

Module Checklist Programming with Python

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Video Overview

- ★ Introduction to Python
- ★ Install Python & Local Setup
- ★ Our first program
- ★ Python IDE vs simple file editor
- ★ Strings & Numbers
- **★** Variables
- **★** Functions
- ★ User Input
- ★ Conditionals (if / else) & Boolean Data Type
- ★ Error Handling with Try / Except
- ★ While Loops
- ★ Lists and For Loops
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- ★ Sets
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- ★ Demo Project: Countdown App
- ★ Packages, PyPi & pip
- ★ Demo Project: Automation with Python Working with Spreadsheets
- ★ Classes and Objects
- ★ Demo Project: API Requests



Git Project

https://gitlab.com/twn-devops-bootcamp/latest/1 3-programming-with-python

Check your progress... 1/5

Introduction to Python

Watched video

Install Python & Local Setup

- Watched video
- **☐** Install Python & PyCharm:
 - Python3 installed
 - PyCharm downloaded & setup

Useful Links:

- Python for different OS:
 - o https://www.python.org/downloads/
 - Installation Guide for Windows:
 https://docs.python.org/3/using/windows.html#installation-steps
- PyCharm Download: https://www.jetbrains.com/pycharm/download/

Our first program

- Watched video
- Demo executed

Python IDE vs simple File Editor

Watched video



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Strings and Numbers Watched video **Demo executed Variables** Watched video **Demo executed Functions** Watched video **Demo executed User Input** Watched video **Demo executed** Conditionals (if / else) & Boolean Data Type Watched video Demo executed - validate User Input to make our program more robust Error Handling with try / except

Watched video

Demo executed



Check your progress... 3/5

While Loops

- Watched video
- Demo executed

Lists and For Loops

- Watched video
- Demo executed

Comments

Watched video

Sets

- Watched video
- Demo executed

Built-In Functions

- Watched video
- Demo executed

Dictionaries

- Watched video
- Demo executed



Check your progress... 4/5

Modules

- Watched video
- Demo executed

Project: Countdown Application

- Watched video
- Program implemented
 - ☐ Get user Input: goal and deadline
 - Convert deadline string into a proper date type
 - ☐ Calculate how many days are left until the deadline
 - Print a proper message to the user including the entered goal
 - ☐ Calculate how many hours are left until the deadline

Exercise:

Write a program that accepts a user input of a goal and a deadline date.

And print back to the user, how much time they have remaining till that deadline.

Packages, PyPi & pip

- Watched video
- Demo executed



Check your progress... 5/5

Project: Automation with Python - Spreadsheet

- Watched video
- **□** Program implemented
 - Exercise 1 List companies with respective product count
 - Exercise 2 List companies with respective total inventory value
 - Exercise 3 List products with less than 10 in inventory
 - Exercise 4 Write to Spreadsheet and save into a new File

Classes and Objects

- Watched video
- Demo executed

Project: API Requests

- Watched video
- □ Program implemented API Request to list your GitLab projects

