

Build Web Apps in Python with Streamlit

Getting Started with Streamlit



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Course Overview



- **Getting started with Streamlit**
- **Building very simple web applications**
- **Building more web applications**
- **Extending Streamlit web applications**
- **Deploying Streamlit web applications**

Challenges of Building Web Applications

Different skillset

- **HTML, CSS, JavaScript**

Fast evolving JavaScript ecosystem

Another team

- **Communication**
- **Availability**

Options for Building Web Applications with Python

Flask

- Lightweight web framework
- Low out-of-the-box interactivity

Django

- Mature web framework
- Low out-of-the-box interactivity

Streamlit

- Rapid prototyping
- Focused on interactive data apps

Module Overview



- **Motivation**
- **Installation**
- **‘Hello world’ with Streamlit**
- **Quick look at some examples**



Meet Sophia!

**Leader of the Data Science team at
Globomantics**

Upcoming demo

- Python project is ready
- Business users want a UI
- Insufficient front-end skills

How can Sophia add a web-based UI?

Demo



- **Install Streamlit**
 - **Python 3.6 to 3.8**
 - **New virtual environment**

Demo



- **‘Hello world’ with Streamlit**
 - **Install PyCharm**
 - **Setup a new project**
 - **Create a web application**

Building Blocks of a Streamlit Web App

Text

Title, headers,
markdown

Data

Visualization, some
interactivity

Charts

Line, area, bar

Widgets

Checkboxes, buttons,
text input

Layout

Collapsible sidebar,
columns

Up Next:

Building Very Simple Web Applications
