



Python Full Stack Artificial Intelligence(AI)

Data visualization Matplotlib module

Adding Grid Lines

Bars,Histograms,Pie Charts

Data structures and Algorithms:

Stack(LIFO),Queue(FIFO),LinkedList

Hash

Table,Set,Trees,Gr

aph Searching

Algorithms,Sortin

g Algorithms

Module 2-SQL:

MYSQL database server installation

Types of statements

Constrains & types of constrains

SQL Operators & types

Joins & types

Views,Limit,Index

Types of clauses

Procedures,functios,

cursors

Module 3-Front end Technologies:

HTML

CSS

Java Script

React JS

API

Module 4- Python Frameworks:

Python Database

Connectivity(PDBC):

Connect to MySQL database

CRUD operations

Django framework

Introduction to web application

Django library

Model View Template(MVT)

Architecture

Template Tags

Django include Tag

Django - Page Redirection

Loading Static Files

Authentication, Authorization

AI tools in PDBC

Django REST API

Rest Architecture

Http Request/Http Response

JSON, Consumer

Service provider, Database

Rest Endpoints

Fast API framework:

Microservices

Fast API database connection

Web scraping the application

PYTHON- ARTIFICIAL INTELLIGENCE(AI):

AI introduction, Machine Learning

Prompt Engineering, Types of Prompts

Responses, LLM models

AI Architecture, Open AI API

Difference between GenAI and Agentic AI

Integrating python application with ChatGPT AI tool

Git , GitHub , Anaconda IDE, Postman, Docker, Kubernetes

Final Realtime Project(Capstone Project)