



Using Python to Interact with the Operating System  
Google

Course Material

- Week 1
- Week 2
- Week 3
- Week 4
- Week 5
- Week 6
- Week 7

Grades

Notes

Discussion Forums

Messages

Resources

Course Info

Testing in Python

🕒 50 min of videos left   📖 40 min of readings left   📝 1 graded assessment left

In this module, you'll learn how to create tests in Python. We'll cover what testing is all about and dive into the differences between manual versus automated testing. Next, we'll explore what unit tests are intended to do and how to write them. Then, we'll learn about other test concepts like black box versus white box tests and how test-driven development can frame how you design and write your code. Finally, you'll learn about errors and exceptions, and how to combat them.

Learning Objectives

- Explain what testing is and the different types of testing available
- Describe the difference between black box and white box testing
- Explain test-driven development
- Apply a try-except construct to catch errors and exceptions

Hide Learning Objectives

Simple Tests

- 🕒 Intro to Module 5: Testing in Python  
Video • 1 min
- 🕒 What is testing?  
Video • 2 min
- 🕒 Manual Testing and Automated Testing  
Video • 3 min
- 📝 Practice Quiz: Simple Tests  
Practice Quiz • 5 questions

Unit Tests

- 🕒 Unit Tests  
Video • 3 min
- 🕒 Writing Unit Tests in Python  
Video • 5 min
- 🕒 Edge Cases  
Video • 3 min
- 🕒 Additional Test Cases  
Video • 4 min
- 📖 Unit Test Cheat-Sheet  
Reading • 10 min
- 📖 Help with Jupyter Notebooks  
Reading • 10 min
- 📅 Unit Tests: Practice Jupyter Notebook  
Lab • 1h

Other Test Concepts

- 🕒 Black Box vs. White Box  
Video • 3 min
- 🕒 Other Test Types  
Video • 4 min
- 🕒 Test-Driven Development  
Video • 2 min
- 📖 More About Tests  
Reading • 10 min
- 📝 Practice Quiz: Other Test Concepts  
Practice Quiz • 5 questions

Errors and Exceptions

- 🕒 The Try-Except Construct  
Video • 3 min
- 🕒 Raising Errors  
Video • 7 min
- 🕒 Testing for Expected Errors  
Video • 2 min
- 📖 Handling Errors Cheat-Sheet  
Reading • 10 min
- 📅 Errors & Exceptions: Practice Notebook  
Lab • 1h

Module Review

1 graded assessment left

- 🕒 Module 5 Wrap Up: Testing in Python  
Video • 1 min
- 📝 Qwiklabs Assessment: Implementing Unit Testing  
**Due, May 28, 11:59 PM +08** Graded App Item • 1h 30m • Grade: --
- 🗨 Discussion Prompt  
Discussion Prompt • 10 min