



# Streamlit with Python



Imran Khan

Follow

4 min read · May 5, 2025



1



...

Streamlit allows developers to quickly build interactive and user-friendly web applications with minimal effort. Together, these tools enable the rapid development of intelligent applications that can leverage the full potential of OpenAI's API.

This block will provide detailed knowledge around Streamlit and its main components with code example.

Follow below command to install Streamlit:

```
pip install streamlit
```

## Hello World Program:

Create a Python file with a custom name like practice.py and paste the following code into it:

```
import streamlit as st
st.title("Hello, everyone!")
st.write("Welcome to your first Streamlit app... Happy Learning !!!")
```

## Deploy Code:

```
C:\Users\██████\OneDrive\Documents\openai>streamlit run hello-streamlit.py
You can now view your Streamlit app in your browser.

Local URL: http://localhost:8501
Network URL: http://192.168.1.66:8501
```

## OUTPUT:



## Hello, World!

Welcome to your first Streamlit app.

## Create Columns and add Text Area:

Create a Python file with a custom name like practice.py and paste the following code into it:

Streamlit allows us to create any number of columns as shown below:

```
import streamlit as st
```

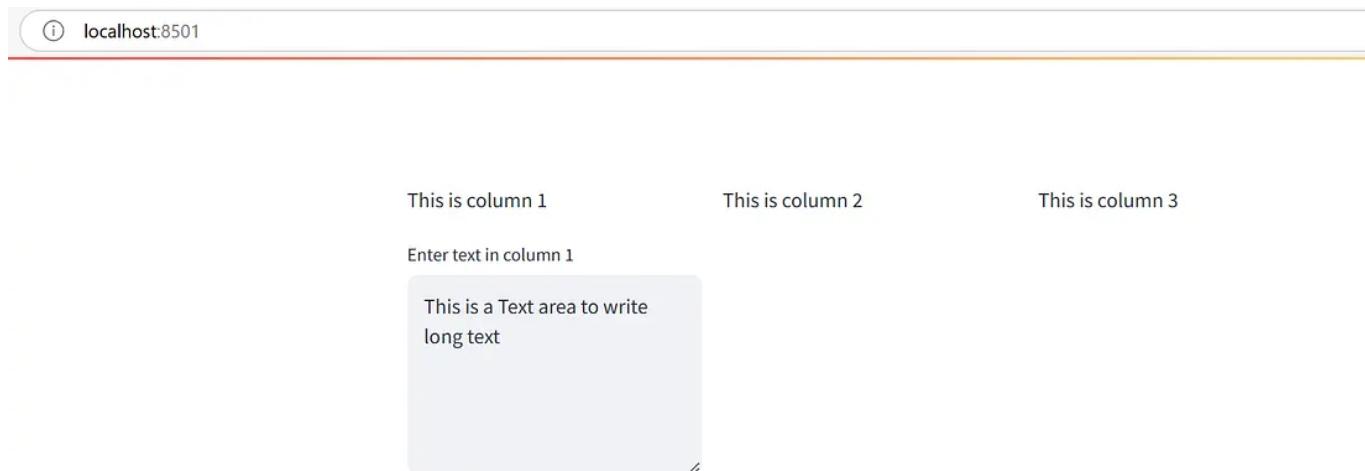
```
# Create 3 columns
col1, col2, col3 = st.columns(3)

# Add content to each column
col1.write("This is column 1")
col1.text_area("Enter text in column 1", height=150)

col2.write("This is column 2")

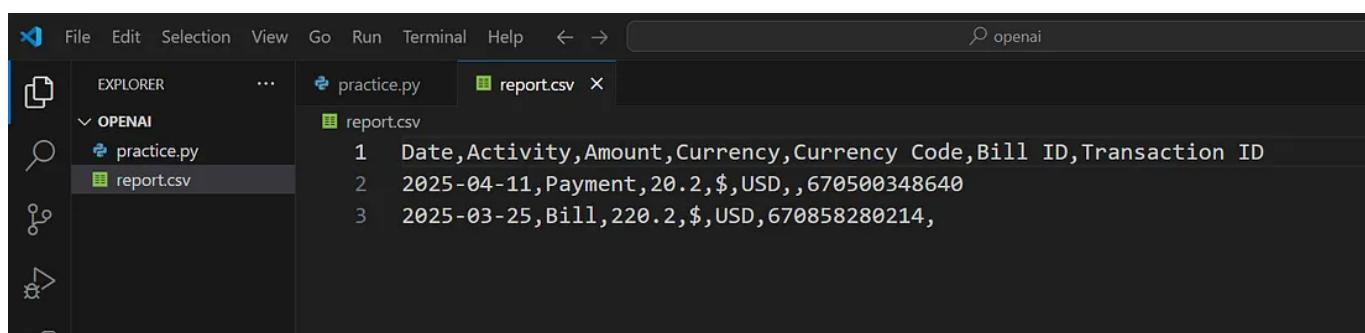
col3.write("This is column 3")
```

## OUTPUT:



## Read CSV file and write using Streamlit

Streamlit allows users to easily read and write CSV files using standard Python libraries like pandas. We can display csv file content using write method as shown below. Streamlit also allows us to export data and offer it for download using st.download\_button(). This makes handling CSV files in web apps simple and interactive



Create a Python file and copy paste below code inside it:

```
import streamlit as st
import pandas as pd

# Read Python file create parallel to practice.py file
data = pd.read_csv("report.csv")

# Write csv data to streamlit
st.write(data)

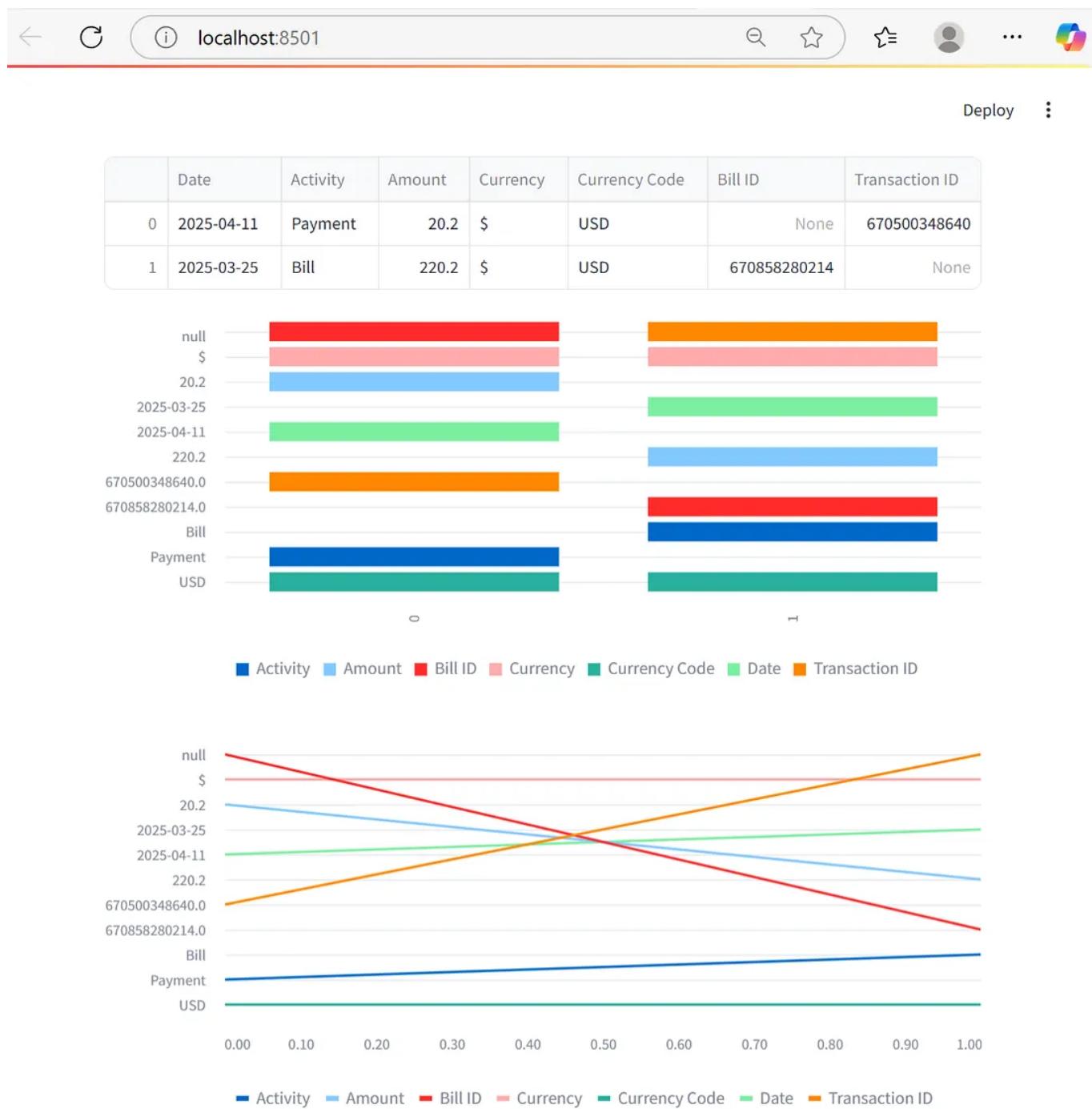
# Create a bar chart
st.bar_chart(data)
```

```
# Create a line chart  
st.line_chart(data)
```

## Deploy code: streamlit run practice.py

```
C:\Users\toimr\OneDrive\Documents\openai>streamlit run practice.py  
  
You can now view your Streamlit app in your browser.  
  
Local URL: http://localhost:8501  
Network URL: http://192.168.1.66:8501
```

## OUTPUT:



## Create Form and Submit:

Let's create a form having all possible types of input fields as shown below and display output post submission.

```
import streamlit as st

st.title("Comprehensive Streamlit Form")

with st.form("my_form"):
    st.header("User Information")

    # Text Input for provide name
    name = st.text_input("Name")

    # Text Area to provide showr bio
    bio = st.text_area("Short Bio")

    # Number Input for Age
    age = st.number_input("Age", min_value=0, max_value=120, step=1)

    # Date Input for DOB
    dob = st.date_input("Date of Birth")

    # Checkbox Newsletter subscription
    subscribe = st.checkbox("Subscribe to newsletter")

    # Radio Buttons
    gender = st.radio("Gender", options=["Male", "Female", "Other"])

    # Select Box (Dropdown)
    country = st.selectbox("Country", options=["USA", "India", "UK", "Other"])

    # Multi Select Hobbies
    hobbies = st.multiselect("Hobbies", options=["Reading", "Traveling", "Gaming"])

    # Slider
    satisfaction = st.slider("Satisfaction Level", 0, 10, 5)

    # File Uploader
    uploaded_file = st.file_uploader("Upload a Profile Picture", type=["png", "j

    # Color Picker
    favorite_color = st.color_picker("Pick your favorite color")

    # Submit Button
    submitted = st.form_submit_button("Submit")

if submitted:
    st.success("Form submitted successfully!")
    st.write("### Entered Information :")
    st.write(f"**Full Name**: {name}")
    st.write(f"**Bio**: {bio}")
    st.write(f"**Age**: {age}")
    st.write(f"**Date of Birth**: {dob}")
    st.write(f"**Contact Time**: {time}")
    st.write(f"**Subscribed**: {subscribe}")
    st.write(f"**Gender**: {gender}")
    st.write(f"**Country**: {country}")
    st.write(f"**Hobbies**: {' '.join(hobbies)}")
```

```
st.write(f"**Satisfaction**: {satisfaction}")
st.write(f"**Favorite Color**: {favorite_color}")
if uploaded_file:
    st.image(uploaded_file, caption="Uploaded Profile Picture", use_colu
```

## Deploy code: streamlit run practice.py

```
C:\Users\toimr\OneDrive\Documents\openai>streamlit run practice.py
You can now view your Streamlit app in your browser.
Local URL: http://localhost:8501
Network URL: http://192.168.1.66:8501
```

## OUTPUT:

# Comprehensive Streamlit Form

## User Information

Name

Imran

Short Bio

This is short Bio

Age

30

- +

Date of Birth

2025/05/14

Subscribe to newsletter

Gender

- Male
- Female
- Other

Country

USA

Hobbies

Traveling Gaming

Satisfaction Level



Upload a Profile Picture



Drag and drop file here  
Limit 200MB per file • PNG, JPG, JPEG

Browse files



image.png 1.5MB



Pick your favorite color



Submit

Information Post Form Submit:

Submit

Form submitted successfully!

### Entered Information :

Full Name: Imran

Bio: This is short Bio

Age: 30

Date of Birth: 2025-05-14

Subscribed: False

Gender: Male

Country: USA

Hobbies: Traveling, Gaming

Satisfaction: 5

Favorite Color: #0ff336

The `use_column_width` parameter has been deprecated and will be removed in a future release.  
Please utilize the `use_container_width` parameter instead.

I hope you found out this article interesting and informative. Please share it with your friends to spread the knowledge.

You can follow me for upcoming blogs [follow](#).

Thank you!

Streamlit

Streamlit App Deployment

Streamlit App

Streamlit Python



Written by Imran Khan

1.7K followers · 18 following

Follow

Tech Enthusiast

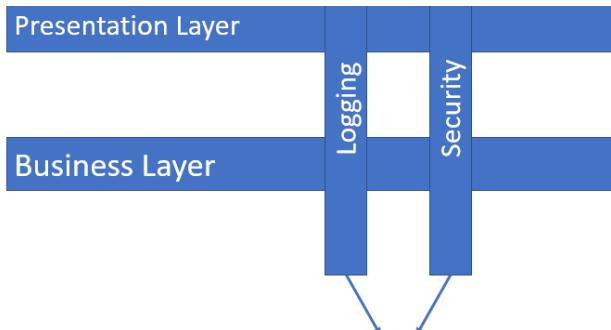
No responses yet



Jagannath Rao

What are your thoughts?

## More from Imran Khan



POST Servlet	i18n	Deploy AEM Code	Custom Workflow
Resource API	Component Creation	Clientlibs CSS & JS	Workflow Launcher
Node API	System User	Dynamic Participant Workflow	Use API
Filter	Experience Fragment	Multi Site Manager (MSM)	data-sly-template
OSGI Service	Content Fragment	Sling Model & Exporter	ACS Commons GenericList
Sling Job	R6 Annotation	Service User Mapping	Error Page Handling
Scheduler	Sling Jobs	Event Handler and Listener	TransportHandler
Style System			
<b>Advanced AEM Topics</b>			
GraphQL	UI Frontend Module	AEM Forms and Data Model Integration	ContextHub
Adaptive Forms	Adaptive Forms	AEM Vanity URL	AEM Offer
Site Theme	Externalizer	Sling Dynamic Include	Localized Generic List
Site Template	AEM React SPA	Forward Reverse Proxy	Dispatcher
Sitemap Creation	Email Custom Template	Link Checker and Transformer	
<b>AEM as a Cloud Service</b>			
AEM Forms	Setup AEM as Cloud Service	Rapid Development Environments RDEs	OSGI Secret and Environment variables

Imran Khan

### Spring Boot AOP with example

Aspect Oriented Programming (AOP) is one of the key feature of Spring framework. AOP...

Nov 15, 2022 260 2



...

Imran Khan

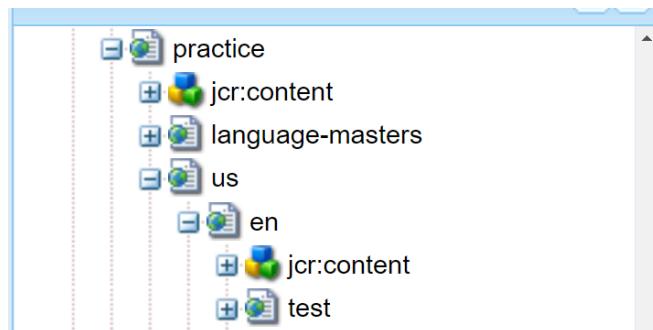
### Complete Guide to learn AEM and build a project from scratch

This blog is one stop shop which will help all of us learn AEM step-by-step from basics to...

Nov 1, 2023 101



...



Imran Khan

### AEM Sightly

Sightly which is also called as HTL(HTML Template Language) is a server-site templat...

Jan 22, 2023 73 4



...

Imran Khan

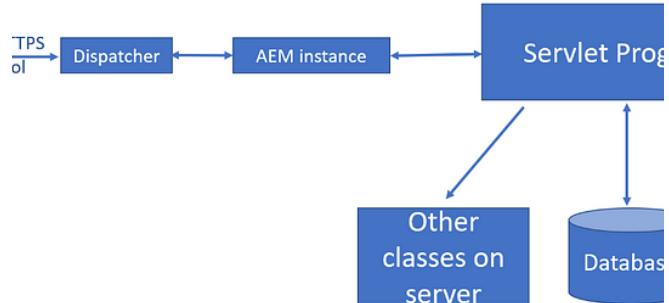
### AEM Sling Servlet

Servlet is a Java class which runs on a server side where application resides. This is a...

Mar 23, 2023 114 3

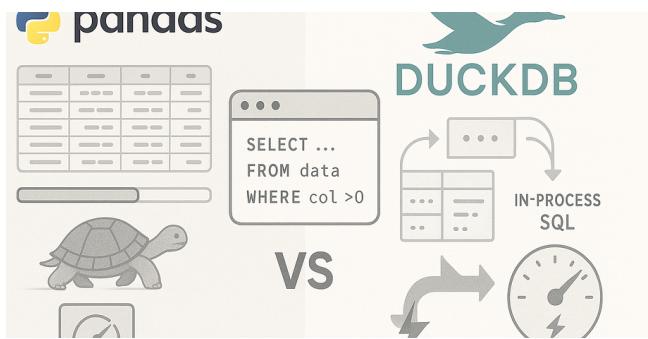


...



[See all from Imran Khan](#)

## Recommended from Medium



Nikulsinh Rajput

### Why DuckDB Replaced Pandas for All My Data Projects

Blazing-fast in-process SQL that scales without setup.

⭐ Aug 3 ⌘ 612 💬 18

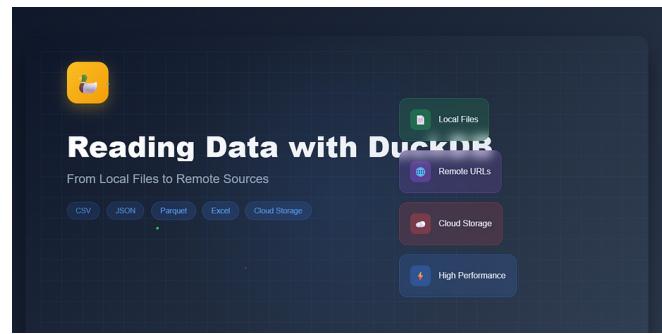


In AI & Analytics Diaries by Analyst Uttam

### 7 ChatGPT Prompts That I use Daily as a Data Analyst

As a data analyst, you've probably felt that some days are a juggling act: querying...

Aug 5 ⌘ 45 💬 3



Dr. Shouke Wei

### Complete Guide to Reading Data with DuckDB: From Local Files to...

Master Every Format, Every Source

⭐ Jul 26 ⌘ 67



In Top Python Libraries by Ajay Parmar

### 9 Unique Data Visualization Charts with Plotly.

Why Settle for Ordinary? 9 Charts That Make Your Data Look Extraordinary Because Your...

⭐ Aug 3 ⌘ 9

