

Full Stack Web Development Using Python

HTML5 and CSS3

1. Introduction to CSS3

- Brief Description
- Writing CSS
- Browser-specific Prefixes
- Adding Comments to a CSS

2. Basic Selectors

- Understanding Selectors
- The Document Object Model (DOM)
- Using DOCTYPE
- Types of Selectors
- Grouping Selectors
- Styling Links
- Playing with Cursor

3. Working with Sizes, Colors and Files

- Sizes and Measuring Units
- Exploring Colors
- Background Images

4. Styling Text

- Working with Fonts
- Dealing with Line Spacing
- Changing the Text Color
- Text Formatting
- Adding Text Shadows

5. Web Fonts

- Desktop Fonts vs. Web Fonts
- Adding Web Fonts to Sites
- Font Formats and the Supporting Browsers
- Embedding Web Fonts
- 6. Background, Borders and Shadows
 - CSS Background
 - Adding Multiple Images to the Background
 - Defining Borders

- Additional Border Properties
- Using Border Images
- Adding Drop Shadows
- Outline Styling

6. Gradients without Images

- Understanding Gradients
- Creating Linear Gradients
- Creating Radial Gradients
- Repeating Gradients
- Using Multiple Gradients

7. Advanced Selectors

- Why Advanced Selectors
- First, Last and Only Child Instances
- Styling Selectors Based on Positions
- Styling Selectors Based on Relationships
- Styling Selectors Based on States
- Negative Selectors
- Other Pseudo Classes

8. Lists and Navigation Menus

- Working with Lists
- Navigation Menus

9. Exploring Generated Content

- What is Generated Content
- Inserting the Generated Content
- Working with Counters
- Using before and after as Pseudo Classes

10. Transforms and Transitions

- Transforms in CSS3
- CSS3 Transitions
- Adding Transformation to the Transition

11. Animating Elements with Keyframes

- Animation vs. Transitions
- Creating Animations Using Keyframes
- Setting the Animation Direction
- Setting the Speed Curve of Animation

12. Styling Tables

- Table Structure
- Grouping Table Rows
- Table Layout Interpretation by Browsers
- Styling Tables in CSS

13.Elements Positioning

- Understanding the Elements Positioning
- Positioning Types
- Positioning Elements
- Creating Tooltips
- Drop Down Menus
- Masking an Absolutely Positioned Element

14. Working with Layouts

- Introduction to CSS Box Model
- Setting Element Dimensions
- Paddings and Margins
- Changing Layout with display
- Controlling Visibility
- Floating Elements
- Using Multiple Classes

15.Multi-Column Layouts with CSS3

- The Multi-Column Layout
- Multi-Column Properties
- Dealing with Column Breaks

16.Dealing with Cross Browser Layouts

- Creating Columnar Layouts using float
- Introducing Flexbox

17.Media Queries

- Understanding Media Queries
- Specifying Media Queries
- Setting Viewport
- Handling Images with Media Queries

18.Print CSS3

- Introduction
- Media Types
- The media Rules
- Defining Page Margins
- Specifying Page Breaks

BOOTSTRAP FRAMEWORK

19. Introduction to Bootstrap

- Introduction
- Bootstrap File Structure
- Default Grid System
- Fluid Grid System
- Responsive Design

20. Bootstrap CSS

- Typography
- Tables
- Forms
- Button
- Images
- Icons

21. Bootstrap Layout Components

- Dropdown Menus
- Button Groups
- Button with Dropdowns
- Navigation Elements
- Navbar
- Breadcrumbs
- Pagination
- Labels
- Badges
- Typographic Elements
- Thumbnails
- Alerts
- Progress Bars
- Media Object

22. Bootstrap JavaScript Plugins

- Model
- Dropdown
- Scrollspy
- Toggleable Tabs
- Tooltips
- Popover
- Alerts
- Buttons
- Collapse Bootstrap Framework
- Carousel
- Typeahead

23. Using Bootstrap

- Customizing Bootstrap
- Built with Bootstrap

JAVASCRIPT

24. Introduction to JavaScript

- Introduction to web development and JavaScript
- How to create a JavaScript application
- How to test and debug a JavaScript application
- XHTML
- CSS

25. JavaScript Essentials

- How to get input and displays output
- How to work with numbers, strings, dates
- How to code control statements
- How to create and use array
- How to create and use function
- How to create and use objects
- How to use regular expressions, handle exceptions, and validate data

26. DOM Scripting

- Basic DOM scripting
- Advanced event handling

- Advanced DOM manipulation
- How to script CSS
- How to script tables and forms
- Animation with DOM scripting IV Other JavaScript Skills
- How to control the web browser
- How to use JavaScript libraries

PYTHON AND DJANGO

27. Getting Started with Python

- Introduction
- Python Intro
- Environment Setup

28. Learning the Basics

- Syntax
- Variables
- Numbers
- Strings
- Operators
- Iterators

29. How to work Lists and Dictionaries

- Lists
- Dictionaries

30. Decision Making and Iterations

- If, if-else
- For Loop
- While Loop
- Do-while loop

31. How to create and functions, Arrays and Lambdas

- Working with functions
- Lambda
- Arrays

32. How to use regular expressions, handle exceptions

- How to use regular expressions
- Errors and exceptions

33. Object Oriented Python

- Python Classes
- Creating Objects
- Inheritance
- Multiple Inheritance

34. File Handling

- Python File Handling
- Python Read Files
- Python Write/Create Files

35. Django Python

- Installing Django
- Creating a Project
- Creating the First App

36. Creating the First App

- Create and run the App
- URL mapping
- Adding Templates

37. Django models

- Understanding models
- Creating Django models
- Populating scripts

38. Learning the Architecture

- MVT Architecture
- Views
- Models
- Templates

39. Working with Database

- Setting up Database
- Database API
- Connecting to Database
- Create Database
- Create Table
- CRUD Operations

40.Forms in Django

- Django Forms
- Adding Forms to Templates
- Model Forms
- Form Validation

41.More on Forms

- Django Passwords
- Registration
- Login

42.Web Service

- Rest APIs

43.Deployment

- Introduction to Django Deployment
- Setting up GitHub