

Introduction to Streamlit Using Python Course



This comprehensive short course is designed to introduce you to Streamlit, a powerful and user-friendly Python library for creating interactive, data-focused web applications. Streamlit is particularly beneficial for data analysts, scientists, machine learning engineers, and Python users who aspire to quickly and effortlessly build and share data-driven applications without the need for extensive web development skills. Throughout this course, you will gain hands-on experience and practical knowledge, enabling you to leverage Streamlit's capabilities to their fullest potential.

Intended audience

This course is ideal for data scientists, machine learning engineers, and Python programmers who want to enhance their skills in building interactive web applications. No prior web development experience is required.



Course duration

1 session, 8 hours total



Time

9am - 5pm



Format

Face-to-face or Online in real-time



Dates

Browse available course dates



It is assumed you have completed the Python Programming 1B course or have equivalent knowledge of Python and Pandas programming.



Upon completion

Every participant receives a University of Sydney certificate of completion.



Aims

The aim of this course is to enhance your skills in creating custom, interactive data applications using the Streamlit package in Python. By the end of the day, you will be able to effortlessly develop powerful data products that your clients will find highly valuable.



Outcomes

By the end of this course, you should be able to:

- understand the fundamentals of Streamlit and its applications
- install and set up Streamlit in a Python environment
- create interactive web applications using Streamlit
- store information in Streamlit Session States
- integrate Streamlit with popular Python libraries such as Pandas and Matplotlib
- deploy and share Streamlit applications.



Content

- Benefits of using Streamlit for data applications
- Installing Streamlit
- Basic Streamlit commands and structure
- Creating and displaying widgets
- Handling user inputs and interactions
- Displaying data and visualisations
- Storing information in Session States
- Best practices for deploying applications
- Sharing applications with others



Before the course

Please download and install Visual Studio Code (or your preferred Python IDE like PyCharm or Spyder) before class. A Python extension is available through the VS Code interface. No separate Python download is required.

Other required Python packages will be downloaded and installed during class.



Delivery style

This course is an interactive experience that includes lectures, individual exercises and discussion.

Materials

All course materials covered in the course are provided electronically.



Recommended reading

There is no prescribed text. However, participants may like to read the following texts prior to attending:

Hurwitz, J.S. and Kirsch, D. (2020) *Cloud Computing For Dummies*. 2nd edn. For Dummies. Wiley.

King, T.H., 2019. AWS: The Ultimate Guide From Beginners To Advanced For The Amazon Web Services (2020 Edition). 1st ed.



Organisational training and development

This course can be delivered as a private session for groups, and tailored to meet the needs of your business. Contact us to discuss our range of organisational training solutions.

Learn more



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