

Bing

To add a yearly bar chart to the code, you can create a new page for the yearly bar chart and define a callback function to update the chart. Here's an example of how you can do this:

First, create a new page for the yearly bar chart by adding the following code after the definition of the `Monthly_bar_chart_page`:

```
Yearly_bar_chart_page = html.Div([
    html.H1('Yearly Bar Chart'),
    dcc.Graph(id='yearly-bar-chart'),
    dcc.Link('Go to Time Series Map', href='/time-series-map'),
    html.Br(),
    dcc.Link('Go to Monthly Bar Chart', href='/Monthly-bar-chart'),
    html.Br(),
    dcc.Link('Go back to home', href='/')
])
```

Next, define a callback function to update the yearly bar chart by adding the following code after the definition of the `update_monthly_bar_chart` function:

```
@app.callback(
    Output('yearly-bar-chart', 'figure'),
    Input('yearly-bar-chart', 'id')
)
def update_yearly_bar_chart(id):
    # Convert the Date column to a datetime object
    df['Date'] = pd.to_datetime(df['Date'])

    # Group the data by year and calculate the mean price for each year
    yearly_data = df.groupby(pd.Grouper(key='Date', freq='Y')).mean().reset_index()

    # Create the interactive bar chart
    fig = px.bar(yearly_data, x='Date', y='Price', title='Yearly Bar Chart')

    return fig
```

Finally, update the `app.layout` and `index_page` definitions to include links to the new yearly bar chart page. Here's an example of how you can do this:

```
app.layout = html.Div([
    dcc.Location(id='url', refresh=False),
    html.Div([
        dcc.Link('Home', href='/'),
        html.Span(' | '),
        dcc.Link('Time Series Map', href='/time-series-map'),
        html.Span(' | '),
        dcc.Link('Monthly Bar Chart', href='/Monthly-bar-chart'),
        html.Span(' | '),
        dcc.Link('Yearly Bar Chart', href='/Yearly-bar-chart'),
    ], className='navbar'),
    html.Div(id='page-content')
], style={'font-family': 'Helvetica'})
```

```
index_page = html.Div([
    html.H1('Home'),
    dash_table.DataTable(
        id='table',
        columns=[{"name": i, "id": i} for i in df.columns],
        data=df.to_dict('records'),
    ),
    html.Br(),
    dcc.Link('Go to Time Series Map', href='/time-series-map'),
    html.Br(),
])
```

```
    dcc.Link('Go to Monthly Bar Chart', href='/Monthly-bar-chart'),  
    html.Br(),  
    dcc.Link('Go to Yearly Bar Chart', href='/Yearly-bar-chart'),  
])
```

This will add a new page for the yearly bar chart and update the navigation bar and home page with links to the new page. Is there anything else you would like to know? 😊