



PRECURSOR

INFO SOLUTIONS PVT. LTD.

spread the joy of learning...

Project Training With Internship Program

DESKTOP

WEB

MOBILE/CLOUD

Data Science with AI/ML

PROJECTS

JAVA

SPRING BOOT

PYTHON

DATA SCIENCE WITH AI/ML

MERN

ANDROID

IoT

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Java Application Development

Fundamentals of Java
Eclipse IDE Configuration & Setup
OOps Concepts with Real-Life Examples
Packages & Interfaces
Exception Handling
Collection Framework and Generics
Multithreading



Streaming
Swing GUI
Event Handling
MySQL Database
JDBC
PROJECT

Java Full Stack Web Development

Introduction to Java
Object-Oriented Programming (OOps) Concepts
Packages and Interfaces
Exception Handling
Collection Framework and Generics
Web Designing Techniques
HTML, CSS & JavaScript
Bootstrap and Tailwind CSS
Introduction to Web Server

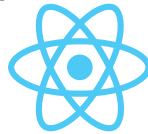


Design Patterns
Servlet
JSP (Java Server Pages)
MySQL Database
JDBC (Java Database Connectivity)
AJAX Integration
Eclipse IDE & Apache Tomcat Configuration
PROJECT

Spring Boot with React

React

Web Development Fundamentals
HTML, CSS ,Bootstrap, JSON
JavaScript Fundamentals Based on ES6
React.js , Virtual Dom, JSX, Styling
Components & Props
React Hooks
React Routing
Axios & API Integration



Spring Boot

Spring Framework Basics
Spring Boot Fundamentals
Maven & Project Structure
Annotations & Components
Spring Data JPA, Jdbc Template
CRUD Operations
RESTful APIs
API Testing with Postman
Validation & Exception Handling
React + Spring Boot Integration
Full Stack Application Development



PROJECT

Python Django with Gen AI

Python

Introduction to Python
Variables, Data Types
Operators
Control Statements
Sequence, Map & Set Data Types
Functions
Modules & Packages
Exception Handling
File Handling
Object Oriented Concepts



Django Framework

Web designing Techniques like HTML,
CSS, JavaScript & Bootstrap
MVC and MVT Model
Django Project Directory Structure
Views, URL Pattern, Routing
Templates, Forms, Template Inheritance
Model, ORM, DTL, Queries
SQLite Database, AJAX
Gen AI Integration
PROJECT



Python Data Science with AI/ML

▶ Python Programming Essentials

Python Fundamentals
OOPs Concepts
File Handling
Exception Handling

▶ Data Science Fundamentals

Introduction to Data Science
Data Analysis using NumPy & Pandas
Data Visualization using Matplotlib & Seaborn



▶ Machine Learning

Machine Learning Concepts
Types of Machine Learning
Regression Techniques
Classification Techniques
Clustering Techniques
Model Evaluation & Optimization
Implementation of ML Algorithms

▶ Web Development

HTML, CSS & JavaScript
Bootstrap & Responsive Design

▶ Django Framework

Introduction to Django
MVC & MVT Architecture
Django Project Structure
URL Routing & Views
Templates & Forms
Models & ORM
Dynamic Web Applications
User Input & Prediction Forms
Integrating ML Models with Django

PROJECT



MERN

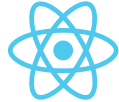
Node.js & Express.js

Introduction to Node.js
Modules in Node.js
Synchronous & Asynchronous programming
Call Backs and Event Loop
Node Package Manager
Built-In modules
Express Framework
Building API using Express
Introduction to Postman
Testing API using Postman
Integration with MongoDB
Integration with React



React.js

Introduction to web development
Client and Server side Technologies
SPA and MPA
HTML, CSS, Bootstrap, JSON
JavaScript based on ES6
Introduction to React.js
Virtual DOM, JSX
Class and Functional components
Styling
React Routing
React Hooks
Axios and JSON-Server



MongoDB

MongoDB Fundamentals
SQL vs NoSQL
MongoDB Compass
MongoDB Atlas
Schema design and Data modeling
Mongoose ODM
CRUD Operations
Query Methods
Data Import & Export



Full Stack web Project using MERN Technology

Android

Introduction to Android studio
Android Architecture
Various XML resource files
Layouts and Widgets
Activity, Fragment
Intent and Intent Filter
Notifications
Graphics, Animation and Media
Data Storage



Content Provider
Broadcast Receiver
Google Map and Locations
Web Services and JSON
Material Design
Third Party Libraries
Google Firebase
Overview of Kotlin
PROJECT

IoT

Introduction
Architecture
Resistors, Diodes, ICs, Transistors
Motors, Relay
Transmitters & Receivers
Sensor & Actuator
Interfacing LED, Button
Raspberry pi



Arduino
Arduino Programming
Communication Protocol
Introduction to IPv4 and IPv6
TCP/UDP Protocol
HTTP Application layer Protocol
MQTT Protocol
PROJECT