Fruto Academy Ruby Development Course Syllabus

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

Course Duration: 12 weeks

Week 1-2: Introduction to Ruby Programming
- Understanding programming concepts and paradigms
- Introduction to the Ruby programming language
- Setting up Ruby environment and IDE

Week 3-4: Ruby Basics
- Variables, data types, and basic operators
- Control structures: conditionals and loops
- Functions and methods
- Handling exceptions and errors

Week 5-6: Object-Oriented Programming (OOP) in Ruby
- OOP principles: encapsulation, inheritance, and polymorphism
- Creating and using classes and objects
- Designing and implementing class hierarchies

Week 7-8: Ruby on Rails Framework
- Introduction to Ruby on Rails and its MVC architecture
- Setting up a Rails project
- Building controllers, models, and views
- Handling routes and database operations

Week 9-10: Web Development with Ruby
- Working with HTML, CSS, and assets in Rails
- Building dynamic web pages with ERB templates
- Using form helpers and handling user input
- Introduction to authentication and authorization

Week 11: Database Integration and ActiveRecord
- Working with databases using ActiveRecord
- Defining models and associations
- Querying and manipulating data using ActiveRecord

Week 12: Final Project and Deployment

- Applying Ruby skills to a real-world project
- Deploying Ruby on Rails applications to web servers
- Final project: Develop and deploy a complete web application using Ruby on Rails

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

Recommended Resources:
- "Learn Ruby the Hard Way" by Zed Shaw
- "Agile Web Development with Rails" by Sam Ruby, Dave Thomas, and David Heinemeier Hansson
- Online tutorials and documentation for Ruby and Ruby on Rails

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

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