

# Web Development with Python خطة معسكر

الأسبوع	الموضوع	العناوين الفرعية
1	<ul style="list-style-type: none"><li>Python 101</li></ul>	<ul style="list-style-type: none"><li>CLI</li><li>Git/Github</li><li>Python Intro</li><li>IDE setup</li><li>Variables</li><li>Type hinting</li><li>Data types</li><li>Data types casting</li><li>Flow control</li><li>IF conditionals</li><li>For Loop</li><li>While Loop</li><li>Range</li><li>Comparison operators</li><li>Logical operators</li></ul>
2	<ul style="list-style-type: none"><li>Python 102</li></ul>	<ul style="list-style-type: none"><li>functions</li><li>Functions with params</li><li>Functions with Return</li><li>Namespace scope</li><li>LIST</li><li>TUPLE</li><li>DICTIONARY</li><li>SET</li><li>Modules &amp; Packages</li><li>File / Directory Operations</li><li>Recursion &amp; Anonymous Functions</li><li>Exceptions &amp; Exceptions Handling</li><li>Decorators</li><li>Object Oriented Programming</li><li>Virtual Environments &amp; PIP</li></ul>
3	UNIT-1 PROJECT	<ul style="list-style-type: none"><li>Students work on a project individually (an interactive CLI program) to revise and implement what they learned in Unit-1.</li></ul>
4	<ul style="list-style-type: none"><li>Internet &amp; world wide web introduction</li></ul>	<ul style="list-style-type: none"><li>How the internet works</li><li>Using HTML to build Web Pages</li><li>Using CSS to style interface</li></ul>

<ul style="list-style-type: none"> <li>Using CSS libraries.</li> <li>CSS Animation.</li> <li>Adding media to a web page.</li> </ul>		
<ul style="list-style-type: none"> <li>What is Django</li> <li>Setting up a new project</li> <li>Running a server with the right settings</li> <li>Using views.</li> <li>Using url mappings.</li> <li>creating templates.</li> <li>Passing data from view to templates.</li> <li>Using conditionals , loops, variables inside a template.</li> <li>Rendering a template</li> <li>Using best practices when dealing with templates.</li> </ul>	<ul style="list-style-type: none"> <li>Django Introduction</li> </ul>	5
<ul style="list-style-type: none"> <li>Students work on a project individually to revise and implement what they learned in Unit-2. Expected a functional website.</li> </ul>	UNIT-2 PROJECT	6
<ul style="list-style-type: none"> <li>Learn about RDBMS</li> <li>What is an ORM</li> <li>Using Django Models</li> <li>Using migrations</li> <li>CRUD operations on Model</li> <li>Filtering results</li> <li>Limiting and ordering results</li> <li>Exploring different types of fields for different purposes</li> </ul>	<ul style="list-style-type: none"> <li>Django ORM</li> </ul>	7
<ul style="list-style-type: none"> <li>Students work on a project individually to revise and implement what they learned in Unit-3.</li> </ul>	UNIT-3 PROJECT	8
<ul style="list-style-type: none"> <li>Using the Django User Model</li> <li>Authenticating users</li> <li>Logging in Users</li> <li>Using the user object in views &amp; templates</li> <li>Giving permissions to users.</li> <li>Checking for permission to users.</li> <li>Limiting functionality or some pages to those users with permissions.</li> <li>Django Admin panel.</li> <li>Adding models to the Admin panel.</li> </ul>	<ul style="list-style-type: none"> <li>Django Admin, Authentication &amp; Authorization</li> </ul>	9

<ul style="list-style-type: none"> <li>Customizing Admin panel.</li> </ul>		
<ul style="list-style-type: none"> <li>Students work on a project individually to revise and implement what they learned in Unit-4.</li> </ul>	UNIT-4 PROJECT	10
Students design, implement, and work in groups to create the final project of the bootcamp.	CAPSTONE	11
Students design, implement, and work in groups to create the final project of the bootcamp.	CAPSTONE	12