Introduction to the Course

Course Outline and Overview

Course Overview

- This course is designed to provide you with a strong foundation in web development.
- You will learn essential programming languages and tools used in web development.
- You'll understand the concepts of data structures, databases, and server-side programming.
- Practical exercises and projects will reinforce your learning.

Course Topics

- 1. Algorithms and Data Structures
- 2. Flowcharts
- 3. Introduction to JavaScript
- 4. HTML
- 5. CSS
- 6. Database

Course Topics

- 7. Introduction to Node.js
- 8. REST APIs
- 9. Express.js
- 10. Object-Relational Mapping (ORM)
- 11. Sequelize: Database Migrations
- 12. Sequelize: Database Seeding
- 13. Authentication and Authorization
- 14. Role-Based Access Control (RBAC)

Algorithms and Data Structures

Study fundamental algorithms and data structures used in programming.

Flowcharts

Learn how to create visual representations of program workflows.

Introduction to JavaScript

Get started with the basics of JavaScript, the language of the web.

HTML

Dive into the markup language used for creating web pages and web applications.

CSS

Explore the styling language for designing and formatting web content.

Database

Understand the fundamentals of databases and data management.

Introduction to Node.js

Introduce server-side JavaScript with Node.js, a popular runtime.

REST APIs

Learn about Representational State Transfer and designing web APIs.

Express.js

Explore Express.js, a web application framework for Node.js.

Object-relational mapping (ORM)

Understand the concept of mapping between object-oriented programming and relational databases.

Sequelize: Database Migrations

Master database schema changes with Sequelize.

Sequelize: Database Seeding

Discover how to populate your database with initial data.

Authentication and Authorization

Secure your applications with user authentication and authorization.

RBAC (Role-Based Access Control)

Implement a flexible access control system based on user roles.

Thank You!

Any Questions?