

## Django

### INTRODUCTION THE PYTHON ENVIRONMENT

- ✓ Starting Python
- ✓ Using the interpreter
- ✓ Running a Python script
- ✓ Python scripts on Unix/Windows
- ✓ Editors and IDEs

### Getting Started

- ✓ Using variables
- ✓ Built in functions
- ✓ Strings
- ✓ Numbers
- ✓ Converting among types
- ✓ Writing to the screen
- ✓ Command line parameters

### Flow Control

- ✓ About flow control
- ✓ White space
- ✓ Conditional expressions
- ✓ Relational and Boolean operators
- ✓ While loops
- ✓ Alternate loop exits

### Lists and Tuples

- ✓ About sequences
- ✓ Lists and list methods

### Tuples

- ✓ Indexing and slicing
- ✓ Iterating through a sequence
- ✓ Sequence functions, keywords, and operators
- ✓ List comprehensions
- ✓ Nested sequences

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### Our Courses

Java Full Stack, Dotnet Full Stack, Python Full Stack, Data Science (AI & ML), Front End – Angular, Front End – React, Testing, Tools – QA, Digital Marketing, Tally, MS Office, C & DS, Java, Advanced Java, Azure Devops, UI Technologies

## Working with Files

- ✓ File overview
- ✓ The with statement
- ✓ Opening a text file
- ✓ Reading a text file
- ✓ Writing to a text file
- ✓ Raw (binary) data

## Dictionaries and Sets

- ✓ About dictionaries
- ✓ Creating dictionaries
- ✓ Iterating through a dictionary
- ✓ About sets
- ✓ Creating sets
- ✓ Working with sets

## Functions

- ✓ About sequences
- ✓ Function parameters
- ✓ Global variables
- ✓ Global scope
- ✓ Returning values
- ✓ Sorting data

## Errors and Exception Handling

- ✓ Syntax errors
- ✓ Exceptions
- ✓ Using try/catch/else/finally
- ✓ Handling multiple exceptions
- ✓ Ignoring exceptions

## Using Modules

- ✓ The import statement
- ✓ Module search path
- ✓ Zipped libraries
- ✓ Creating Modules
- ✓ Function and Module aliases

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## Classes

- ✓ About o-o programming
- ✓ Defining classes
- ✓ Constructors
- ✓ Instance methods and data
- ✓ Class/static methods and data
- ✓ Inheritance

## Django Architecture

- ✓ Sites and apps
- ✓ Shared configuration
- ✓ Minimal Django layout
- ✓ Builtin flexibility

## Configuring a Project

- ✓ Executing manage.py
- ✓ Starting the project
- ✓ Database setup
- ✓ The development server

## Adding an Application

- ✓ Generate the application files
- ✓ Defining models
- ✓ Related objects
- ✓ SQL Migration
- ✓ App configuration
- ✓ Accessing models

## Login for Nothing and Admin for free

- ✓ Setting up the admin user
- ✓ Running the admin site
- ✓ Tweaking the admin interface
- ✓ Changing the admin index page

## Basic Views

- ✓ What is a view
- ✓ HttpResponse
- ✓ URL route configuration
- ✓ Shortcut: `get_object_or_404()`

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## Basic Views

- ✓ About templates
- ✓ Django template syntax
- ✓ Static files
- ✓ Loading templates
- ✓ The url tag
- ✓ Shortcut: `template.render()`

## Querying the Models

- ✓ QuerySets
- ✓ Field lookups
- ✓ Chaining filters
- ✓ Slicing QuerySets
- ✓ Related fields
- ✓ Q objects

## Working with Templates

- ✓ Variable lookups
- ✓ Comments
- ✓ Inheritance
- ✓ Filters
- ✓ Escaping HTML
- ✓ Custom filters

## Forms

- ✓ Forms overview
- ✓ GET and POST
- ✓ The Form class
- ✓ Processing the form
- ✓ Widgets
- ✓ Validation
- ✓ Forms in templates
- ✓ Beyond the basics

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