ARYATECHNO

CodeIgniter Syllabus

Topics : Codeigniter
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1: Introduction to CodeIgniter

- Overview of CodeIgniter framework
- Setting up CodeIgniter on local environment
- Understanding MVC (Model-View-Controller) architecture
- Creating a simple "Hello World" application

2: Controllers

- Introduction to Controllers in CodeIgniter
- Creating and managing Controllers
- Passing data from Controllers to Views
- Using URI routing for clean URLs

3: Views

- Understanding Views in CodeIgniter
- Creating and loading Views
- Working with HTML, CSS, and JavaScript in Views
- Using View layouts and templates

4: Models and Database Integration

- Introduction to Models in CodeIgniter
- Connecting CodeIgniter with databases (MySQL, SQLite, etc.)
- Performing CRUD (Create, Read, Update, Delete) operations using Models
- Using Active Record for database interactions

5: Form Handling and Validation

- Creating forms in CodeIgniter
- Handling form submissions
- Implementing form validation using CodeIgniter's validation library
- Displaying validation errors

6: Sessions and Authentication

- Managing user sessions in CodeIgniter
- Implementing user authentication and authorization
- Securing routes and controllers
- Integrating authentication libraries like Ion Auth or SimpleLoginSecure

7: RESTful APIs

- [Introduction to RESTful APIs](#)
- [Creating RESTful APIs in CodeIgniter](#)
- [Handling HTTP requests and responses](#)
- [Authentication and security considerations for APIs](#)

8: File Uploading and Image Manipulation

- [Uploading files in CodeIgniter](#)
- [Validating and processing uploaded files](#)
- [Image manipulation using libraries like GD2 or ImageMagick](#)
- [Implementing image resizing, cropping, and watermarking](#)

9: Caching and Performance Optimization

- [Understanding caching techniques in CodeIgniter](#)
- [Implementing caching for improved performance](#)
- [Optimizing database queries and code for speed](#)
- [Profiling and debugging techniques](#)

10: Advanced Topics

- [Working with third-party libraries and helpers](#)
- [Internationalization and localization](#)
- [Error handling and logging](#)
- [Extending CodeIgniter with custom libraries and helpers](#)

11: Project Development

- Students work on a project applying all the concepts learned throughout the course
- Instructor provides guidance and assistance as needed
- Presentation of projects and peer review