Data Visualization with Python

Cheat Sheet : Plotly and Dash

Function	Description	Syntax	Example
Plotly Express			
scatter	Create a scatter plot	`px.scatter(dataframe, x=x_column, y=y_column)`	`px.scatter(df, x=age_array, y=income_array)`
line	Create a line plot	`px.line( x=x_column, y=y_column,'title')`	`px.line(x=months_array, y=no_bicycle_sold_array)`
bar	Create a bar plot	`px.bar( x=x_column, y=y_column,title='title')`	`px.bar( x=grade_array, y=score_array, title='Pass Percentage')`
sunburst	Create a sunbust plot	`px.sunburst(dataframe, path= [col1,col2..], values='column',title='title')`	`px.sunburst(data, path=['Month', 'DestStateName'], values='Flights',title='Flight Distribution Hierarchy')`
histogram	Create a histogram	`px.histogram(x=x,title="title")`	`px.histogram(x=heights_array,title="Distribution of Heights")`
bubble	Create a bubble chart	`px.scatter(dataframe, x=x,y=y,size=size,title="title")`	`px.scatter(bub_data, x="City", y="Numberofcrimes", size="Numberofcrimes",hover_name="City", title='Crime Statistics')`
pie	Create a pie chart	`px.pie(values=x,names=y,title="title")`	`px.pie(values=exp_percent, names=house_holdcategories, title='Household Expenditure')`
Plotly Graph Objects			
Scatter	Create a scatter	`go.Scatter(x=x, y=y, mode='markers')`	`go.Scatter(x=age_array, y=income_array, mode='markers')`
	Create a line plot	`go.Scatter(x=x, y=y, mode='lines')`	`go.Bar(x=months_array, y=no_bicycle_sold_array,mode='lines')`
add_trace	Add additional traces to an	`fig.add_trace(trace_object)`	`fig.add_trace(go.Scatter(x=months_array, y=no_bicycle_sold_array))`

Function	Description	Syntax	Example
	existing figure		
update_layout	Update the layout of a figure, such as title, axis labels, and annotations.	`fig.update_layout(layout_object)`	`fig.update_layout(title='Bicycle Sales', xaxis_title='Months', yaxis_title='Number of Bicycles Sold')`
Dash			
dash_core_components.Input	Create an input component	`dcc.Input(value='', type='text')`	`dcc.Input(value='Hello', type='text')`
dash_core_components.Graph	Create a graph component	`dcc.Graph(figure=fig)`	`dcc.Graph(figure=fig)`
dash_html_components.Div	Create a div element	`html.Div(children=component_list)`	`html.Div(children=[html.H1('Hello Dash'), html.P('Welcome to Dash')])`
dash_core_components.Dropdown	Create a dropdown component	`dcc.Dropdown(options=options_list, value=default_value)`	`dcc.Dropdown(options=[{'label': 'Option 1', 'value': '1'}, {'label': 'Option 2', 'value': '2'}], value='1')`

Author(s)

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Changelog

Date	Version	Changed by	Change Description
2023-06-19	0.1	Dr. Pooja	Initial version created