

This course offer Django framework ( MTV ) training with hands on session using Eclipse+Pydev Environment.

### Prerequisite

Advance Python Skills, Object Oriented Programming in Python.

### Set up Requirements

Computer with the following software

Tool :Sublime Text Editor +Eclipse + Pydev

Operating System: Ubuntu16.x or MacOS or Windows7/ 8/10.

Python 2.7.12 or Anaconda Python 2.7.12 ( latest version )

Django 1.10.x

MySQL Server5.6.x

Connector

<https://pypi.python.org/pypi/MySQL-python/1.2.5>

### Day Wise Break Up

Day	Module	Topics
Day 1	Module 1	<b>Review of Object Oriented Programming using Python</b> Introduction to Django Django Philosophy Django MTV Framework Django Installation Django Command Line Interface Django Administration Django Application Development Django Best Practices
	Module 2	Generating Simple Django Views Static and Dynamic View HttpResponse, Request, render_to_response
	Module 3	Python Regular Expression Concepts Configuring URLconf's URL Practice using Regular Expression

	Module 4	<b>Django Templates/Advanced Template Usage</b> <ul style="list-style-type: none"><li>■ About Templates</li><li>■ Template Fundamentals</li><li>■ Creating Template Objects</li><li>■ Loading Template Files</li><li>■ Filling in Template Content (Context Objects)</li><li>■ Template Filters</li><li>■ Template Tags</li><li>■ More on For Loops</li><li>■ Template Inheritance</li><li>■ Easy Rendering of Templates</li></ul>
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Day 2	Module 5	<ul style="list-style-type: none"> <li>▪ <b>Database Models with Django</b></li> <li>▪ Database abstraction (Object Relational Mapper)</li> <li>▪ Working with an ORM on the command line</li> <li>▪ Model validation</li> <li>▪ Using Django's admin</li> <li>▪ About Database Models</li> <li>▪ Integration with MySQL Server 5.6</li> <li>▪ Configuring Django for Database Access</li> <li>▪ Understanding Django Apps</li> <li>▪ About Django Models</li> <li>▪ Defining Django Models</li> <li>▪ Understanding Model Fields &amp; Options</li> <li>▪ Table Naming Conventions</li> <li>▪ Creating A Django Model</li> <li>▪ Adding the App to Your Project</li> <li>▪ Validating the App</li> <li>▪ Generating &amp; Reviewing the SQL</li> <li>▪ Adding Data to the Model</li> <li>▪ Primary Keys and the Model</li> <li>▪ Simple Data Retrieval Using a Model</li> <li>▪ Understanding QuerySets</li> <li>▪ Applying Filters</li> <li>▪ Specifying Field Lookups</li> <li>▪ Lookup Types</li> <li>▪ Slicing QuerySets</li> <li>▪ Specifying Ordering in QuerySets</li> <li>▪ Common QuerySet Methods</li> <li>▪ Deleting Records</li> <li>▪ Managing Related Records</li> <li>▪ Retrieving Related Records</li> <li>▪ Using Q Objects</li> <li>▪ Creating Forms from Models</li> <li>▪ Case Study</li> </ul>
Day 3	Module 6	Model Forms
	Module 7	Forms, Contact Forms and Templates Integration
	Module 8	Email Forms, SMTP Configuration Case Study

Day 4	Module 9	Using the Django Admin Interface
	Module 10	Access Control with Sessions and Users
	Module 11	Generic Views/Class-based views
	Module 12	Restframework Case Study Serialisation
Day 5	Module 13	<b>Advance Django Concepts</b> <ul style="list-style-type: none"> <li>▪ Export and import of data (via JSON)</li> <li>▪ How to handle static files in Django</li> <li>▪ Different debugging techniques</li> <li>▪ Logging File Create and Formats</li> <li>▪ Decorators</li> <li>▪ Pagination</li> <li>▪ Authentication</li> <li>▪ Middleware</li> <li>▪ Write your own middleware</li> <li>▪ Django Project Deployments</li> </ul>
	Module 14	Summary and Conclusion