

## Fruto Academy Frontend Developer Course Syllabus

### Course Overview:

Welcome to the Fruto Academy Frontend Developer Course! This comprehensive program will equip you with the skills and knowledge needed to build modern, responsive, and user-friendly web interfaces. Throughout this course, you'll learn the foundational technologies, tools, and best practices of frontend development.

Course Duration: 16 weeks

### Week 1-2: Introduction to Web Development

- Understanding the role of a frontend developer
- HTML5 fundamentals and document structure
- Creating well-formed HTML documents
- Introduction to CSS3 and basic styling concepts
- Applying styles to HTML elements

### Week 3-4: Responsive Web Design

- Principles of responsive design
- Using CSS media queries for various screen sizes
- Building flexible layouts with CSS Grid and Flexbox
- Designing mobile-first interfaces

### Week 5-6: Introduction to JavaScript

- Fundamentals of JavaScript programming
- Variables, data types, and operators
- Control structures: conditionals and loops
- Functions and scope
- Handling events and user interactions

### Week 7-8: Document Object Model (DOM) Manipulation

- Understanding the DOM and its importance in frontend development
- Selecting and manipulating DOM elements using JavaScript
- Event handling and delegation for interactive web applications

### Week 9-10: Frontend Frameworks (React)

- Introduction to React and its component-based architecture
- Building reusable UI components
- Managing state with hooks
- Routing and navigation
- Fetching and displaying data from APIs

### Week 11-12: Frontend Frameworks (Vue.js)

- Exploring Vue.js and its reactivity system

- Creating components and composing the user interface
- State management with Vuex
- Integrating animations and transitions

#### Week 13-14: Web Performance Optimization

- Techniques for improving frontend performance
- Minification and bundling of assets
- Lazy loading and code splitting
- Browser rendering and rendering optimizations

#### Week 15: Version Control and Collaboration

- Introduction to Git and version control concepts
- Collaborative workflows using GitHub
- Branching, merging, and pull requests

#### Week 16: Deployment and Final Project

- Web hosting and deployment platforms
- Deploying frontend applications to production
- Final project: Build and deploy a complete web application

#### Assessment and Certification:

- Weekly coding assignments: 40%
- Midterm projects (React and Vue.js): 20%
- Final project: 30%
- Participation and quizzes: 10%

#### Recommended Resources:

- "You Don't Know JS" by Kyle Simpson
- "Learning React" by Alex Banks and Eve Porcello
- Online tutorials and documentation for React, Vue.js, and related technologies

Note: This syllabus is subject to adjustment based on instructor discretion and the evolving landscape of frontend development.

For inquiries, contact us at [info@frutoacademy.com](mailto:info@frutoacademy.com) or visit [www.frutoacademy.com](http://www.frutoacademy.com).