



Advance Python Full Stack Web Development

Course Highlights:

- ✓ HTML
- ✓ CSS
- ✓ BOOTSTRAP
- ✓ JAVASCRIPT
- ✓ TYPESCRIPT
- ✓ REACTJS
- ✓ PYTHON
- ✓ DJANGO
- ✓ POSTGRESQL DATABASE
- ✓ SQLITE DATABASE
- ✓ PROJECT

Learning path:

Frontend:

- HTML:
 - Daily / Topic wise task
 - Project assignment after completion of subject
- CSS
 - Daily / Topic wise task
 - Project assignment after completion of subject
- BOOTSTRAP
 - Daily / Topic wise task
 - Project assignment after completion of subject
- JAVASCRIPT
 - Daily / Topic wise task
 - Project assignment after completion of subject
- TYPESCRIPT
 - Daily / Topic wise task
- REACTJS
 - Daily / Topic wise task
 - Project assignment after completion of subject

Backend:

- PYTHON
 - Daily / Topic wise task
 - Project assignment after completion of subject
- SQL DATABASE
- DJANGO+POSTGRESQL DATABASE
- DJANGO+SQLITE DATABASE
 - Daily / Topic wise task
 - Project assignment after completion of subject



DETAILED SYLLABUS:

HTML

1. Introduction To Website Designing
2. What is web
3. Static webpage vs dynamic page
4. Front end vs backend
5. Types of File
6. What is HTML
7. History of HTML
8. Element
9. Tags
10. Attribute
11. Structure of HTML
12. Headings
13. Paragraph
14. Image
15. Break Tag
16. Line Tag
17. Property and value
18. Hyperlink
19. Table
20. list
21. order list
22. un-order list
23. definition list
24. pre vs paragraph tag
25. Form
26. Form Validation
27. Audio
28. Video
29. Marquee
30. Text (Bold, Italic, Underline etc.)
31. Background color
32. Iframe
33. Project assignment

CSS

1. Introduction to CSS
2. Types of CSS
3. Inline CSS
4. Internal CSS
5. External CSS
6. Selector
7. Types of Selector
8. Class
9. Id
10. Group
11. Hover effect



12. text
13. Margin
14. Padding
15. Float
16. Border
17. Border radius
18. circle
19. Transform
20. Transition
21. Position
22. Overflow
23. Gradient
24. Background Image
25. Animation
26. Responsive
27. Media Query
28. Box shadow
29. Text shadow
30. Project assignment

BOOTSTRAP

1. Introduction to Bootstrap
2. Grid Model
3. Grid Layout
4. Responsive Webpage
5. Gutter
6. Bootstrap classes
7. Bootstrap Structure (Container , Rows and column)
8. CDN vs NPM vs CSS & JS File
9. Creating webpage using Bootstrap Grid model
10. Text
11. Image
12. menu
13. Dropdown
14. Carousel
15. Cards
16. Collapse
17. Modal
18. Alert
19. Table
20. Form
21. ID
22. Bootstrap Components
23. Project -1 assignment
24. Project -2 assignment
25. Project -3 assignment



JavaScript

1. Introduction to JavaScript
2. Data vs Information
3. Tokens
4. Datatype
5. Keywords
6. Identifier
7. Variable
8. Constant
9. Script Tag
10. JavaScript structure
11. Document. Write
12. Prompt
13. Alert
14. Confirm
15. Operators
16. Arithmetic operator
17. Assignment operator
18. Comparison operator
19. Logical operator
20. Date
21. Time
22. Control Flow Statement
23. Conditional statement
24. Loop
25. Function
26. Parameter and Arguments
27. Events
28. On click
29. On Mouse over
30. On Mouse out
31. On submit
32. On select
33. On change
34. On blur
35. On focus
36. On load
37. On key up and on key down
38. Hyperlink
39. Eval
40. Project assignment



Typescript

1. Introduction To Typescript
2. How typescript work?
3. Benefits of TS
4. Top features of TS
5. Typescript development over JavaScript
6. History of TS
7. Installation and setting environment
8. How to build your 1st TS file
9. Compiling TS file into JS
10. Datatypes
11. Let
12. Var
13. Const
14. Any
15. Unknown
16. Type inference
17. Type alias
18. Advance data type or collections
19. Object
20. Array
21. Built-in array function
22. Tuple
23. Enum
24. Union
25. Literal
26. Null
27. Undefined
28. Operators
29. Arithmetic operators
30. Assignment operators
31. Comparison operators
32. logical operators
33. ternary operators
34. type of operators
35. control flow statement
36. conditional statement
37. switch statement
38. iterative statement
39. .for



- 40. while
- 41. do-while
- 42. un-conditional or transfer statement
- 43. break
- 44. continue
- 45. return
- 46. Function
- 47. Arrow function
- 48. Module
- 49. interface
- 50. Object oriented programming
- 51. Class
- 52. Object
- 53. Method
- 54. Constructor
- 55. inheritance
- 56. Method overriding
- 57. Modifier
- 58. Public
- 59. Private
- 60. Protected
- 61. Read-only

React JS

- 1. Introduction To React JS
- 2. History of React
- 3. Features of React
- 4. Installation
- 5. Setting environment
- 6. Creating project
- 7. App.js File
- 8. Displaying our own content
- 9. Index.js file
- 10. Creating our new file
- 11. Loading new file
- 12. Importing new file
- 13. Npm vs yarn package manager
- 14. File and folder structure
- 15. Package.json file
- 16. Package-lock.json file
- 17. What is babel
- 18. React package installation



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19. Components in reactjs
20. Function component
21. Class component
22. Jsx
23. Click event
24. State components
25. Props
26. Get input box data
27. Hide
28. Show
29. Toggle
30. Form handling
31. Conditional rendering
32. Life cycle method
33. Constructor Life cycle method
34. Render Life cycle method
35. Component Life cycle method
36. Hooks
37. Styles in react
38. Bootstrap in react
39. Re-using component
40. Router
41. React API
42. Redux
43. Project

Python programming Language

1. Introduction To programming
2. What is Python Language?
3. Important of Python language
4. Structure of Python language
5. Data type
6. Variable
7. Tokens
8. Keywords
9. Identifier
10. Literals
11. Operators
12. Arithmetic operators
13. Assignment operators
14. Comparison operators



- 15. logical operators
- 16. bitwise operators
- 17. identity operators
- 18. membership operators
- 19. Comment
- 20. casting
- 21. string
- 22. Mutable vs Immutable
- 23. List
- 24. Tuple
- 25. Set
- 26. Frozen set
- 27. Dictionary
- 28. Conversion
- 29. Control flow statement
- 30. Conditional statement
- 31. iterative statement
- 32. counter control loop
- 33. event control loop
- 34. for
- 35. while
- 36. Transfer statement
- 37. Pass
- 38. Continue
- 39. Break
- 40. return

ADVANCE

- 41. Function
- 42. Recursive function
- 43. Iterative function
- 44. Lambda Function
- 45. Exceptional Handling
- 46. Module & Packages
- 47. Built-in modules
- 48. User define modules
- 49. Comprehension
- 50. Any function
- 51. Iterator
- 52. generator
- 53. Map
- 54. Filter
- 55. Reduce



- 56. Threading
- 57. Multi-threading
- 58. Lock ()
- 59. Release()
- 60. Acquire ()

OOPS

- 61. Object oriented programming
- 62. Class
- 63. Object
- 64. Method
- 65. Static Variable
- 66. non-static Variable
- 67. Constructor
- 68. Encapsulation
- 69. Inheritance
- 70. Polymorphism
- 71. abstract

Additional Data science Library:

- 72. NumPy
- 73. Pandas
- 74. Matplot
- 75. Project – 1 assignment

Django Framework with PostgreSQL Database

- 1. Introduction to Django
- 2. Feature of Django
- 3. Django web server
- 4. MVT architecture
- 5. ORM
- 6. Building Django Project
- 7. Understanding Django environment
- 8. Sample Hello world application
- 9. Starting a Project
- 10. Http response
- 11. Activating first APP
- 12. Django template language
- 13. Creating HTML file
- 14. Render HTML file
- 15. View that display hyperlink
- 16. Mapping urls file
- 17. Setting.py file



18. Views.py
19. Urls.py
20. Running our first app
21. Passing value using python variable
22. Views using Template
23. Django template language (DTL) ,
24. Extends
25. Static content
26. Dynamic content
27. Passing images
28. If else
29. Loop
30. Model , class and object
31. Models.py
32. ORM
33. Integrating PostgreSQL Database
34. Creating Model
35. Fields in Models
36. Converting Model to Table
37. Creating super user
38. Creating admin panel
39. Adding data using admin
40. Displaying data through database
41. Card view using bootstrap
42. CRUD operations (Create, Read, Update, Delete)
43. Creating signup page
44. User authentication
45. messages
46. Login page
47. Logout Page
48. Project – 1 assignment
49. Project - 2 assignment
50. Project - 3 assignment

Django project + SQLITE database clone E-commerce web app

PART -1

1. Create project
2. Running project
3. Create app
4. Connect your app with your project
5. Creating a super user
6. Check in database
7. Creating model



PART -2

8. Attach your model with `__init__.py` file
9. create a category model to add a product for a specific category
10. Do the migration
11. store some category on category model
12. Now add foreign key to connect product and category
13. Display Table view in admin panel for product
14. Display Table view in admin panel for product
15. Display category name in product

PART -3

16. Handling request in Django
17. Working with HTML file (Django Templates)
18. Fetching products from database to client side (html page area)
19. Adding HTML file and pass the data
20. Loading images to front end

PART -4

21. Add Bootstrap in to your project
22. Create Menu (Navbar for your project)

PART -5

23. Using `extend.html` to pass the same menu in all pages
24. Listing category in your page
25. Filter the list

PART - 6

26. Signup page client side
27. Signup backend-1
28. Signup backend-2

PART -7

29. Signup validations
30. Hash password creating

PART -8

31. Login page client side
32. login page logic

PART -9

33. Class based view
34. create a separate folder for each function (singp,login,home)

PART -10

35. Manage session
36. Creating cart part-1: Create a form to handle the request w



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PART -11

- 37. Creating cart part-2: managing session
- 38. Creating cart part-3: creating filter

PART -12

- 39. Cart part-4 : creating items in cart
- 40. Cart part-5 : increase decrease button
- 41. Cart part-6 : display saved items in cart
- 42. Cart part-7 : product view

PART -13

- 43. Return to same product
- 45. Creating logout
- 46. Fetching cart product

PART-14

- 47. Showing cart product in cart page
- 48. Filter for currency
- 49. Place order

PART-15

- 50. Checkout

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