

Ruby on Windows

CodeMash v2.0.1.2

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A few assumptions...

- That you are new to Ruby
- Rails is not our end goal
- JRuby content will be slim

Schedule run down

- Installation
- Introduction to Ruby
- Rake
- Cucumber
- Bonus material...if you're good

The GitHub Repository

[https://github.com/timwingfield/
codemash-ruby-on-windows-precompiler](https://github.com/timwingfield/codemash-ruby-on-windows-precompiler)

Rake and Albacore

CodeMash PreCompiler 2012

What is Rake?

- Ruby build tool & task manager
- Created by Jim Weirich (He's here)
- Based on Make, a c-style build tool
 - Ruby + Make = Rake

Um, can't I just a script?

- Sure, if you're a dolt.
- Rake allows you to easily
 - modularize tasks
 - create explicit defaults
 - create explicit prerequisites
 - find the build file, via conventions

Rakefile

- Only 1 rakefile per directory
- No extension on the file
- Filename is flexible on capitalization
- The rakefile contains executable ruby code
 - no XML
 - full power of the ruby language

Sample Task

```
task hello_world do
  puts 'hello world'
end
```

Exercise: Image Processor

Iteration #1

- Create a task to rename camel-cased file names to ruby-style names
- Example: “KoalaBear.jpg” would be renamed “koala_bear.jpg”
- Output progress to the user

Thing you might Google if your internet isn't working...

- ❖ How do I get the files in a directory?

```
files = Dir.glob(path)
```

- ❖ How do I split a string by capital letters?

```
words = File.basename(file).scan(/([A-Z][a-z]+)/)
```

- ❖ How do I rename a file?

```
File.rename(file, new_name)
```

Retrospective and User Feedback for Iteration #1

- Your thoughts?
 - Shouldn't we be testing or something?
- The users have no idea how to run it.

Exercise: Image Processor

Iteration #2

- Make the interface more user friendly
 - Create a ‘default’ task
 - Add the ‘desc’ attribute to the task
- Copy the renamed files to “production” folder
- Output progress to the user

Thing you might Google if your internet isn't working...

- ❖ How do I set default task?

```
task :default => [ :task_name ]
```

- ❖ What does the ‘desc’ attribute do?

Allows “rake -T” on the command line

- ❖ How do I copy files?

```
cp(file, new_name)
```

Retrospective and User Feedback for Iteration #2

- Your thoughts?
- The users want the process to include a staging folder so they can review it before it goes to production:
`rename => copy to staging => copy to production`
- Sometimes they might want to not review it and just type one command

Exercise: Image Processor

Iteration #3

- Create a task for each action
- Create a task that performs all actions
- Allow users to pass in a ‘gif’ or ‘jpg’ parameter to filter the processed files
- Error handling is out of scope

Thing you might Google if your internet isn't working...

- » How do I pass parameters to a task?

```
task :rename_images, [:extension] do |t, args|
```

Part deus: Albacore

- Albacore is a Ruby gem that wraps many common .NET build tasks
- Allows you to automate many tasks easily with just a little bit of Ruby and no XML.
- Many CI environments have built-in facilities to work with rakefiles.

Can't I build it with Visual Studio?

- Visual Studio doesn't play well with CI environments
 - Even TFS uses MSBuild
- CI and Continuous Deployment are critical means of feedback for development

Can't I just use MSBuild or nANT?

- Sure, if you're a dolt.
- Why do you hate XML so much?
 - Wingfield's Rant
- With a script-language based build tool, you have more power.
- Usually less lines of code
- Usually easier to debug
- Reusable skill

Albacore Example

- Tasks
 - Build
 - Release Build
 - Change Connection String
- Based on a real production build file