Fruto Academy TypeScript Development Course Syllabus

Course Overview:
Welcome to the Fruto Academy TypeScript Development Course! This comprehensive program will provide you with the skills and knowledge needed to become a proficient TypeScript developer. Throughout this course, you'll learn the fundamentals of TypeScript programming, modern web development, and building robust applications.

Course Duration: 12 weeks

Week 1-2: Introduction to TypeScript
- Understanding programming concepts and paradigms
- Introduction to TypeScript and its benefits
- Setting up TypeScript environment and IDE

Week 3-4: TypeScript Basics
- Variables, data types, and basic operators
- Control structures: conditionals and loops
- Functions and arrow functions
- Type annotations and type inference

Week 5-6: Object-Oriented Programming (OOP) in TypeScript
- OOP principles in TypeScript
- Creating classes, interfaces, and enums
- Design patterns in TypeScript

Week 7-8: Modern Web Development with TypeScript
- Introduction to modern web development tools
- Building and bundling TypeScript code
- Using npm and Node.js for development

Week 9-10: Frontend Development with Angular
- Introduction to Angular framework
- Creating components, services, and modules
- Routing and handling forms in Angular

Week 11: Backend Development with Node.js and Express
- Introduction to Node.js and Express framework
- Building RESTful APIs with TypeScript
- Handling middleware and authentication

Week 12: Final Project and Deployment
- Applying TypeScript skills to a real-world project
- Deploying TypeScript applications to web servers

- Final project: Develop and deploy a complete web application using Angular and Express

Assessment and Certification:
- Weekly coding assignments: 40%
- Midterm project (TypeScript application development): 20%
- Final project: 30%
- Participation and quizzes: 10%

Recommended Resources:
- "TypeScript Handbook" by TypeScript Team
- "Angular Development with TypeScript" by Yakov Fain and Anton Moiseev
- Online tutorials and documentation for TypeScript, Angular, and Node.js

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

For inquiries, contact us at info@frutoacademy.com or visit www.frutoacademy.com.