

# Python Django Deployment 2023

Prepared by *S Faisal Amin*



## Objective

Learn Python and build & deploy a real estate application using the Django framework & PostgreSQL

Serial	Topic	Remarks
1	<b>Course Introduction</b>	<ul style="list-style-type: none"><li>• Welcome to the course</li></ul>
2	<b>Getting Setup</b>	<ul style="list-style-type: none"><li>• Python 3 Mac Install</li><li>• Python 3 Windows Install</li><li>• VSCode &amp; Python Sandbox Setup</li></ul>
3	<b>Python Language Fundamentals</b>	<ul style="list-style-type: none"><li>• Variables &amp; Data Types</li><li>• Strings &amp; Formatting</li><li>• Lists</li><li>• Tuples &amp; Sets</li><li>• Dictionaries</li><li>• Functions</li><li>• Conditionals</li><li>• Loops</li><li>• Modules</li><li>• Classes</li></ul>

		<ul style="list-style-type: none"> <li>• Files</li> <li>• Working With JSON</li> </ul>
4	<b>Project spaces and getting started</b>	
		<ul style="list-style-type: none"> <li>• Project resources &amp; requirements</li> <li>• A Look at The Bootstrap Theme</li> <li>• Virtual Environment Setup</li> <li>• Django Install &amp; Project Setup</li> <li>• Exploring The Initial Files &amp; Running the Server</li> </ul>
5		
		<ul style="list-style-type: none"> <li>• Creating The Pages App</li> <li>• Pages Templates &amp; Base Layout</li> <li>• Static Files &amp; Paths</li> <li>• Bootstrap Layout</li> </ul>
6	<b>Models, Migrations &amp; Admin</b>	
		<ul style="list-style-type: none"> <li>• Install Postgres &amp; PgAdmin</li> <li>• Django Postgres Setup &amp; Migrate</li> <li>• Planning Our Schemas</li> <li>• Create Listing Model</li> <li>• Realtor Model &amp; Run Migrations</li> <li>• Create Superuser &amp; Register Models with Admin</li> <li>• Media Folder &amp; Adding Data</li> <li>• Admin Logo &amp; CSS</li> </ul>

		<ul style="list-style-type: none"> <li>• Customize Admin Display Data</li> </ul>
7	<b>View Methods, Display &amp; Search</b>	
		<ul style="list-style-type: none"> <li>• Pull Data from Listings Model</li> <li>• Pagination, Order &amp; Filter</li> <li>• Home &amp; About Page Dynamic Content</li> <li>• Single Listing Page</li> <li>• Search Form Choices</li> <li>• Search Form Filtering</li> <li>• Preserving Form Input</li> </ul>
8	<b>Accounts &amp; Authentication</b>	
		<ul style="list-style-type: none"> <li>• Accounts App &amp; URLs</li> <li>• Register &amp; Login Templates</li> <li>• Message Alerts</li> <li>• User Registration</li> <li>• User Login</li> <li>• Logout &amp; Navbar Auth Links</li> <li>• Dynamic Page Titles</li> </ul>
9	<b>Contact requires</b>	
		<ul style="list-style-type: none"> <li>• Contacts App &amp; Model</li> <li>• Contacts Admin Customization</li> <li>• Contact Form Prep</li> <li>• Contact Form Submission</li> <li>• Inquiry Check &amp; Send Email</li> <li>• Dashboard Functionality</li> </ul>

10	Django Deployment	
		<ul style="list-style-type: none"><li>• Pushing To Github</li><li>• Droplet Setup &amp; SSH Keys</li><li>• Server Security</li><li>• Software &amp; Database Setup</li><li>• Virtual Env &amp; File Pull</li><li>• Local Settings File</li><li>• Server Migrations &amp; Data</li><li>• Gunicorn Setup &amp; Config</li><li>• Nginx Setup</li><li>• Adding A Domain</li></ul>

**What you'll learn:**

- Learn Python and its core fundamental syntax
- Learn about apps, templates, models & migrations, admin customization & more
- Build a real estate application using the Django framework & Postgres
- Build virtual environments and deploy using Gunicorn and Nginx

----- The End -----