



STREAMLIT





Czym jest Streamlit?

Open-source'owa biblioteka Python

Dla kogo jest przeznaczony?

Dla analityków danych i inżynierów uczenia maszynowego



Do czego służy?

Do budowania interaktywnych aplikacji webowych

Główne zalety

Kod = aplikacja

Nie wymaga znajomości
HTML, CSS czy JS

Współpracuje z
większością
bibliotek Python

Open-source





Ograniczenia



Ograniczona
kontrola nad UI

Brak możliwości budowy
dużych aplikacji

Bezstanowość

Niska wydajność



Jak działa Streamlit?

```
1 import streamlit as st
2
3 hobbies = st.multiselect("Select Your Hobbies:", ['Dancing', 'Reading', 'Sports'])
4 st.write("You selected", len(hobbies), "hobbies")
```

Select Your Hobbies:

Choose options

Dancing

Reading

Sports

Select Your Hobbies:

Reading ×

Dancing ×

You selected 2 hobbies

```
1 import streamlit as st
2
3 st.checkbox('Yes')
4 st.button('Click Me')
5 st.radio('Pick your gender', ['Male', 'Female'])
6 st.selectbox('Pick a fruit', ['Apple', 'Banana', 'Orange'])
7 st.multiselect('Choose a planet', ['Jupiter', 'Mars', 'Neptune'])
8 st.select_slider('Pick a mark', ['Bad', 'Good', 'Excellent'])
9 st.slider('Pick a number', 0, 50)
```

☐ Yes

Click Me

Pick your gender

☐ Male

☒ Female

Pick a fruit

Banana

Choose a planet

Mars ×

Jupiter ×

Pick a mark

Good

Bad

Excellent

Pick a number

0

0

50



Komponenty

Komunikaty z objaśnieniami

```
1 import streamlit as st
2
3 st.success("Success")
4 st.info("Information")
5 st.warning("Warning")
6 st.error("Error")
```

Success

Information

Warning

Error

Kółko ładowania (*spinner*)

```
1 import streamlit as st
2 import time
3
4 with st.spinner("Wait for it...", show_time=True):
5     time.sleep(5)
6 st.success("Done!")
7 st.button("Rerun")
```

Wait for it... (4.8 seconds)

Pasek postępu

```
1 import streamlit as st
2 import time
3
4 progress_text = "Operation in progress. Please wait."
5 my_bar = st.progress(0, text=progress_text)
6
7 for percent_complete in range(100):
8     time.sleep(0.01)
9     my_bar.progress(percent_complete + 1, text=progress_text)
10 time.sleep(1)
11 my_bar.empty()
12
13 st.button("Rerun")
```

Operation in progress. Please wait.

Rerun





Komponenty

Wykresy

```
1 import streamlit as st
2 import pandas as pd
3 from numpy.random import default_rng as rng
4
5 df = pd.DataFrame(rng(0).standard_normal((20,3)), columns = ["a", "b", "c"])
6 st.area_chart(df)
```



Widżety

```
1 import streamlit as st
2 import datetime
3
4 d = st.date_input("When's your birthday", datetime.date(2019, 7, 6))
5 st.write("Your birthday is:", d)
```

When's your birthday

2019/07/12

< July 2019 >

Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Przykłady zastosowania

Dashboards i aplikacje oparte na danych

1







Streamlit AI assistant


Ask a question...




 What is Streamlit?

 Help me understand session state

 How do I make an interactive chart?

 How do I customize my app?

 Deploying an app at work

 Legal disclaimer



what is LLM?



LLM stands for Large Language Model, which is an advanced AI model trained on vast amounts of text data to understand and generate human-like text. Popular examples include OpenAI's GPT models.