First Steps with Python

Report of Contributions

Welcome & Organization

Contribution ID: 1

Type: not specified

Welcome & Organization

Monday 15 April 2024 10:00 (15 minutes)

Setting up a Python Project

Contribution ID: 2

Type: not specified

Setting up a Python Project

Monday 15 April 2024 10:15 (15 minutes)

You learn how a basic project is set up and explore two approaches to Python programming: using the REPL and writing Python files.

Importing

Contribution ID: 3

Type: not specified

Importing

Monday 15 April 2024 11:15 (15 minutes)

Since projects often get distributed over multiple files or require code from other sources, we will investigate how to import code from other files or libraries.

Variables, Assignments and Data T ...

Contribution ID: 4

Type: not specified

Variables, Assignments and Data Types

Monday 15 April 2024 10:30 (45 minutes)

Get to know the basic constructs for storing and manipulating information in a program. Understand what data types are and how they influence how information is processed.

First Steps with P $\ldots \,$ / Report of Contributions

Conditionals

Contribution ID: 5

Type: not specified

Conditionals

Monday 15 April 2024 12:30 (45 minutes)

It is often necessary to check conditions and act accordingly. This section will cover expressing those conditions and how to control in which order they get checked and how to react to them.

While-Loops

Contribution ID: 6

Type: not specified

While-Loops

Monday 15 April 2024 13:15 (45 minutes)

Loops are a good choice when it comes to repeating actions. In this section, the "while"-loop will be introduced as a method of repeating code based on condition.

Recap from Day 1

Contribution ID: 7

Type: not specified

Recap from Day 1

Tuesday 16 April 2024 10:00 (15 minutes)

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Functions

Contribution ID: 8

Type: not specified

Functions

Tuesday 16 April 2024 10:15 (1 hour)

Splitting parts of programs off into self contained, reusable blocks is a good way to handle complexity and allow for parts of a program to also be used in other projects.

For-Loops

Contribution ID: 9

Type: not specified

For-Loops

Tuesday 16 April 2024 11:15 (15 minutes)

Introducing the second kind of loop, the "for"-loop is well suited to iterate over a set of data or repeat a set of instructions a given amount of times.

Recap from Day 2

Contribution ID: 10

Type: not specified

Recap from Day 2

Wednesday 17 April 2024 10:00 (15 minutes)

Tuples

Contribution ID: 11

Type: not specified

Tuples

Wednesday 17 April 2024 10:15 (30 minutes)

Tuples are a great way to bundle up multiple values. Learn how to employ them and take advantage of Python's automatic Packing/unpacking feature.

Lists

Contribution ID: 12

Type: not specified

Lists

Wednesday 17 April 2024 10:45 (30 minutes)

Another very useful data type is the List, a sorted collection of data. In this section we introduce some basic functionality and learn where to find more detailed information for this data type and many others.

Finalizing the Project

Contribution ID: 13

Type: not specified

Finalizing the Project

Wednesday 17 April 2024 11:15 (15 minutes)

We will put some finishing touches on our example project to make it ready for a first release. Further, possible future learning paths will be outlined.