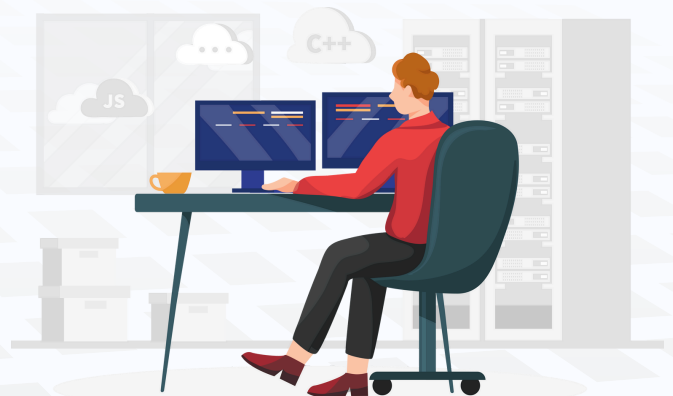


PYTHON FULLSTACK MODULE 1

Live Classes with **Placement Support**

- Frontend + Backend + Database Mastery
- Hands-On Projects & Live Deployment
- Industry-Ready Skills & Architecture
- Become a Complete Developer



Why choose Python FullStack?

MASTER FRONTEND & BACKEND WITH ONE POWERFUL STACK

Python Full Stack Development combines HTML, CSS, JavaScript, Python, Django, and databases to help you build complete, production-ready web applications.

BUILD REAL-WORLD PROJECTS FROM END TO END

From UI design to backend logic and database integration — you'll learn to develop, deploy, and maintain fully functional websites and apps.

IN DEMAND BY STARTUPS, TECH GIANTS & SAAS COMPANIES

Companies like TCS, Infosys, Zoho, Cognizant, and early-stage startups actively hire full stack developers with Python and Django skills.

ONE COURSE, MULTIPLE CAREER PATHS

After this course, step into roles such as: Full Stack Developer, Python Web Developer, Django Developer, Software Engineer, or Backend Engineer.

HTML Course Curriculum

Lesson 1: Introduction to HTML

1.1: Introduction to HTML

- Learn what HTML is and its role in building webpages.

1.2: Difference Between HTML and HTML5

- Understand the key differences between HTML and the newer version, HTML5.

1.3: HTML Overview

- Explore the basic structure of an HTML document, including the 'html', 'head', and 'body' tags.

1.4: DOCTYPE Declaration

- Learn how to properly define a document type declaration for an HTML page.

1.5: HTML Tag vs Element

- Understand the difference between tags and elements in HTML...

1.6: HTML Attributes

- Explore various HTML attributes like 'id', 'class', 'style', and others.

Lesson 2: Basic HTML Formatting

2.1: Basic Formatting Tags

- Learn about basic tags for formatting such as 'b', 'i', 'u', and 'strong'.

2.2: Basic HTML Tags

- Explore commonly used HTML tags like 'h1-h6', 'p', 'a', 'img', 'ul', and 'ol'.

2.3: Grouping Using Div and Span

- Understand how to group content using the 'div' and 'span' tags for better styling and organization.

2.4: Div Tag

- Learn how to use the 'div' tag for grouping larger blocks of content.

2.5: Span Tag

- Explore the 'span' tag for inline grouping of smaller content.

Lesson 3: HTML Lists and Images

3.1: Unordered List

- Learn how to create unordered lists using the 'ul' and 'li' tags.

3.2: Ordered List

- Understand how to create ordered lists with the 'ol' tag.

3.3: Definition List

- Explore definition lists with the 'dl', 'dt', and 'dd' tags.

3.4: Images and Image Mapping

- Learn how to add images to your webpage and create image maps.

3.5: Responsive Images

- Understand how to use the 'srcset' attribute to make images responsive.

3.6: List Styling

- Learn how to style lists using CSS properties like 'list-style-type' and 'list-style-image'.

Lesson 4: HTML Tables

4.1: Basic Table Structure

- Learn how to create tables with the 'table', 'tr', 'th', and "td" tags.

4.2: Table Elements: Caption, Thead, Tfoot, Tbody

- Explore how to enhance tables with 'caption', 'thead', 'tfoot', and 'tbody'.

4.3: Table Grouping and Layout

- Learn to group columns using the 'colgroup' tag and control table layout

Lesson 5: HTML Frames and Iframes

5.1: Understanding Frames

- Learn how to create frames for splitting a browser window into multiple sections.

5.2: Using Iframes

- Explore how to embed other webpages within your webpage using the 'iframe' tag.

5.3: Iframe Attributes and Targeting

- Learn how to control the behavior of iframes, including setting attributes like 'src' and 'target'.

Lesson 6: HTML Forms

6.1: HTML Form Elements

- Explore the various form elements such as 'form', 'input', 'textarea', and 'button'.

6.2: HTML Input Types

- Learn about the different "input types, including 'text', 'password', 'radio', and 'checkbox'.

6.3: HTML Input Attributes

- Understand how to use attributes like placeholder, 'value', and 'required' in form elements.

Lesson 7: HTML Media

7.1: HTML Audio and Video

- Learn how to embed audio and video in your webpage using the 'audio' and 'video' tags.

7.2: Attributes for Media Tags

- Explore the attributes you can use to control media playback, such as 'controls', 'autoplay', and 'loop'.

CSS Course Curriculum

Lesson 1: Introduction to CSS

1.1: What is CSS?

- Understand CSS and its role in web design.

1.2: CSS Inclusion

- Learn methods to include CSS in your pages (inline, internal, external).

1.3: Selectors

- Explore CSS selectors like element, class, and ID.

1.4: Colour's

- Learn about CSS colour properties: name, hex, RGB, and RGBA.

1.5: Background

- Master adding background images and colours.

1.6: Border

- Style borders with width, colour, and radius.

1.7: Margin and Padding

- Understand the use of margin and padding for spacing.

Lesson 2: Box Model and Layouts

2.1: Box Model

- Understand the box model (content, padding, border, margin).

2.2: Height, Width, and Size

- Learn to control element dimensions and layout.

2.3: Box-Sizing

- Master the box-sizing property for layout control.

2.4: Flexbox

- Explore Flexbox for flexible layout and alignment.

2.5: Grid Layout

- Learn CSS Grid for creating grid-based designs.

Lesson 3: Fonts and Text Styling

3.1: CSS Fonts

- Learn to style text using font properties (family, size, weight).

3.2: CSS Text Properties

- Manipulate text alignment, decoration, and transformation.

3.3: CSS Links

- Style hyperlinks, including hover and focus states.

3.4: CSS Lists

- Style ordered and unordered lists with custom bullets.

3.5: Text Shadows

- Add text shadows for better visibility.

3.6: Line Height and Letter Spacing

- Improve text readability with spacing adjustments.

Lesson 4: Advanced CSS Techniques

4.1: CSS Cursors

- Change cursor style to improve user interaction.

4.2: CSS Overflow

- Control visibility and overflow behaviour in containers.

4.3: CSS Pseudo-Classes and Pseudo-Elements

- Use pseudo-classes like :hover and ::before.

4.4: CSS Animation

- Create animations with CSS keyframes.

4.5: CSS Transitions and Transformations

- Add smooth transitions and element transformations.

Lesson 5: Responsive Web Design

5.1: Media Queries

- Use media queries for responsive designs.

5.2: Mobile-First Design

- Design with a mobile-first approach.

5.3: Fluid Layouts and Viewport

- Build flexible layouts based on viewport size.

5.4: CSS Grid for Responsive Design

- Use CSS Grid for responsive layouts.

5.5: Responsive Typography

- Adjust typography for different screen sizes

Lesson 6: CSS Best Practices and Optimization

6.1: Writing Clean and Maintainable CSS

- Learn to write scalable, maintainable CSS.

6.2: CSS Preprocessors (Sass/LESS)

- Use preprocessors like Sass/LESS for modular CSS.

6.3: CSS Performance Optimization

- Optimize CSS for performance improvements.

6.4: CSS Organization

- Organize CSS for better Scalability.

6.5: Minification and Compression

- Learn to minify and compress CSS for faster loading.

Lesson 7: Advanced CSS Tools and Frameworks

7.1: CSS Frameworks (Bootstrap, Tailwind)

Explore CSS frameworks for faster development.

7.2: PostCSS

Automate tasks using PostCSS.

7.3: CSS Grid and Flexbox Frameworks

Use frameworks to create responsive layouts.

7.4: CSS Variables

Use CSS variables for dynamic and reusable styles.

Organize CSS for better scalability.

6.5: Minification and Compression

Learn to minify and compress CSS for faster loading.

JAVASCRIPT Course Curriculum

Lesson 1: Introduction to JavaScript

1.1: Introduction to JavaScript

- Learn about JavaScript, its uses, and the basics of the language.

1.2: Setting Up JavaScript Development Environment

- Learn how to set up your local development environment and run JavaScript code.

1.3: Your First JavaScript Program: "Hello, World!"

- Write and run your first simple JavaScript script.

1.4: Understanding JavaScript Syntax

- Get familiar with JavaScript syntax, including identifiers, keywords, and basic operators.

1.5: Writing Comments and Documentation in JavaScript

- Learn how to document your code effectively.

1.6: Using User Input and Console

- Learn how to accept input from users and use the console object for debugging.

Lesson 2: Working with Variables and Data Types

2.1: JavaScript Variables and Data Types

Learn how to declare variables and work with different data types in JavaScript.

2.2: Arithmetic Operations in JavaScript

Explore JavaScript's arithmetic operators and how to perform basic math operations.

2.3: Working with Arrays in JavaScript

Learn how to create and manipulate arrays, including accessing and modifying elements.

2.4: Using Array Methods

Master array methods like `map()`, `filter()`, `reduce()`, and more.

2.5: Type Conversion in JavaScript

Understand how to convert between different data types in JavaScript.

2.6: JavaScript Constants and Let vs Var

Learn the difference between `let`, `const`, and `var` for variable declarations.

Lesson 3: Strings and String Methods

3.1: Working with Strings

- Learn how to work with strings in JavaScript, including concatenation and manipulation.

3.2: JavaScript String Methods

- Explore essential string methods like `'slice()'`, `'split()'`, and `'replace()'`.

3.3: String Template Literals

- Use template literals to build dynamic strings with embedded expressions.

3.4: String Padding and Trimming

- Learn how to pad and trim strings to meet your formatting needs.

3.5: Regular Expressions in JavaScript

- Understand the basics of regular expressions and how to use them with strings.

Lesson 4: Control Flow and Loops

4.1: Conditional Statements (if, else, switch)

- Master the control flow in JavaScript using 'if', 'else', and 'switch' statements.

4.2: Loops in JavaScript (for, while, do-while)

- Understand the different types of loops and how to iterate over arrays and objects.

4.3: Break and Continue Statements

- Learn to control the flow of loops using 'break' and 'continue'.

Lesson 5: Objects, Set, and Map

5.1: Working with Objects in JavaScript

- Learn how to create and manipulate objects in JavaScript.

5.2: Using Set and Map

- Explore JavaScript's 'Set' and 'Map' collections and how to use them for efficient data management.

Lesson 6: Functions and Closures

6.1: JavaScript Functions

- Learn how to define functions in JavaScript and pass parameters.

6.2: Function Closures

- Understand closures and how to use them for better function management.

6.3: Arrow Functions

- Learn how to write concise and efficient arrow functions.

Lesson 7: Asynchronous JavaScript

7.1: Introduction to Asynchronous JavaScript

- Learn about asynchronous operations and how to use them with JavaScript.

7.2: Promises in JavaScript

- Understand how to handle asynchronous tasks using 'Promise' objects.

7.3: Async/Await Syntax

- Learn how to work with async/await to simplify asynchronous JavaScript code.

Lesson 8: Working with the DOM

8.1: Introduction to the DOM

- Learn about the Document Object Model (DOM) and how JavaScript interacts with web pages.

8.2: DOM Manipulation

- Master how to manipulate DOM elements using JavaScript to change content dynamically.

8.3: Event Handling in JavaScript

- Learn how to add event listeners and respond to user interactions with your web page.

Lesson 9: Fetch API and AJAX

9.1: Working with Fetch API

- Learn how to make API requests with the Fetch API and handle JSON data.

9.2: Introduction to AJAX

- Explore how AJAX allows for asynchronous web page updates.

Module 10: Final Project and Real-World Applications

10.1: Project Planning: From Idea to Execution

- Learn how to select and plan a JavaScript project that aligns with your learning goals.

10.2: Building and Testing Your JavaScript Application

- Hands-on project work: develop, test, and debug your application.

10.3: Deployment and Sharing Your Application

- Learn how to deploy your JavaScript project and share it with the world.

PYTHON Course Curriculum

Lesson 1: Getting Started with Python

1.1: Introduction to Python

Why Python is the language of choice for modern developers.

1.2: Setting Up Python

Installation, IDEs, and Python shell.

1.3: Writing and Running Scripts

Hello World and basic syntax.

1.4: Comments and Documentation

Inline and docstring documentation.

1.5: User Input and CLI Arguments Handling basic I/O and arguments

Lesson 2: Core Python Data Structures

2.1: Primitive Data Types

- Strings, numbers, booleans.

2.2: Variables and Memory

- Variable binding and scope.

2.3: Control Flow

- If-else, loops, and logical operators.

2.4: Built-in Functions

- Common built-ins like 'len', 'type', 'range', and 'input'.

2.5: Type Casting and Conversion

- Converting between strings, ints, floats.

Lesson 3: Advanced Data Structures

3.1: Lists and Tuples

- Indexing, slicing, methods.

3.2: Dictionaries and Sets

- Key-value pairs and unique collections.

3.3: Comprehensions

- Create lists, sets, and dicts concisely.

3.4: Iterators and Generators

- Lazy evaluation with 'yield' and iterables.

Lesson 4: File I/O and Persistence

4.1: Reading/Writing Text Files

- File modes, paths, and file objects.

4.2: Binary Files and Appending

- Append mode and working with binary streams.

4.3: Serialization with JSON & CSV

- Save and load structured data with 'json' and 'csv' modules.

Lesson 5: Functions and Modularization

5.1: Defining Functions

- Parameters, arguments, return values.

5.2: Lambda Functions

- Anonymous functions and use cases.

5.3: Modules and Packages

- Importing, creating, and organizing code into packages.

Lesson 6: Object-Oriented Programming

6.1: Classes and Objects

- Creating objects and constructors.

6.2: Encapsulation and self

- Object state and behaviour.

6.3: Inheritance and Polymorphism

- Reusability, and Method Overriding.

6.4: Abstract Classes and Interfaces

- Design patterns and 'abc' module.

Lesson 7: Error Handling & Regex

7.1: Exception Handling

- Try, except, finally, raising errors.

7.2: Regular Expressions

- Match patterns with 're' module.

7.3: Validating Inputs

- Use regex to clean and validate data.

Lesson 8: Multithreading & Concurrency

8.1: Working with Threads

- Basic threading with 'threading' module.

8.2: Thread vs. Process

- Differences and appropriate use cases.

8.3: Synchronization

- Locks, race conditions, and thread safety.

Lesson 9: Databases and SQL

9.1: Connecting to MySQL

- Set up and connect with 'mysql.connector'.

9.2: CRUD Operations

- Create, Read, Update, and Delete in SQL.

9.3: Parameterized Queries

- Secure and dynamic data access.

Lesson 10: Final Project

10.1: Project Planning

- Define scope, goals, and structure.

10.2: Building Your Application

- Implement concepts in a capstone project.

10.3: Testing and Deployment

- Debug and publish your application.

MYSQL Course Curriculum

Lesson 1: Introduction to Oracle SQL

1.1: Overview of Oracle Database and SQL

- Learn about the Oracle Database architecture and SQL basics.

1.2: Installing Oracle Database and SQL Developer

- Step-by-step guide for setting up Oracle SQL and SQL Developer.

1.3: Understanding Oracle Data Types

- Learn about various Oracle data types (CHAR, VARCHAR, DATE, etc.).

1.4: Basic SQL Syntax and Structure

- Understand the fundamental syntax and structure for writing SQL queries.

1.5: Introduction to SQL Developer Interface

- Learn how to use SQL Developer's interface to interact with Oracle databases

Lesson 2: Retrieving Data using the SELECT Statement

2.1: Basic SELECT Statement Syntax

- Understand the structure and syntax of the SELECT statement.

2.2: Using the WHERE Clause to Filter Data

- Learn how to filter data with the WHERE clause.

2.3: Sorting Data with ORDER BY

- Sort your query results by one or more columns.

2.4: Limiting Results with FETCH and OFFSET Clauses

- Learn how to limit the number of results returned.

2.5: Using the LIKE Operator for Pattern Matching

- Understand how to use the LIKE operator for matching patterns.

2.6: Using the IN and BETWEEN Operators

- Learn how to filter data with IN for multiple values and BETWEEN for range values.

Lesson 3: Filtering and Sorting Data

3.1: Filtering Data with the WHERE Clause

- Learn advanced techniques for filtering data with logical operators.

3.2: Sorting Data by Single and Multiple Columns

- Master sorting in ascending and descending order.

3.3: Using Column Aliases

- Understand how to create aliases for columns to make results more readable.

3.4: Using Advanced Filtering Techniques

- Explore advanced filtering options like regular expressions and complex conditions.

3.5: Sorting Data with Custom Order

- Learn how to sort data by custom sorting logic using case expressions.

Lesson 4: Joining Tables

4.1: Introduction to Joins

- Learn about different types of joins and their uses.

4.2: Inner Joins and Outer Joins

- Understand the differences between INNER JOIN, LEFT JOIN, RIGHT JOIN, and FULL JOIN.

4.3: Cross Joins and Self-Joins

- Learn about cross joins and how to perform self-joins.

Lesson 5: Aggregating Data with Group Functions

5.1: Using the GROUP BY Clause

- Group data based on specific columns for aggregation.

5.2: Using Aggregate Functions

- Learn to use aggregate functions like AVG, COUNT, MIN, MAX, and SUM.

5.3: Using the HAVING Clause

- Filter aggregated results with the HAVING clause.

Lesson 6: Subqueries

6.1: Understanding Subqueries

- Learn how to use subqueries in SQL.

6.2: Types of Subqueries

- Explore single-row, multiple-row, and correlated subqueries.

6.3: Using Subqueries in WHERE, HAVING, and SELECT Clauses

- Learn to use subqueries for filtering and selecting data

Lesson 7: Manipulating Data with DML Statements

7.1: Understanding Data Manipulation Language (DML)

- Introduction to INSERT, UPDATE, and DELETE statements.

7.2: Inserting, Updating, and Deleting Data

- Learn how to manipulate data in Oracle tables.

7.3: Using Transactions to Ensure Data Integrity

- Understand how to use COMMIT, ROLLBACK, and SAVEPOINT to manage data integrity

Lesson 8: Creating Tables and Database Objects

8.1: Creating Tables

- Learn how to create tables in Oracle SQL.

8.2: Adding and Modifying Columns and Constraints

- Understand how to modify existing tables and add constraints.

8.3: Dropping Tables

- Learn how to safely drop tables from your database

8.4: Creating Views, Sequences, Indexes, and Synonyms

- Understand how to create other database objects like views and indexes.

Lesson 9: Working with Date and Time Functions

9.1: Using Date and Time Functions

- Master date and time functions like SYSDATE, ADD MONTHS, and TO DATE

9.2: Understanding Date and Time Data Types in Oracle

- Learn about Oracle's handling of dates and times.

9.3: Calculating Date Differences

- Learn to calculate the difference between two dates using SQL functions.

9.4: Handling Time Zones in SQL

- Understand how to handle time zones and perform date-time conversions.

Lesson 10: Advanced SQL Concepts

10.1: Using Regular Expressions

- Learn how to use regular expressions in SQL queries.

10.2: Using Analytical Functions

- Explore advanced functions for analysis like RANK, LEAD, and LAG.

10.3: Working with Large Data Sets

- Learn how to partition and process large datasets using Oracle.

10.4: Implementing Security with Roles and Privileges

- Understand how to control access and permissions in Oracle databases.

DJANGO Course Curriculum

Lesson 1: Introduction to Django

1.1: Introduction to Django

- Overview of Django and its popularity.

1.2: Features of Django

- Key features that make Django ideal for web apps.

1.3: Django Web Server

- Setting up the Django web server for development.

1.4: Django Environment

- Set up a virtual environment and understand the structure.

1.5: Hello World App

- Build your first Django app.

Lesson 2: Django Architecture

2.1: Django Architecture

- Explore Django's internal architecture and the MTV pattern.

2.2: MVC vs MTV

- Compare MVC and MTV patterns.

2.3: Starting a Project

- Learn how to start a new Django project.

2.4: Django Apps

- Learn how to structure apps in a Django project.

Lesson 3: Views, URLs, and Templates

3.1: Hyperlink View

- Learn how to create views that display hyperlinks.

3.2: URL Mapping

- Map views to specific URLs.

3.3: Templates and Inheritance

- Use templates and template inheritance.

3.4: Data Flow

- Pass data from URLs to views and templates.

Lesson 4: Django Models and DB Operations

4.1: Creating Models

- Learn to create models and link them to database tables.

4.2: Data Access via Django Shell

- Use the Django shell for database interactions.

4.3: CRUD Operations

- Perform Create, Read, Update, and Delete operations in Django.

Lesson 5: Django Admin Interface

5.1: Admin Panel

- Set up Django's admin panel for model management.

5.2: Customize Admin

- Learn how to customize the admin interface.

5.3: Users and Permissions

- Add users and assign permissions in Django.

Lesson 6: Django Forms and Email

6.1: Creating Forms

- Build forms for user input and validation.

6.2: Email Functionality

- Configure email settings and send emails from Django.

6.3: Template Language

- Learn Django's template language with tags and filters.

Lesson 7: Sessions and Cookies

7.1: Session vs Cookie

- Understand the differences between sessions and cookies.

7.2: Using Sessions and Cookies

- Store and retrieve user data with sessions and cookies.

Lesson 8: Working with Databases

8.1: SQLite and MySQL

- Learn how to use SQLite and MySQL in Django.

8.2: Advanced Queries

- Master querying and filtering with Django ORM.

Lesson 9: Django Restful API

9.1: CRUD with Django Rest Framework

- Implement CRUD operations with Django Rest Framework.

9.2: Live Project

- Build and deploy a live project using Django Rest APIs.

Lesson 10: Final Project and Deployment

10.1: Functional Website

- Build a functional website from start to finish.

10.2: Deployment

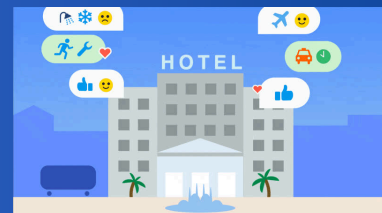
- Learn to deploy your Django project to production

Hands-On Project

Hotel Management System

Manage bookings, rooms, and customers.

Build a fullstack application with user roles, room availability, and booking management using Django/Flask and a relational database.



Online Banking System

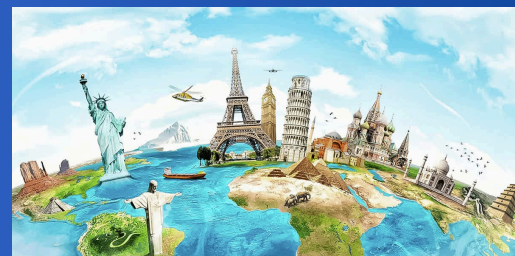
Simulate bank operations securely.

Develop an app for account creation, balance checks, transfers, and transaction history with proper authentication and security practices.

Tours and Travels Portal

Plan, book, and manage trips.

Create a platform for users to explore destinations, book travel packages, and manage itineraries using Python fullstack technologies.

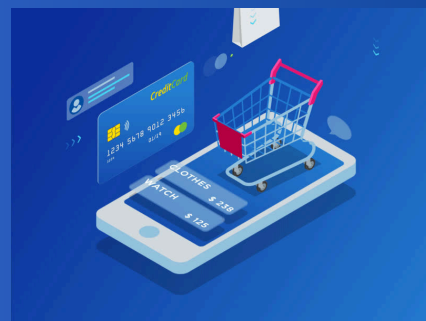


Hands-On Project

E-commerce Platform

Build a complete online shopping app.

Develop a product catalog, shopping cart, user accounts, and payment integration using Django or Flask with a modern JS frontend.



Learning Management System (LMS)

Deliver courses and track progress.

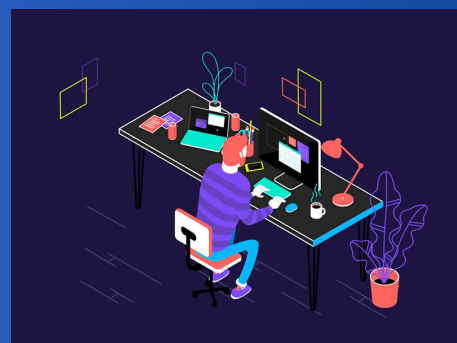
Allow instructors to upload content, students to enroll, take quizzes, and track progress with a clean admin dashboard and REST API.



Job Portal System

Connect job seekers with recruiters.

Implement user registration, job posting, resume uploads, and application tracking with secure user roles and admin panel.





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