

FRONT-END

- Introduction
- Different types of Applications
- Application Architecture

HTML

- Introduction to HTML
- Basic Structure of HTML
- HTML Editors
- HTML Tags
- Paragraphs, Headings and Text
- Formatting Tags
- HTML Lists
- HTML Images
- HTML Tables
- HTML Forms
- HTML Media

CSS

- Introduction to CSS
- Types of CSS
- CSS Properties, Selectors and Values
- Applying CSS to HTML
- CSS colors
- CSS Box Model, Margins, Padding,
- Borders
- CSS Text & Font Formats
- CSS Advanced Topics (Effects, Animations, Shadows, Etc.,)

SAAS

- Introduction to Saas
- Installation
- Variables
- Nesting
- @import,@mixin,@extend
- Saas Functions
 1. String
 2. Numeric
 3. List
 4. Map
 5. Selector
 6. Color

JAVASCRIPT

- Introduction to JavaScript
- How to Apply JavaScript
- Displaying Output in JavaScript
- Understanding JavaScript Syntax
- Variables & Data types Operators
- Math and String Manipulations
- Conditional and looping Statements
- Functions
- Validations
- Events

FRONT-END

JQUERY

- Introduction to jQuery
- jQuery Features
- Installing jQuery
- jQuery Syntax
- jQuery Ready Function
- jQuery Selectors
- jQuery Actions
- jQuery Custom Functionality
- jQuery Libraries
- jQuery Validation
- jQuery Slideshow
- JQuery Dropdown
- jQuery UI
- jQuery Accordions
- jQuery Tabs
- jQuery Tooltips
- jQuery Autocomplete

TYPESCRIPT

- Typescript Introduction
- Typescript Simple and Special Types
- TypeScript Arrays
- TypeScript Tuples
- TypeScript Object Types
- TypeScript Functions

BOOTSTRAP

- Introduction to Bootstrap
- Bootstrap Setup
- Bootstrap Containers
- Bootstrap Grids
- Bootstrap Tables
- Bootstrap Buttons, Navbars, Alerts
- Bootstrap Carousel
- Bootstrap Forms

ANGULAR

- Introduction to Angular
- Environment Setup
- Installing Angular CLI
- Directory Structure of Angular
- Angular Fundamentals
- Angular Building Blocks
- Angular Data Binding
- String Interpolation
- Directives and Pipes
- Forms
- Routing

WEB HOSTING

- Introduction to Hosting
- Git and Github
- Creating and Merging Repositories
- Push and Pull Requests

BACK-END

INTRODUCTION

- What is Python and history of Python
- Unique features of Python
- Python-2 and Python-3 differences
- Install Python and Environment Setup
- First Python Program
- Python Identifiers, Keywords and Indentation.
- Comments and document Command-line arguments
- Getting User Input
- Python Data Types
- What are variables?
- Python Core objects and Functions
- Number and Maths
- Assignments

CONTROL STATEMENTS

- If-Else
- If-Else If-Else
- While Loop
- For Loop
- Break
- Continue
- Assert
- Pass
- Return

LIST, RANGES & TUPLES IN PYTHON

- Introduction
- Lists in Python
- More about Lists
- Understanding Iterator's
- Generators, Comprehensions and Lambda Expressions
- Generators and Yield
- Next and Ranges
- Understanding and using Ranges
- More About Ranges
- Ordered Sets with tuples

PYTHON DICTIONARIES AND SETS

- Introduction to the section
- Python Dictionaries
- More On Dictionaries
- Sets
- Python Sets Examples
- Input and Output in Python
- Reading and writing text files
- Writing Text Files
- Appending to Files and Challenge
- Writing Binary Files Manually
- Using Pickle to Write Binary Files

PYTHON BUILT IN FUNCTION

- Python user defined functions
- Python packages functions
- Defining and calling Function
- The anonymous Functions
- Loops and statement in Python
- Python Modules & Packages

PYTHON OBJECT ORIENTED

- Overview of oop
- The self variable
- Constructor
- Types of variables
- Namespaces
- Creating classes and objects
- Inheritance
- Types of methods
- Instance methods
- Static methods
- Class methods
- Accessing attributes
- Built-in class attributes
- Destroying objects
- Abstract classes and interfaces
- Abstract methods and abstract class
- Interface in python
- Abstract classes and interfaces

EXCEPTIONS

- Errors in Python
- Compile-Time Errors
- Runtime Errors
- Logical Errors
- What is Exception?
- Handling an exception/except/elsetry-finally clause.
- Argument of an Exception
- Python Standard Exceptions
- Raising an exceptions
- User-Defined Exceptions

PYTHON REGULAR EXPRESSIONS

- What are regular expressions?
- The match Function
- The search Function
- Matching vs searching
- Search and Replace
- Extended Regular Expressions
- Wildcard

PYTHON MULTITHREADED PROGRAMMING

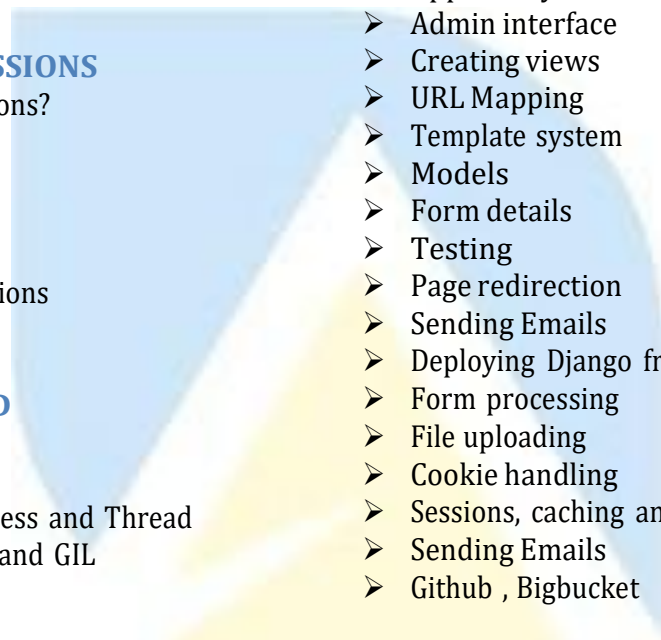
- What is multithreading?
- Difference between a Process and Thread
- Concurrent Programming and GIL
- Uses of Thread
- Starting a New Thread
- The Threading Module
- Thread Synchronization
- Locks & Semaphore
- Deadlock of Threads
- Avoiding Deadlocks
- Daemon Threads
- Using Databases in Python
- Python MySQL Database Access
- Install the MySQLdb and other Packages
- Create Database Connection
- CREATE, INSERT, READ Operation
- DML and DDL Operation with Databases
- Data Visualization Section Matplotlib
- Pandas

GRAPHICAL USER INTERFACE

- HTML, CSS, Jquery, Bootstrap
- GUI in Python
- Button Widget
- Label Widget
- Text Widget
- Rest Api

DJANGO WEB FRAMEWORK IN PYTHON

- Django overview
- Creating a project
- Apps life cycle
- Admin interface
- Creating views
- URL Mapping
- Template system
- Models
- Form details
- Testing
- Page redirection
- Sending Emails
- Deploying Django framework
- Form processing
- File uploading
- Cookie handling
- Sessions, caching and comments
- Sending Emails
- Github , Bigbucket



DATA-BASE

DATABASE

- Database handling with Mysql
- Python mysql database access
- Create database connection
- DML and DDL operations with databases
- Performing transactions
- Handling database errors
- Disconnecting database
- Database handling with mongodb
- Sql vs nosql
- Mongodb
- Pymongo
- Establishing a connection
- Accessing database
- DML and DDL operation

SKILL ENHANCEMENT MODULE

- Project Guiding Session
- Interview Preparation Skills
- Resume Building
- Mock Up Interviews
- Logical Reasoning and Analytical Ability
- Decision Making Skills
- Problem Solving Techniques
- Includes 3 Mini Project + 1 Capstone Project