:

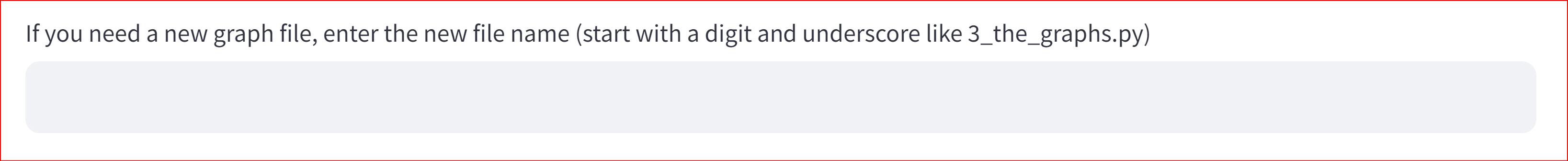
A screenshot of a computer

Description automatically generated

1. Click on the Browse file button (left side of above screen shot).
2. Navigate to your directory which has a clean csv file (sorry, no xlsx file). Select and click on Open.
   1. Requirement is for ‘tall’ table format. It will not work with pivoted or ‘wide’ format.
3. Data will be read in. You should see a scrollable view of your dataframe.
4. Below the dataframe, you will see two buttons as follows:



1. If you want to see the dataframe info (i.e. df.info() in Python, select the button on the left. If you want to see the shape of the data of the value counts, select the button on the right. Pop Ups will appear.
2. If you do not want to use the default graphing page (which is 3\_the\_graphs.py), then type in the name of a new graphing file. Requirements are below.
   1. File Name must start with a number followed by an underscore.
   2. Should end in ‘.py’. Keep it simple and only use letters or digits after the digit-underscore and the .py.
   3. Hit control enter.



* 1. May need to click on the Enter your graphing request text input area for action to start, which is directly below and right of the file name input box, as shown below.

A screen shot of a computer

Description automatically generated

* 1. Note: If you are starting out, just you the default and do not add an additional graph page.

1. Enter your graphing request. Note: Prompt engineering is important. Here are a few requests that worked (obviously you must reference columns/features in your loaded dataset). After typing your request, hit Control-Enter. Note: You can use single quotes, but NO DOUBLE QUOTES.

|  |
| --- |
| generate a stacked bar chart of counts of payment\_method. The bottom part of the stacked bar should be for churn=0 versus the top of the stacked bar should be for churn=1. |
| create histograms for tenure, number\_customer\_service\_calls and internet\_charge\_per\_min. For the internet\_charge\_per\_min, limit the x axis to 0.03. |
| Create overlapping histograms for number\_customer\_service\_calls for churn=0 versus churn=1. Since the are many more data rows where churn=0, convert the data to relative frequency |
| Generate overlapping histograms for the variable fgp for Player = Jordan versus Player = Lebron. Add an annotation for the average fgp for Player = Jordan versus average fgp for Player = Lebron. |
| Generate a scatter plot with two series. Series 1: x= game\_abs and y = pts for Player = Jordan and Series 2: x= game\_abs and y = pts for Player = Lebron. Use sklearn library to generate a regression line for both series. Annotate the regression lines with the Players. |
| Generate a scatter plot with two series. Series 1: x= game\_abs and y = pts for Player = Jordan and Series 2: x= game\_abs and y = pts for Player = Lebron. Use sklearn library to generate a regression line for both series. Annotate the regression lines with the Players. for Series 1 use red points and a black regression line. For Series 2, use blue points and a yellow regression line. |

1. After entering your request and hitting Control-Enter, Button labeled Request Received… Click to Produce graph(s) will appear. Click on this Button to generate your chart.

A screenshot of a chat

Description automatically generated

1. This will take you to the create\_graphs page per the screen shot below.

A screenshot of a computer

Description automatically generated

1. Either click on “Click to view the page with the graphs (button is below the data definition per the screen shot below.

A screenshot of a computer

Description automatically generated

1. Or click “Click to generate another graph”, shown on the right in the screen shot above. We’ll assume you clicked on “Click to view the page with the graphs”. You can always generate more graphs, so it is fine to see what you have generated so far.
2. In our example with the request above, after clicking on the “click to view…” button, you will go to the graphing page. If the default was used, this will be a page called “the\_graphs”. Alternately, the custom page you selected by specifying a new graph file name will appear.
3. Below is the top of the graphing page for our entered request.

A screen shot of a graph

Description automatically generated

1. The page still allows you to view the dataframe information, shape and value stream counts using the buttons shown.
2. The graph request you made should be generated on this page. Our graph comparing M.Jordan versus Lebron J. is shown below.

A graph of a field goal

Description automatically generated

1. On the gray sidebar on the left hand side of the screen, select ‘Create graphs’ to create another graph as shown below.

A screenshot of a computer

Description automatically generated

* 1. Note: If the side bar is hidden, click on the little arrow on the upper left corner to show the sidebar as shown below.

A screenshot of a computer

Description automatically generated

1. This will return you to the Create Graphs page as shown below. You can enter a new graphing request here. After entering the request, hit control enter again. To view your new graph (your last graph will still be present), choose ‘the graphs’ from the side panel on the left as shown below

A close-up of a white background

Description automatically generated

1. Iteratively, create all of the graphs you need.
2. Afterward, when you are ready to quite, Hit control-C If you are running this application from your terminal (such as from Visual Studio Code), the quit the application.
   1. After (not before) executing Control-C in the terminal, then dismiss the web page in the browser.
3. f
4. f