Développement

Web Development with Python and Django

Code your own web applications using Python and Django.

Path duration:
305 hours

Average duration of full-time study:
8 months

Certification OpenClassrooms
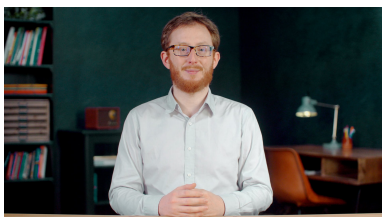
OPENCLASSROOMS

Project 1 - 80 hours

Develop a Software Program Using Python

The local chess club needs help. You are working as a freelancer, and they have asked you to write a new program to help them manage their events. Time to put your new skills in developing high-quality Python software to use!

Skills

- Use object-oriented programming to develop a Python program
- Write robust Python code using PEP 8
- Structure the code of a Python program using a design pattern
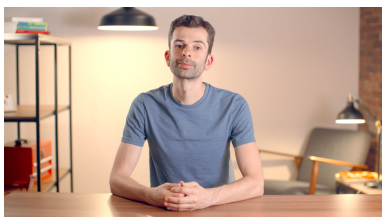
Associated courses

Learn Programming With Python

📶 Easy   🕐 12 hours

Are you a Python beginner? Take your basic coding skills to the next level with object-oriented programming. Practice using methods, classes, inheritance, and modules, and start coding your own applications!

Write Maintainable Python Code

📶 Easy   🕐 8 hours

Now that you've learned to program with Python, make your code clean, readable, easy to modify, and resistant to bugs by applying the PEP 8 style guide for Python, a few key design patterns (including MVC), and the SOLID principles.

Project 2 - 40 hours

Develop a User Interface for a Python Web Application

As a developer at a streaming company, you have been entrusted with a new project: code the user interface of a Flask web application in HTML, CSS, and JS. It's a great opportunity to gain experience using an API!

Skills

- Develop a user interface using HTML, CSS, and JS
- Interact with an API

Associated courses

Build Your First Web Pages With HTML and CSS

📶 Easy   🕐 10 hours

Learn to create your first web pages using HTML and CSS, the two most important languages on the web. No coding experience required!

Create Web Page Layouts With CSS

📶 Easy   🕐 10 hours

Go beyond basic HTML and CSS skills and learn how to create great layouts using CSS layout techniques!

Produce Maintainable CSS With Sass

▂▃▅ Medium ⏰ 15 hours

Learn to write clean, maintainable, and modular CSS code through the implementation of designed naming and file structures, such as BEM, and the use of Sass, a CSS precompiler.

Learn Programming With JavaScript

▂▃▅ Easy ⏰ 15 hours

Build a strong foundation in web development by learning and practicing JavaScript, one of the major programming languages on the web. You'll even create a simple application!

Build Your Web Projects With REST APIs

▂▃▅ Easy ⏰ 4 hours

Enhance your web projects with REST APIs by accessing data that can be integrated into your own applications. APIs will add a whole new dimension to your software!

Project 3 - 105 hours

Develop a Web Application Using Django

You've just been hired as lead Python developer at a new startup. Use the powerful Django framework to make their digital product a reality!

Skills

- Develop a web application using Django
- Use server-side rendering in Django

Associated courses

Create a Web Application With Django

📊 Medium   🕐 12 hours

Discover Django, one of the most popular Python web frameworks. Build an app using MVT architecture, the Django Admin, and your own custom-built CRUD interface.

Intermediate Django

📊 Medium   🕐 12 hours

Take your Django web applications to the next level with authentication, modularity, and advanced functionalities of models, forms, templates, and the Django ORM.

Develop Your Creativity

.ıl Easy   🕐 8 hours

Creativity is a key skill when problem-solving. Develop your convergent and divergent thinking by building a toolkit of practical exercises to help you innovate at work and in job applications.

Project 4 - 80 hours

Create a Secure RESTful API Using Django REST

Take your Django skills to the next level by building and documenting a RESTful API in compliance with OWASP and GDPR security standards.

Skills

- Create a RESTful API using Django REST
- Document an application
- Secure an API to comply with OWASP and GDPR standards

Associated courses

Secure Your Web Application With OWASP

📶 Medium   🕐 10 hours

To create a quality application, you must implement secure coding practices! Learn to apply the techniques of OWASP, an online community providing invaluable techniques and tools for reducing security risks in web development.

Write the Technical Documentation for Your Project

📶 Medium   🕐 6 hours

Produce clear and maintainable documentation for your project with naming conventions, README, API documentation tools, and a technical architecture document.