Ruby Programming

Applications with Ruby on Rails Winter Term, 2010 (10 Sessions) Wednesdays 6-9:00 PM, January 13 through March 17

Course Objectives

This course introduces participants to the web development platform of Ruby on Rails. Participants will work on a larger web application project within small teams, using business requirements supplied by the instructor. Topics include:

- Rails application architecture
- RESTful Routes
- Database connectivity and migrations
- Test-driven Development
- Application Deployment
- AJAX

Prerequisites:

Database design and relational database theory; basic SQL; some exposure to web application development and front end technologies; familiarity with Ruby.

Required Textbook:

Agile Web Development with Rails (3rd edition)
PDF version recommended from:
http://pragprog.com/titles/rails3/agile-web-development-with-rails-third-edition

Instructor

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Technology Requirements:

Laptop w/ Windows XP SP2/Vista or Mac OS X (10.4.x)

Assessment Criteria:

This class is pass / no pass. In order to pass, a student must:

- attend 80% of classes
- being 20 min or more late is considered an absence
- complete 100% of assigned work
- complete a final project

Disability Accommodation

The University of Washington is committed to providing access and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. For information or to request disability accommodation contact:

• Disability Services Office: 206.543.6450/V, 206.543.6452/TTY, 206.685.7264 (FAX), or e-mail at dso@u.washington.edu.

	Topic	Chapters
Week 1	Intro	1, 2, 3, 4
Jan 13	Getting a simple rails app working	
	Exercises	
	- Simple app working "instant gratification"	
Week 2	Active Record models	15, 17, 18, 19
Jan 20	Exercises	
	- Design schemas	
	MigrationsActive Record relationships	
	- Active Record validations	
	- Approved Project	
Week 3	Agile practices	14
Jan 27	- TDD	
	- Pairing	
	- Testing in Rails	
	Exercises	
	- Ping Pong Pairing demo	
	- Testing model demo	
Week 4 Feb 3	Controllers	21, 22
	REST	
	Exercises	
	- non RESTful routes	
	- RESTful routes	
	- Simple RESTful controller	
	- Testing controller demo	
Week 5	Views	23
Feb 10	Exercises	
	- Templates	
	- Layouts - Helpers	
	- CSS	
Week 6	Sessions	27
Feb 17	Plugins	21
	Exercises	
	- Authentication example	
	- Pagination (with will_paginate)	
	- Upload a photo	
	- Resize a photo	
Week 7	AJAX	24
Feb 24	- RJS	
	jQuery	
	Exercise	
	- AJAX	
Maak 0	- Autocompletion Active Mailer	20
Week 8 Mar 3		28
	Deployment - capistrano	
	- capistratio - heroku	
	- strategies	
	Exercises	
	- Confirmation E-mail	
	- Deploy to heroku	
Week 9	Caching	
Mar 10	Searching	
Week 10	Final Project Demos	
Mar 17		