



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

Współpracuje z
większością
bibliotek Python

Nie wymaga znajomości
HTML, CSS czy JS

Open-source



X

Ograniczenia

X

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 x Dancing x

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 x Jupiter x

Pick a mark

Bad Good Excellent

Pick a number

0

0 50



Komponenty

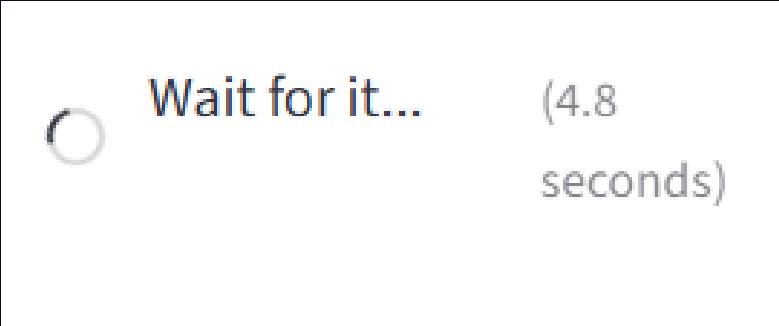
Komunikaty z objaśnieniami

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



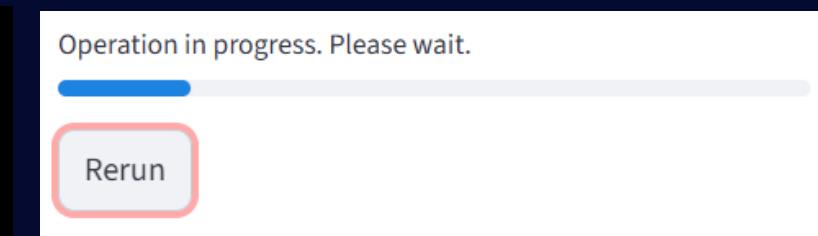
Kółko ładowania (spinner)

```
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")
```



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")
```





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)
```



Przykłady zastosowania

Dashboardy i aplikacje oparte na danych

1



Przykłady zastosowania

Czaty oparte na modelach językowych

2

The screenshot shows the Streamlit AI assistant interface. At the top, there's a logo consisting of a circle with several lines radiating from it. Below the logo, the title "Streamlit AI assistant" is displayed in a large, bold, dark font. Underneath the title is a search bar with the placeholder text "Ask a question...". To the right of the search bar is a blue arrow button pointing to the right. Below the search bar are five circular buttons, each containing a small icon and text: "What is Streamlit?", "Help me understand session state", "How do I make an interactive chart?", "How do I customize my app?", and "Deploying an app at work". At the bottom left, there's a link to "Legal disclaimer". A modal window is open in the foreground, containing a red button with a white question mark icon and the text "what is LLM?". Below this, an orange button with a white clipboard icon is followed by a detailed explanation: "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."

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.