



SOFTWARE DEVELOPMENT

(Full-Stack Python)

S Y L L A B U S

Build your tomorrow today

Introduction

Typical Software Engineers, working in applications or system development first analyze the needs of the user. Then they design, construct, test, and maintain computer applications software to meet these needs. These Engineers use different programming languages, depending on the purpose of the program. This course focuses specifically on Full-Stack Software Development while using Python(Django) as the backend programming language. You will learn about powerful ways to develop web applications while storing and manipulating complex data.

Python is one of the top programming languages for web development that is becoming more popular and it is also used by data scientists in a wide range of applications. Companies worldwide are using Python to develop powerful web applications to gain a competitive edge.

Unlike any other Software Development training center, Torilo Academy will teach you the best practices of software engineering.

Course Introduction

1. How the internet works
2. Setting up your Integrated Development Environment(IDE)
3. Technologies to use

Dive into HTML

The main tool that will be used is Visual Studio Code

1. What is HTML?
2. The structure of an HTML document
3. Starting to fill the structure
4. Images & attributes
5. URLs, Links & iframing
6. Practice Exercise

Formatting with CSS

1. Getting started with CSS
2. Starting to make our webpage beautiful: text
3. Colors
4. Classes and ID's
5. The CSS box model
6. Building a simple layout
7. Polishing our blog post
8. Relative vs Absolute
9. Practice Exercise

Responsive Web Design with media queries & bootstrap 4

1. Bootstrap Installation
2. Responsive Navbar & nav colours
3. Containers, media breakpoint & grid in Bootstrap 4
4. Styling your pages with Icons

Killer Web Projects

1. The Steps in Analysing & Designing Web pages
2. Git
3. Project 1: Landing Page
4. Project 2: Facebook Clone

Modern Javascript

1. A brief introduction to Javascript
2. Variables & Data Types
3. Basic Operators
4. DOM Manipulations & events
5. If/else Statements
6. Boolean Logic
7. Arrays
8. Functions (Arrow functions)
9. Practice Exercise

Python

1. Introduction to programming with Python
2. Command Line basics
3. Installing Python
4. Variable Assignment
5. Introduction to Strings
6. Indexing & Slicing of strings
7. Python data structures & data types
(Lists, Sets, Tuples, Ranges, Dictionaries)
8. Conditionals (If, elif, else statements),
Loops (for/while loops)& Exceptions
9. List Comprehension
10. Generators with Python
11. Decorators
12. Method & Functions
13. Object-oriented programming

Django Web Framework

1. Django project setup
2. Setting up admin site
3. URLs and views
4. Static files
5. Template inheritance
6. Setting up your models
7. Practice Project 1
8. Practice Project 2

In the event of the termination of training after payment by the student, (whether before or during training session), no portion of any payment of any kind shall be owed or repayable by Torilo Academy.