Introduction to Django Training (5 Days)

OVERVIEW

The course assumes no prior knowledge of Django, but you must have experience with Python. If you do not, we can customize a private class for groups to cover the Python you need to know to work with Django.

COURSE BENEFITS

- Learn how to install Django in a virtual environment.
- Create your first Django website.
- Learn to use Git and GitHub to manage Django projects.
- Learn to work with Django models that map to the database.
- Learn how to create template pages using Django's template language.
- Learn to create your own custom template filters and tags.
- Learn to manage static files (e.g., CSS, JS, and images) in Django.
- Learn to create users using a custom user model.
- Learn to work with Django's built-in admin site.
- Learn to send emails with Django.
- Learn to process and validate forms.
- Deep-dive into Django models.
- Learn to handle user registration and authentication.

COURSE PREREQUISITES

Experience in the following *is required* for this Django class:
- Python

Experience in the following *would be useful* for this Django class:
- HTML
- CSS
- Bootstrap

COURSE OUTLINE

Setting Up Your Computer
      Demo and Exercise Files
      Recommended Software
      Running Python

Getting Started with Django
      Welcome to the Server-side
      Google Chrome DevTools: Network Tab
      Creating the Virtual Environment
      Exercise: Creating a Virtual Environment and Installing Django
      Exploring the Django Source Code
      Creating a New Project
      Exercise: Hello, Django!
      Settings
      Django Apps
      Creating a New App
      Exercise: First Django App
      Exercise: Working with Templates
      Exercise: Creating an About Us Page

Git, GitHub, and an App with a Model
      djangojokes.com
      Version Control Systems, Git, and GitHub
      Exercise: Setting Up VS Code, Git, and GitHub
      Exercise: Creating the Project
      Exercise: Creating a pages App
      Exercise: Creating the jokes App
      Models
      Exercise: Migrating
      Exercise: Creating a Model
      Types of Views
      Exercise: Creating a ListView
      Exercise: Creating a DetailView
      GET and POST Requests
      Exercise: Creating and Updating Jokes
      Deleting Objects
      Exercise: Deleting Jokes

Template Filters and Tags
      Exercise: Setting Up the Project

Core Field Arguments
Exercise: Building out the Application
Typed Choice Fields
Changing Widgets
Exercise: Improving the Job Application Form
Validators
Exercise: Crispy Forms
Exercise: Making the Joke Form Crispy

ModelForms

Models
Model Fields
Model Field Arguments
ModelForms
Exercise: Creating a ModelForm
Many-to-One Relationships
Exercise: Adding Joke Categories
Many-to-Many Relationships
Exercise: Adding Joke Tags
Exercise: Updating the Joke Templates
Exercise: Tying Job Applications to Models

User Registration

The User-Registration Process
Exercise: Getting Started with django-allauth
django-allauth Templates
Exercise: Making the Authentication Pages Crispy
Exercise: Updating the _base.html Template
Email Templates
Exercise: Custom User Registration
Exercise: Creating a My Account Page
Exercise: Associating Users with Jokes
Mixins
Exercise: Restricting Joke Creating and Updating