

Course Title: Django (High Level Web framework)

Duration: 5 days

This course offer Django framework (MTV) training with hands on session using Aptana Studio 3.2.

Prerequisite

Advance Python Skills

Set up Requirements

Computer with the following software

Tool :Aptana Studio 3.2

Operating System: Red Hat Linux / Window XP/Vista/7

Active Python 2.7.3

Django 1.4.8

Day Wise Break Up

Day	Module	Topics
Day 1	Module 1	Introduction to Django
	Module 2	Generating Simple Django Views
Day 2	Module 3	Configuring URLconf's
	Module 4	Django Templates
Day 3	Module 5	Forms
	Module 6	Database Models with Django
Day 4	Module 7	Using the Django Admin Interface
	Module 8	Access Control with Sessions and Users
Day 5	Module 9	Generic Views
	Module 10	Deploying Django Applications
	Module 11	Django Case Studies

Course Outline

Module 1: Introduction to Django

- Introduction
- About Django
- Django Components
- Installing & Configuring Django Components
- Django Pre-Requisites

- Downloading & Installing Django
- Choosing a Database
- Creating a New Project

Module 2: Generating Simple Django Views

- Generating Simple Django Views
- About View Functions
- Using Django's HttpResponse Class
- Understanding HttpRequest Objects
- Using QueryDict Objects

Module 3: Configuring URLconf's

- Configuring URLconf's
- About URLconf
- Regular Expressions
- Expression Examples
- Simple URLConf Examples
- Using Multiple URLConf's
- Passing URL Arguments

Module 4: Django Templates

- About Templates
- Template Fundamentals
- Creating Template Objects
- Loading Template Files
- Filling in Template Content (Context Objects)
- Template Filters
- Template Tags
- More on For Loops
- Template Inheritance
- Easy Rendering of Templates
- RequestContext Processors
- Global Context Processors

Module 5: Forms

- Getting Data From the Request Object
- A Simple Form-Handling Example

- Making a Contact Form
- Tying Form Objects Into Views

Module 6: Database Models with Django

- About Database Models
- Configuring Django for Database Access
- Understanding Django Apps
- About Django Models
- Defining Django Models
- Understanding Model Fields & Options
- Table Naming Conventions
- Creating A Django Model
- Adding the App to Your Project
- Validating the App
- Generating & Reviewing the SQL
- Adding Data to the Model
- Primary Keys and the Model
- Simple Data Retrieval Using a Model
- Understanding QuerySets
- Applying Filters
- Specifying Field Lookups
- Lookup Types
- Slicing QuerySets
- Specifying Ordering in QuerySets
- Common QuerySet Methods
- Deleting Records
- Managing Related Records
- Retrieving Related Records
- Using Q Objects
- Creating Forms from Models

Module 7: Using the Django Admin Interface

- Using the Django Admin Interface
- Enabling the Admin Interface
- Creating an Admin User

Module 8: Access Control with Sessions and Users

- Access Control with Sessions and Users
- Cookies & Django
- The Django Session Framework
- Sessions in Views
- Session Tuning
- Installing Django User Authentication
- Using Authentication in Views
- Login and Logout
- Building your Own Login/Logout Views
- Authentication Decorators
- Adding & Deactivating Users
- Asynchronous Messaging
- Managing Permissions

Module 9: Generic Views

- Simple Generic Views
- Using Generic Redirects
- Other Generic Views
- Create/Update/Delete Generic views

Module 10: Deploying Django Applications

- Deploying Django Applications

Module 11: Django Case Studies

- Django Case Studies.