



# Python And React

— FULL STACK INTERNSHIP —



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# PYTHON FULL STACK AND REACT



## INTRO TO WEB DEVELOPMENT

- What is web development?
- How websites work?
- Advantages of learning web development
- History of web development
- Tasks and Projects Overview



## DATABASE (MySQL)

- Introduction
- Database
- CREATE, ALTER, DELETE, DROP tables
- INSERT, UPDATE, DELETE table data
- WHERE condition
- LEFT JOIN, RIGHT JOIN, INNER JOIN
- INDEXING IN DATABASES



## WEB TECHNOLOGIES

- What is HTML?
- Structure of Webpage
- HTML Tags



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## WEB TECHNOLOGIES

- What is HTML?
- Structure of Webpage
- HTML Tags
- Adding and formatting texts, title
- Lists Ordered/Unordered
- Images, Forms, Links, Tables
- Iframes, Videos, Anchor tags
- HTML Divs, CSS Introduction
- Inline vs Internal vs External styling
- CSS Display



## CSS ADVANCED

- CSS Backgrounds, Borders, Margins
- CSS Font Styling, Stylings Lists
- Styling Tables, Forms
- Gradients, Font Awesome
- Tool tips, Buttons
- Transitions, Transformation, Animations
- Box sizing, Flex, Grid



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## BOOTSTRAP

- Bootstrap containers
- Tables, Images, Colors
- Alerts, Buttons
- Spinners, Cards
- Pagination, Drop Down
- Carousel
- Bootstrap grid systems
- Bootstrap grid system-Advanced



## JavaScript

- Introduction
- Syntax
- External and Internal using
- Variables, Operators, Functions
- Events, Comparison, Condition, Loops



## JQUERY

- JQuery install
- JQuery syntax
- JQuery selector
- JQuery events



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# PYTHON FULL STACK AND REACT

## Python Introduction

- short history
- introduction
- Features
- Python Installation
- Python Interpreter
- How to Run Python
- Variable and Data Types
- Numbers-strings-Lists-Tuple-set-Dictionary
- Operators
- Arithmetic Operations



## Looping

- For loop
- For loop with else
- While Loop
- Nested



## Conditional Statements

- For loop
- if
- if..else
- if..elif..else
- Nested



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# PYTHON FULL STACK AND REACT

## Control Statements

- Break
- Continue
- pass



## Comprehensions

- List
- set
- Tuple
- Dictionary



## Functions

- Definition
- Calling
- Arguments
- Lambda Functions
- Recursive Functions
- Functions Returning values



## Modules

- Creating Modules
- Import Statements
- packages



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# PYTHON FULL STACK AND REACT



## File Handling

- Opening,
- Reading
- Writing
- Closing
- Renaming
- Deleting



## Exception Handling

## OOPS Concept

- class and objects
- Inheritance, Destructors
- Encapsulation, Data Hiding
- Method overriding
- Polymorphism
- Regular Expressions



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# PYTHON FULL STACK AND REACT

## Django

- Features
- Architecture
- Installation
- templates
- Models and Forms
- Create and Read(CRUD operations)
- Update and Delete(CRUD operations)
- Registration and Login,Django Administration
- Database Connection(Sqlite) and Working



## Deploy a Django Project on Heroku

- Using Git
- Heroku Cloud Platform
- Testing



## Django Rest Framework

- Introduction to Rest API
- Working with JSON files
- Serialization
- Class based views
- API Permissions
- API request methods
- Understanding response objects and headers Using Postman
- Creating API endpoints in Django web application





## Introduction to React JS

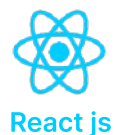


- Overview of ReactJS
- Understanding Single Page and Multi-Page Applications
- Installation
- Create a new project
- Folder Structure of React Application
- React - Hello World
- Running the app Server



## JSX & Components

- React component (Func & class)
- Working with React.createElement
- Component architecture
- Component lifecycle
- Nested components
- JSX



### Working with state, Props and rendering list

- State
- Passing data to component using props
- Conditional rendering
- React lists
- Passing Key
- Using map function to iterate on arrays to generate elements.
- Importing components from other files



### Event Handling in REACT

- React event System
- Basic Event Handling
- Binding Event Handlers
- Passing arguments to event handlers
- Methods as prop



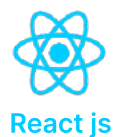
## Styling and Application Layout

- Inline Styling
- CSS Stylesheet

django

## React Hooks

- useState
- useEffect
- useContext
- useCallback
- useRef
- useMemo
- useReducer
- useImperativeHandle
- useEffect
- custom Hooks



## Working with Forms and Contents



- Different Form Concepts
- Controlled components
- Uncontrolled components
- Using react ref prop to get access to DOM element



## Router

- Setting up react-router
- Understand routing in single page applications

## Redux

- Install redux
- Actions, Reducer function, Dispatch
- Store



## PROJECT

- Designing
- Prototyping
- Coding
- Test & Debugging
- Deploying



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# PYTHON FULL STACK INTERNSHIP



## CAPSTONE PROJECT

- Designing
- Prototyping
- Coding
  - Integration with Chat GPT
- Test & Debugging
- Deploying





# — Python and React Tech Stack —





— Our interns Who Got Placed in Last 4 Months —



**Arya**

React js Developr



**Midhun**

UI/UX Designer



**Prasana**

UI/UXI Designer



**Sandhya**

Front End Developer



**Zamil**

Flutter developer



**Silpa**

Python DJANGO  
Developer



**Rishna**

PHP Developer



**Sajana**

PHP Developer



**Deepak**

Python DJANGO



**Thushara**

Python DJANGO



**Reshma**

Python Developer



**Drishya**

UI/UX Designer



**Vineetha**

Python Developer



**Muhammad Anshif**

Flutter developer



**Raniya**

Mobile app  
developer



## — Our Technology Expertise —

