

# COMPARING JVM WEB FRAMEWORKS

Matt Raible

<http://raibledesigns.com>

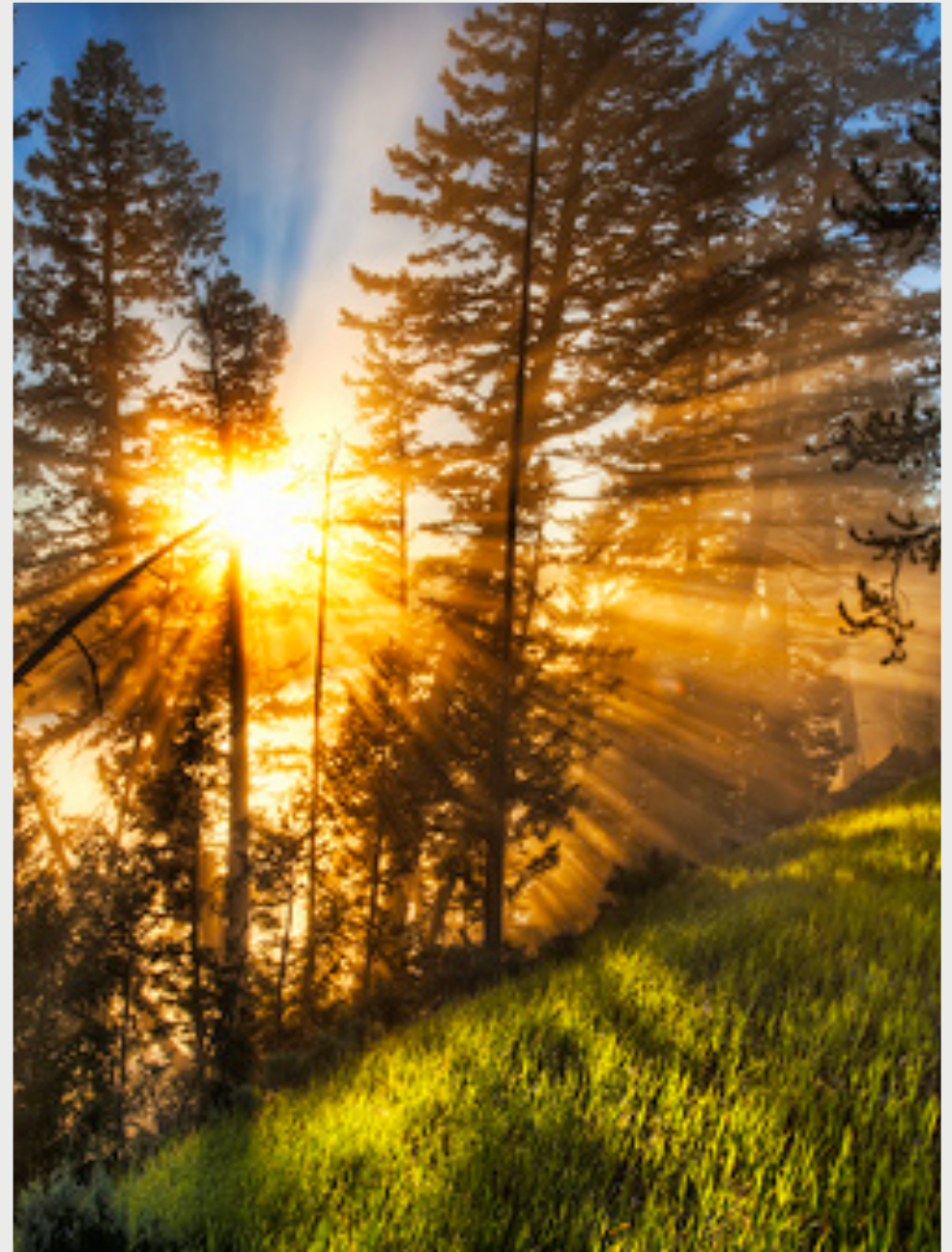
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# INTRODUCTIONS

- Your experience with web development?
- Your experience with Java EE development?
- What do you want to get from this session?
- Experience with Grails, GWT, Rails, Spring MVC, Wicket or Tapestry?





Blogger on [raibledesigns.com](http://raibledesigns.com)

Father, Skier,  
Cyclist

Founder of [AppFuse](#)

Web Framework Connoisseur

Who is **Matt Raible**?





# SESSION AGENDA

- The Problem with Web Frameworks
- The Candidates
- Comparison Points
- The Matrix
- Conclusion
- Q and A





# THE PROBLEM



tapestry



Struts<sup>2</sup>





# HOW DO YOU CHOOSE?





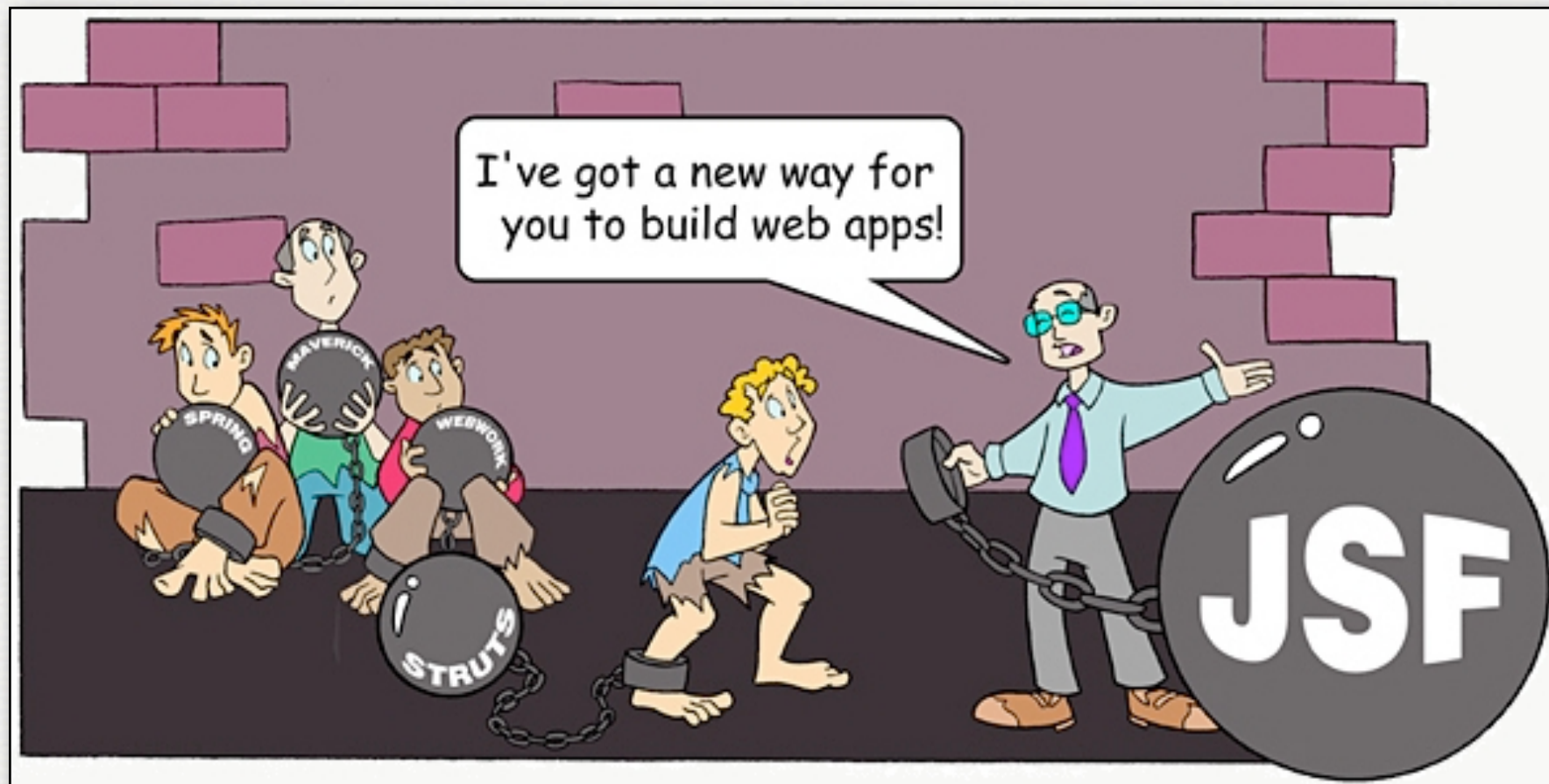


ELIMINATE, DON'T INCLUDE











... while I'd \*love\* to see life made simpler for Java web developers, and a lot of the things happening in Struts2 are going that way -- it won't be me doing it.

I've gone over to the dark side :-)) and much prefer to develop in Rails -- for the conciseness mentioned above, but also because I don't ever have to do a "build" or "deploy" step during my development cycle any more. But you guys and gals need to be reminded that \*this\* is the kind of thing you are competing against if you expect to attract Rails developers ... or to avoid even more "previously Java web developer" defectors like me :-)).

*-- Craig McClanahan, 10/23/2007*

<http://markmail.org/thread/qfb5sekad33eobh2>



# JAMES GOSLING ON JSF

**James Gosling on Apple, Apache, Google, Oracle and the Future of Java**

UserGroupsatGoogle

62 videos

Subscribe



<http://www.youtube.com/watch?v=9ei-rbULWoA#t=47m>



# CHOOSING A FRAMEWORK

- Choose a short list of frameworks to prototype with.
- Create an application prototype with each framework.
- Document findings and create a matrix with important criteria.
- Create presentation to summarize document.
- Deliver document, presentation and recommendation.



# 2007: 6 IMPORTANT FACTORS

- Request, Component or RIA Framework
- Ease of Development
- Project Community
- Project Future and Roadmap
- Maintenance
- Technical Features





# REQUEST, COMPONENT OR RIA

- Are you developing...
  - ... a consumer facing site?
  - ... a desktop-like, application?
  - ... a media-rich site?
- If the framework is built for state-fulness, should you use it in a stateless architecture?





# TYPES OF APPLICATIONS

- High-traffic, internet facing, infinite scalability
- Intranet-based, behind the firewall, few users
- Products, to be maintained for 5-10 years
- Legacy Backend
- Others?



# TYPES OF FRAMEWORKS

- Request Based Frameworks
  - Struts 2, Spring MVC, Rails, Stripes
- Component Based Frameworks
  - JSF, Tapestry, GWT
- Rich Internet Applications
  - Flex
- One Size Fits All
  - Grails





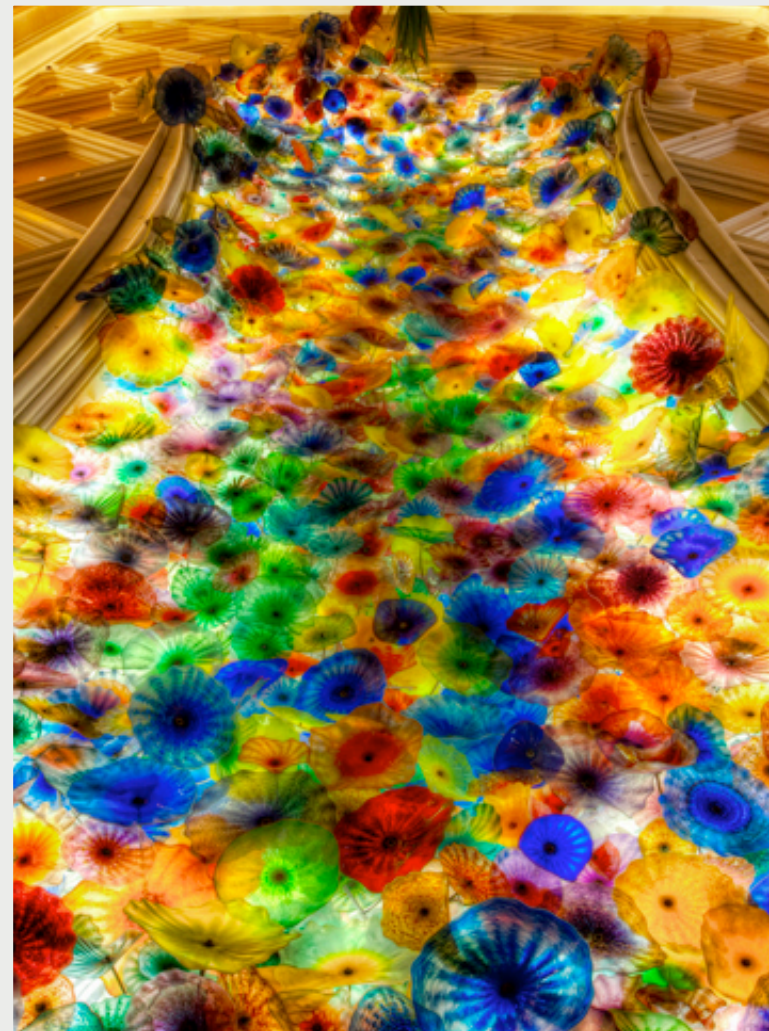
# DO THEY MATCHUP?

- High-traffic, internet facing, infinite scalability
  - **Request-based frameworks**
- Intranet-based, behind the firewall, few users
  - **Component-based frameworks**
- Products, to be maintained for 5-10 years
  - **Largest Community, Most Vendor Support**
- Legacy Backend
  - **Same Language as backend**



# 2010: NOW THERE'S 20

1. Developer Productivity
2. Developer Perception
3. Learning Curve
4. Project Health
5. Developer Availability
6. Job Trends





# 2010: COMPARISON POINTS

7. Templating

8. Components

9. Ajax

10. Plugins or Add-Ons

11. Scalability

12. Testing Support





# 2010: COMPARISON POINTS

13.i18n and l10n

14.Validation

15.Multi-language Support (Groovy / Scala)

16.Quality of Documentation/Tutorials

17.Books Published

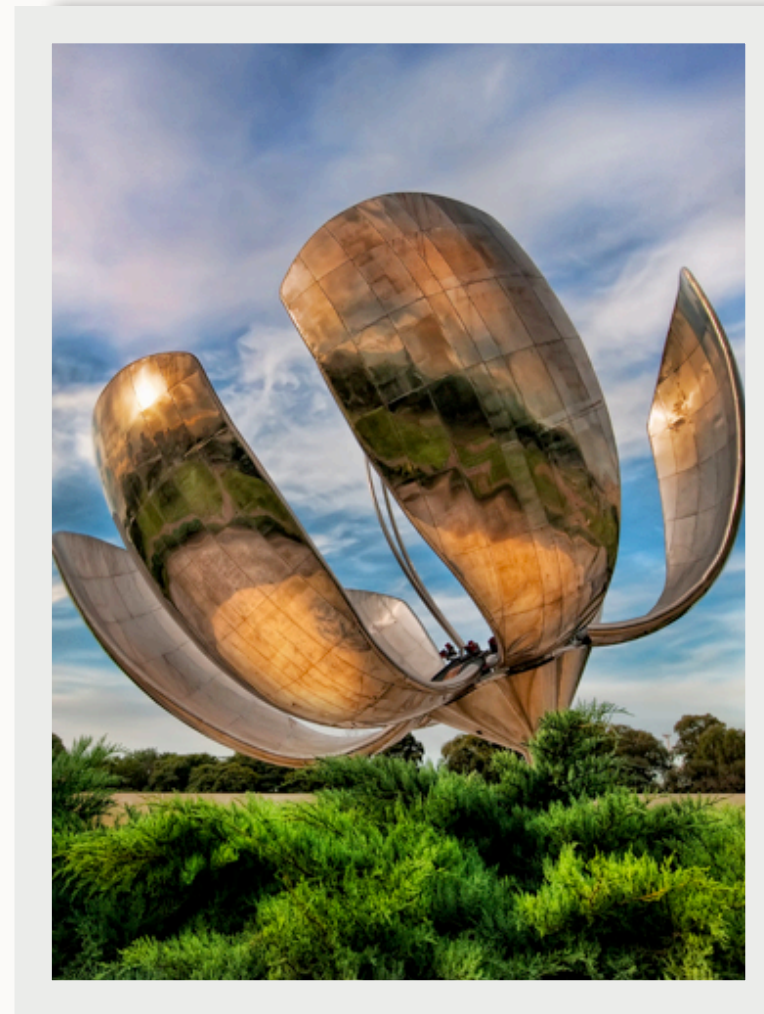
18.REST Support (client and server)



# 2010: COMPARISON POINTS

19.Mobile / iPhone Support

20.Degree of Risk





# COMPARISON MATRIX

| Criteria                                | Struts 2 | Spring MVC | Wicket | JSF  | Tapestry | Stripes | GWT  | Grails | Rails | Flex | Vaadin | Lift | Play |
|---|----------|------------|--------|------|----------|---------|------|--------|-------|------|--------|------|------|
| Developer Productivity                  | 0.50     | 0.50       | 0.50   | 0.50 | 1.00     | 0.50    | 1.00 | 1.00   | 1.00  | 0.00 | 1.00   | 0.50 | 1.00 |
| Developer Perception                    | 0.50     | 1.00       | 1.00   | 0.00 | 0.50     | 1.00    | 1.00 | 1.00   | 1.00  | 1.00 | 1.00   | 1.00 | 1.00 |
| Learning Curve                          | 1.00     | 1.00       | 0.50   | 0.50 | 0.50     | 1.00    | 1.00 | 1.00   | 1.00  | 1.00 | 1.00   | 0.50 | 1.00 |
| Project Health                          | 0.50     | 1.00       | 1.00   | 0.50 | 0.50     | 0.50    | 1.00 | 1.00   | 1.00  | 0.50 | 1.00   | 1.00 | 1.00 |
| Developer Availability                  | 0.50     | 1.00       | 0.50   | 1.00 | 1.00     | 0.50    | 1.00 | 0.50   | 1.00  | 1.00 | 0.50   | 0.00 | 0.50 |
| Job Trends                              | 1.00     | 1.00       | 0.00   | 1.00 | 0.50     | 0.00    | 1.00 | 0.50   | 1.00  | 1.00 | 0.00   | 0.00 | 0.50 |
| Templating                              | 1.00     | 1.00       | 1.00   | 0.50 | 1.00     | 1.00    | 0.50 | 1.00   | 1.00  | 0.50 | 0.50   | 0.50 | 0.50 |
| Components                              | 0.00     | 0.00       | 1.00   | 1.00 | 1.00     | 0.00    | 0.50 | 0.50   | 0.50  | 1.00 | 1.00   | 0.00 | 0.00 |
| Ajax                                    | 0.50     | 1.00       | 0.50   | 0.50 | 0.50     | 0.50    | 1.00 | 0.50   | 0.50  | 0.50 | 1.00   | 1.00 | 0.50 |
| Plugins or Add-Ons                      | 0.50     | 0.00       | 1.00   | 1.00 | 0.50     | 0.00    | 1.00 | 1.00   | 1.00  | 1.00 | 1.00   | 0.50 | 0.50 |
| Scalability                             | 1.00     | 1.00       | 0.50   | 0.50 | 0.50     | 1.00    | 1.00 | 0.50   | 0.50  | 0.50 | 0.50   | 1.00 | 1.00 |
| Testing                                 | 1.00     | 1.00       | 0.50   | 0.50 | 1.00     | 1.00    | 0.50 | 1.00   | 1.00  | 0.00 | 0.50   | 0.50 | 1.00 |
| i18n and l10n                           | 1.00     | 1.00       | 1.00   | 0.50 | 1.00     | 1.00    | 1.00 | 1.00   | 0.50  | 0.50 | 0.50   | 1.00 | 1.00 |
| Validation                              | 1.00     | 1.00       | 1.00   | 0.50 | 1.00     | 1.00    | 1.00 | 1.00   | 1.00  | 1.00 | 1.00   | 0.50 | 0.50 |
| Multi-language Support (Groovy / Scala) | 0.50     | 0.50       | 1.00   | 1.00 | 1.00     | 1.00    | 0.00 | 1.00   | 0.00  | 0.00 | 1.00   | 0.00 | 0.50 |
| Quality of Documentation/Tutorials      | 0.50     | 1.00       | 0.50   | 0.50 | 0.50     | 1.00    | 1.00 | 1.00   | 1.00  | 1.00 | 1.00   | 1.00 | 1.00 |
| Books Published                         | 1.00     | 1.00       | 0.50   | 1.00 | 0.50     | 0.50    | 1.00 | 1.00   | 1.00  | 1.00 | 0.50   | 0.50 | 0.00 |
| REST Support (client and server)        | 0.50     | 1.00       | 0.50   | 0.00 | 0.50     | 0.50    | 0.50 | 1.00   | 1.00  | 0.50 | 0.50   | 0.50 | 0.50 |
| Mobile / iPhone Support                 | 1.00     | 1.00       | 1.00   | 0.50 | 1.00     | 1.00    | 1.00 | 1.00   | 1.00  | 0.50 | 1.00   | 1.00 | 1.00 |
| Degree of Risk                          | 1.00     | 1.00       | 1.00   | 1.00 | 1.00     | 1.00    | 1.00 | 1.00   | 1.00  | 1.00 | 0.50   | 0.50 | 0.50 |

<http://bit.ly/jvm-frameworks-matrix>



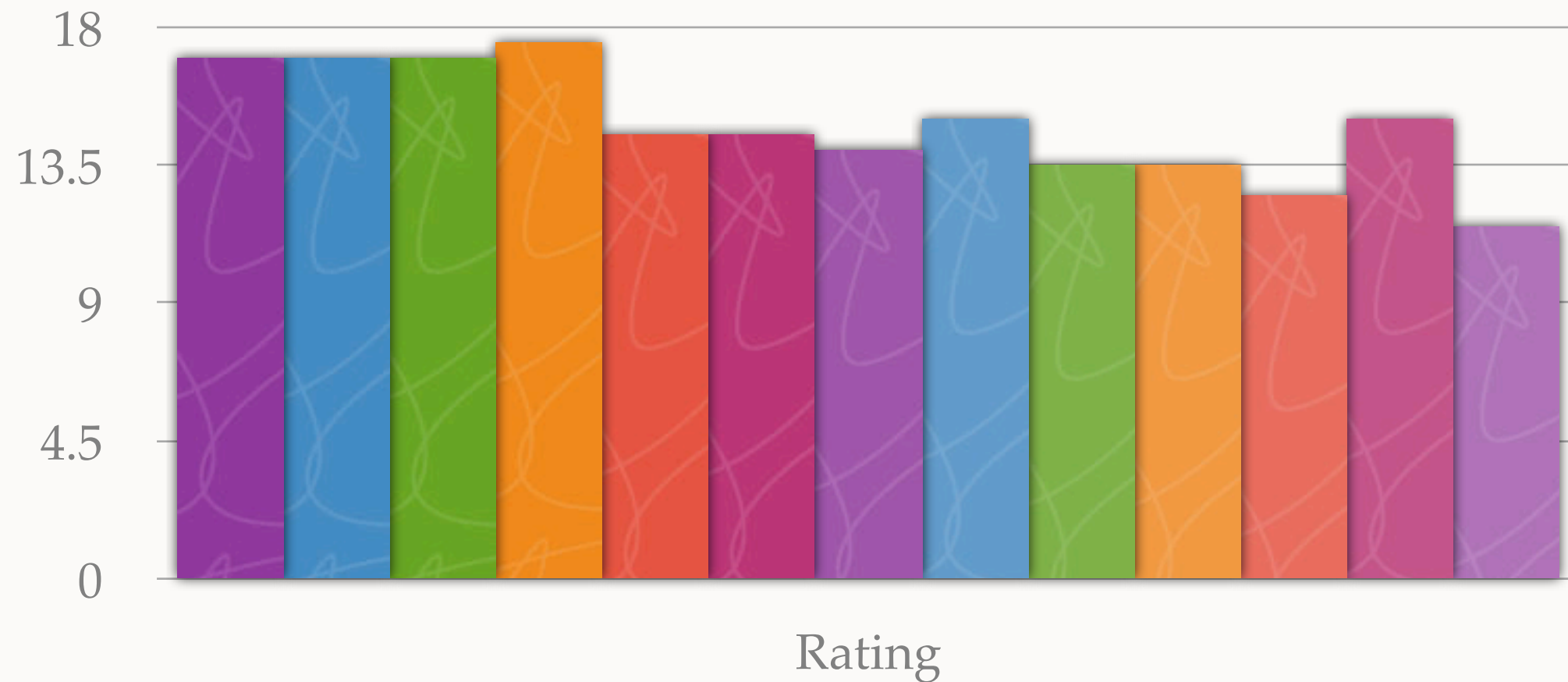
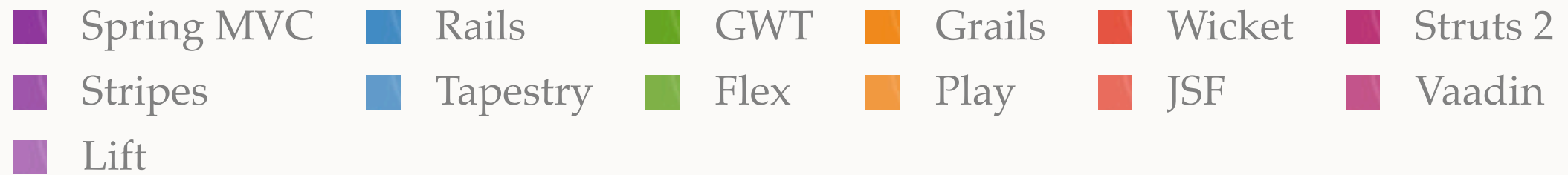
# COMPARISON MATRIX

| Criteria                                | Struts 2    | Spring MVC | Wicket      | JSF         | Tapestry  | Stripes   | GWT       | Grails      | Rails     | Flex        | Vaadin    | Lift        | Play        |
|---|-------------|------------|-------------|-------------|-----------|-----------|-----------|-------------|-----------|-------------|-----------|-------------|-------------|
| Developer Productivity                  | 0.50        | 0.50       | 0.50        | 0.50        | 1.00      | 0.50      | 1.00      | 1.00        | 1.00      | 0.00        | 1.00      | 0.50        | 1.00        |
| Developer Perception                    | 0.50        | 1.00       | 1.00        | 0.00        | 0.50      | 1.00      | 1.00      | 1.00        | 1.00      | 1.00        | 1.00      | 1.00        | 1.00        |
| Learning Curve                          | 1.00        | 1.00       | 0.50        | 0.50        | 0.50      | 1.00      | 1.00      | 1.00        | 1.00      | 1.00        | 1.00      | 0.50        | 1.00        |
| Project Health                          | 0.50        | 1.00       | 1.00        | 0.50        | 0.50      | 0.50      | 1.00      | 1.00        | 1.00      | 0.50        | 1.00      | 1.00        | 1.00        |
| Developer Availability                  | 0.50        | 1.00       | 0.50        | 1.00        | 1.00      | 0.50      | 1.00      | 0.50        | 1.00      | 1.00        | 0.50      | 0.00        | 0.50        |
| Job Trends                              | 1.00        | 1.00       | 0.00        | 1.00        | 0.50      | 0.00      | 1.00      | 0.50        | 1.00      | 1.00        | 0.00      | 0.00        | 0.50        |
| Templating                              | 1.00        | 1.00       | 1.00        | 0.50        | 1.00      | 1.00      | 0.50      | 1.00        | 1.00      | 0.50        | 0.50      | 0.50        | 0.50        |
| Components                              | 0.00        | 0.00       | 1.00        | 1.00        | 1.00      | 0.00      | 0.50      | 0.50        | 0.50      | 1.00        | 1.00      | 0.00        | 0.00        |
| Ajax                                    | 0.50        | 1.00       | 0.50        | 0.50        | 0.50      | 0.50      | 1.00      | 0.50        | 0.50      | 0.50        | 1.00      | 1.00        | 0.50        |
| Plugins or Add-Ons                      | 0.50        | 0.00       | 1.00        | 1.00        | 0.50      | 0.00      | 1.00      | 1.00        | 1.00      | 1.00        | 1.00      | 0.50        | 0.50        |
| Scalability                             | 1.00        | 1.00       | 0.50        | 0.50        | 0.50      | 1.00      | 1.00      | 0.50        | 0.50      | 0.50        | 0.50      | 1.00        | 1.00        |
| Testing                                 | 1.00        | 1.00       | 0.50        | 0.50        | 1.00      | 1.00      | 0.50      | 1.00        | 1.00      | 0.00        | 0.50      | 0.50        | 1.00        |
| i18n and l10n                           | 1.00        | 1.00       | 1.00        | 0.50        | 1.00      | 1.00      | 1.00      | 1.00        | 0.50      | 0.50        | 0.50      | 1.00        | 1.00        |
| Validation                              | 1.00        | 1.00       | 1.00        | 0.50        | 1.00      | 1.00      | 1.00      | 1.00        | 1.00      | 1.00        | 1.00      | 0.50        | 0.50        |
| Multi-language Support (Groovy / Scala) | 0.50        | 0.50       | 1.00        | 1.00        | 1.00      | 1.00      | 0.00      | 1.00        | 0.00      | 0.00        | 1.00      | 0.00        | 0.50        |
| Quality of Documentation/Tutorials      | 0.50        | 1.00       | 0.50        | 0.50        | 0.50      | 1.00      | 1.00      | 1.00        | 1.00      | 1.00        | 1.00      | 1.00        | 1.00        |
| Books Published                         | 1.00        | 1.00       | 0.50        | 1.00        | 0.50      | 0.50      | 1.00      | 1.00        | 1.00      | 1.00        | 0.50      | 0.50        | 0.00        |
| REST Support (client and server)        | 0.50        | 1.00       | 0.50        | 0.00        | 0.50      | 0.50      | 0.50      | 1.00        | 1.00      | 0.50        | 0.50      | 0.50        | 0.50        |
| Mobile / iPhone Support                 | 1.00        | 1.00       | 1.00        | 0.50        | 1.00      | 1.00      | 1.00      | 1.00        | 1.00      | 0.50        | 1.00      | 1.00        | 1.00        |
| Degree of Risk                          | 1.00        | 1.00       | 1.00        | 1.00        | 1.00      | 1.00      | 1.00      | 1.00        | 1.00      | 1.00        | 0.50      | 0.50        | 0.50        |
| <b>Totals</b>                           | <b>14.5</b> | <b>17</b>  | <b>14.5</b> | <b>12.5</b> | <b>15</b> | <b>14</b> | <b>17</b> | <b>17.5</b> | <b>17</b> | <b>13.5</b> | <b>15</b> | <b>11.5</b> | <b>13.5</b> |

<http://bit.ly/jvm-frameworks-matrix>



# MATRIX RESULTS





# MATRIX RESULTS

- Grails (17.5)
- GWT (17)
- Ruby on Rails (17)
- Spring MVC (17)
- Tapestry (15)
- Vaadin (15)





# WEIGHTED MATRIX

| Weight | Criteria                                | Struts 2 | Spring MVC | Wicket | JSF   | Tapestry | Stripes | GWT   | Grails | Rails | Flex  | Vaadin | Lift  | Play  |
|--------|---|----------|------------|--------|-------|----------|---------|-------|--------|-------|-------|--------|-------|-------|
| 10     | Developer Productivity                  | 5.00     | 5.00       | 5.00   | 5.00  | 10.00    | 5.00    | 10.00 | 10.00  | 10.00 | 0.00  | 10.00  | 5.00  | 10.00 |
| 0      | Developer Perception                    | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 5      | Learning Curve                          | 5.00     | 5.00       | 2.50   | 2.50  | 2.50     | 5.00    | 5.00  | 5.00   | 5.00  | 5.00  | 5.00   | 2.50  | 5.00  |
| 5      | Project Health                          | 2.50     | 5.00       | 5.00   | 2.50  | 2.50     | 2.50    | 5.00  | 5.00   | 5.00  | 2.50  | 5.00   | 5.00  | 5.00  |
| 5      | Developer Availability                  | 2.50     | 5.00       | 2.50   | 5.00  | 5.00     | 2.50    | 5.00  | 2.50   | 5.00  | 5.00  | 2.50   | 0.00  | 2.50  |
| 0      | Job Trends                              | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 0      | Templating                              | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 0      | Components                              | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 5      | Ajax                                    | 2.50     | 5.00       | 2.50   | 2.50  | 2.50     | 2.50    | 5.00  | 2.50   | 2.50  | 2.50  | 5.00   | 5.00  | 2.50  |
| 5      | Plugins or Add-Ons                      | 2.50     | 0.00       | 5.00   | 5.00  | 2.50     | 0.00    | 5.00  | 5.00   | 5.00  | 5.00  | 5.00   | 2.50  | 2.50  |
| 10     | Scalability                             | 10.00    | 10.00      | 5.00   | 5.00  | 5.00     | 10.00   | 10.00 | 5.00   | 5.00  | 5.00  | 5.00   | 10.00 | 10.00 |
| 10     | Testing                                 | 10.00    | 10.00      | 5.00   | 5.00  | 10.00    | 10.00   | 5.00  | 10.00  | 10.00 | 0.00  | 5.00   | 5.00  | 10.00 |
| 0      | i18n and l10n                           | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 5      | Validation                              | 5.00     | 5.00       | 5.00   | 2.50  | 5.00     | 5.00    | 5.00  | 5.00   | 5.00  | 5.00  | 5.00   | 2.50  | 2.50  |
| 10     | Multi-language Support (Groovy / Scala) | 5.00     | 5.00       | 10.00  | 10.00 | 10.00    | 10.00   | 0.00  | 10.00  | 0.00  | 0.00  | 10.00  | 0.00  | 5.00  |
| 10     | Quality of Documentation/Tutorials      | 5.00     | 10.00      | 5.00   | 5.00  | 5.00     | 10.00   | 10.00 | 10.00  | 10.00 | 10.00 | 10.00  | 10.00 | 10.00 |
| 0      | Books Published                         | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 10     | REST Support (client and server)        | 5.00     | 10.00      | 5.00   | 0.00  | 5.00     | 5.00    | 5.00  | 10.00  | 10.00 | 5.00  | 5.00   | 5.00  | 5.00  |
| 10     | Mobile / iPhone Support                 | 10.00    | 10.00      | 10.00  | 5.00  | 10.00    | 10.00   | 10.00 | 10.00  | 10.00 | 5.00  | 10.00  | 10.00 | 10.00 |
| 0      | Degree of Risk                          | 0.00     | 0.00       | 0.00   | 0.00  | 0.00     | 0.00    | 0.00  | 0.00   | 0.00  | 0.00  | 0.00   | 0.00  | 0.00  |
| 100    | <b>Weighted Totals</b>                  | 70       | 85         | 67.5   | 55    | 75       | 77.5    | 80    | 90     | 82.5  | 50    | 82.5   | 62.5  | 80    |



# WEIGHTED RESULTS

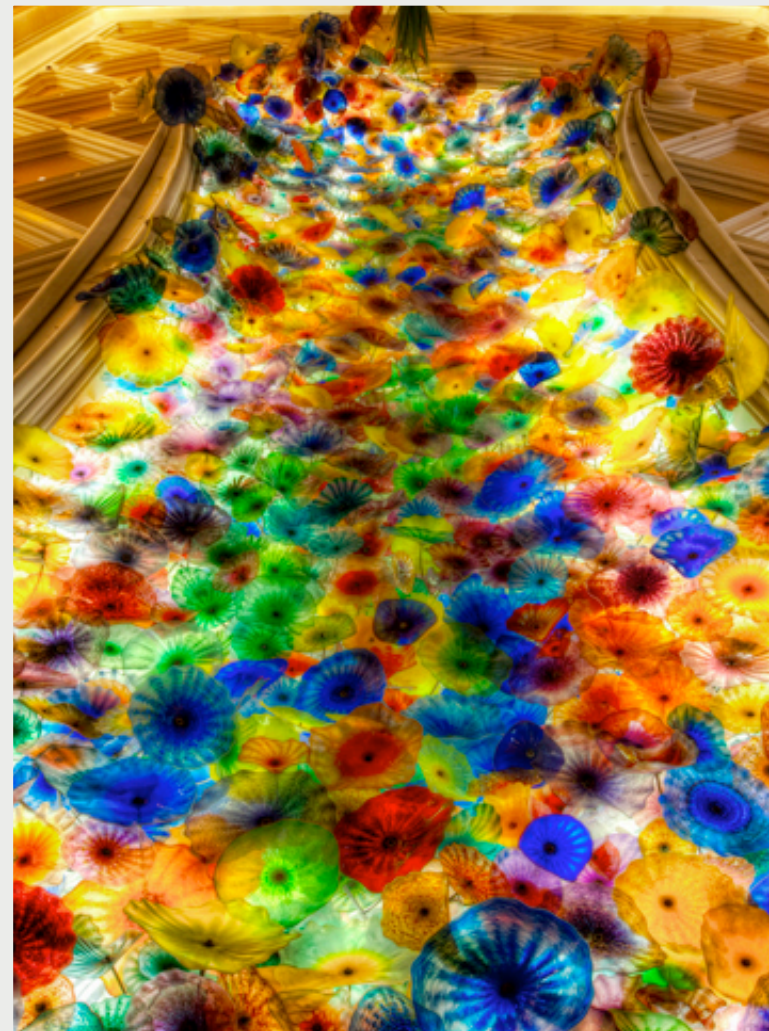
- Grails (90)
- Spring MVC (85)
- Ruby on Rails (82.5)
- Vaadin (82.5)
- Play (80)
- GWT (80)





# RATINGS LOGIC

1. Developer Productivity
2. Developer Perception
3. Learning Curve
4. Project Health
5. Developer Availability
6. Job Trends





# RATINGS LOGIC

- 7. Templating
- 8. Components
- 9. Ajax
- 10. Plugins or Add-Ons
- 11. Scalability
- 12. Testing Support





# RATINGS LOGIC

13. i18n and l10n

14. Validation

15. Multi-language Support (Groovy / Scala)

16. Quality of Documentation/Tutorials

17. Books Published

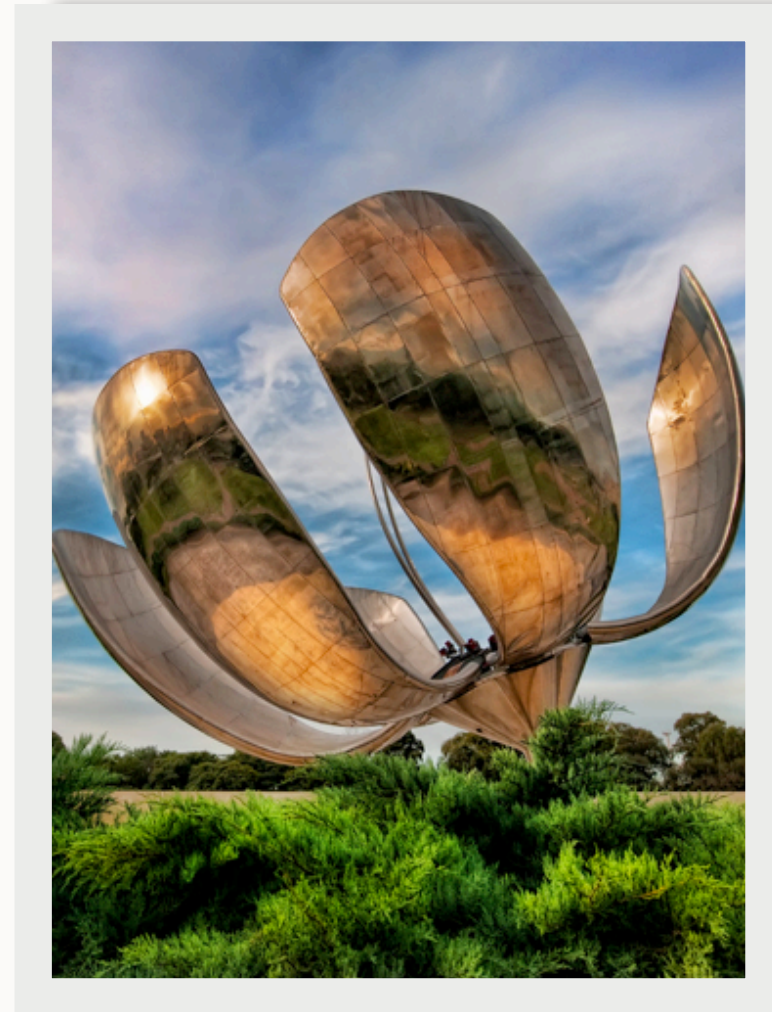
18. REST Support (client and server)



# RATINGS LOGIC

19. Mobile / iPhone Support

20. Degree of Risk



<http://bit.ly/jvm-webfwk-ratings-logic>



# PROS AND CONS





# SPRING MVC

## ● Pros

- Easy Configuration with Annotations and Conventions
- Integrates with many view options seamlessly: JSP / JSTL, Tiles, FreeMarker, Excel, PDF, JSON
- Excellent REST Support

## ● Cons

- Instant reload not built-in, need JRebel or Spring Roo
- No open development process, need to be SpringSource
- Ajax requires 3rd-party library (can be a good thing!)



# GWT

- **Pros**

- Write Java => Produces Optimized JavaScript
- Easy to learn and develop with standard Java Tools
- Vibrant Community

- **Cons**

- You have to know Java
- Slow to compile, difficult to test
- More like a JSP Tag Library than a web framework



# RUBY ON RAILS

- **Pros**

- Easy to learn and understand for Web Developers
- Lots and lots of documentation
- Passionate Community

- **Cons**

- Slightly less performant by default
- Dynamic language means more tests
- Development Tools and Debugging



# GRAILS

- **Pros**

- Easy dynamic language transition for Java Developers
- Groovy
- Plugins for all types of applications

- **Cons**

- Groovy learning targets Java Developers
- Stack traces are horrendous
- Knowledge of underlying frameworks not required, but helpful

# WICKET

- **Pros**

- Great for Java Developers
- Tight binding between pages and views
- Active community - support from creators

- **Cons**

- No Jobs or Developers
- Stateful by default
- HTML Templates live next to Java code by default



# TAPESTRY

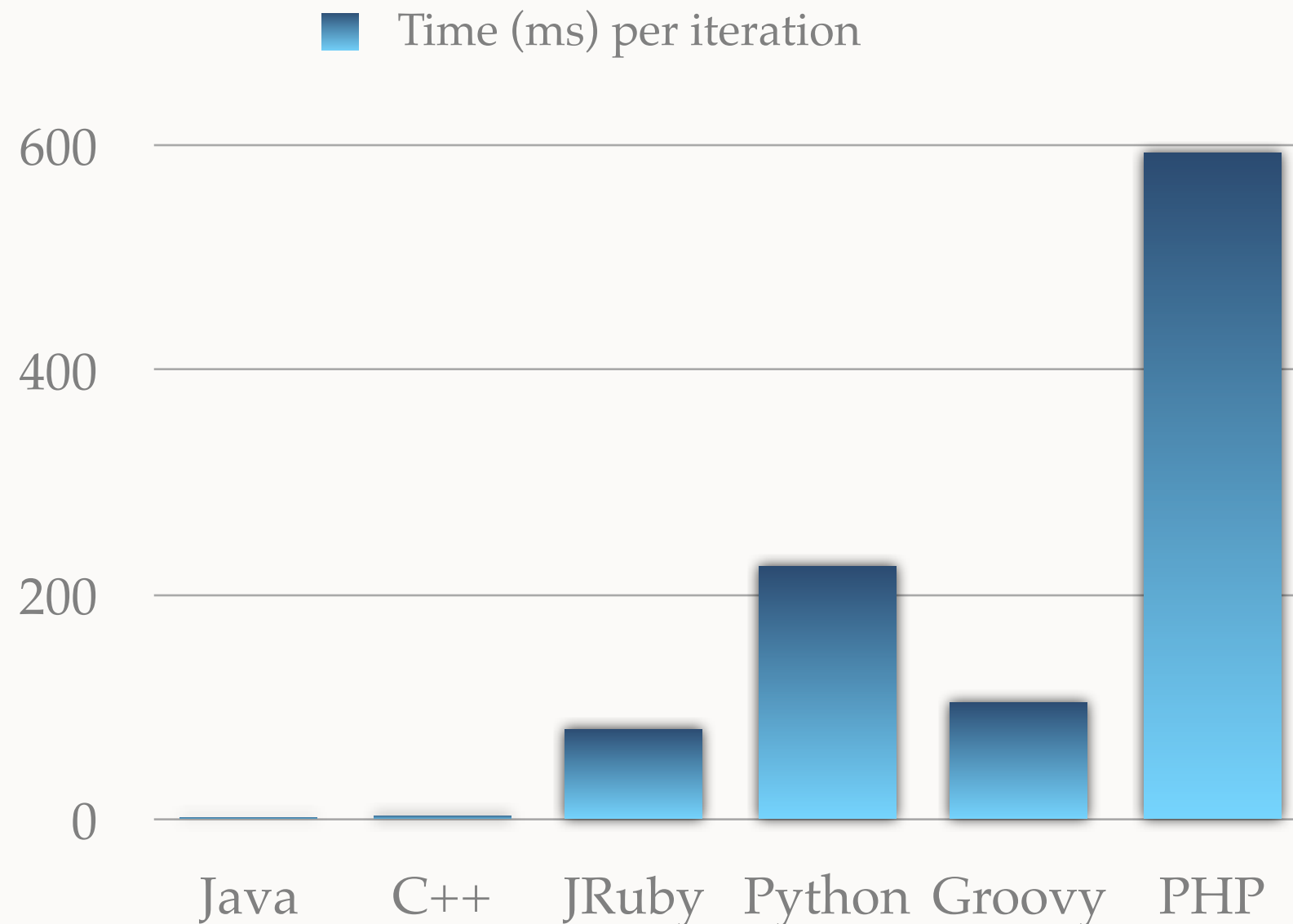
- **Pros**

- Live Class Reloading
- Development emphasis on performance and scalability
- Excellent Exception Reporting

- **Cons**

- No Jobs
- Prototype baked in for JS Library
- Annotations vs. Conventions

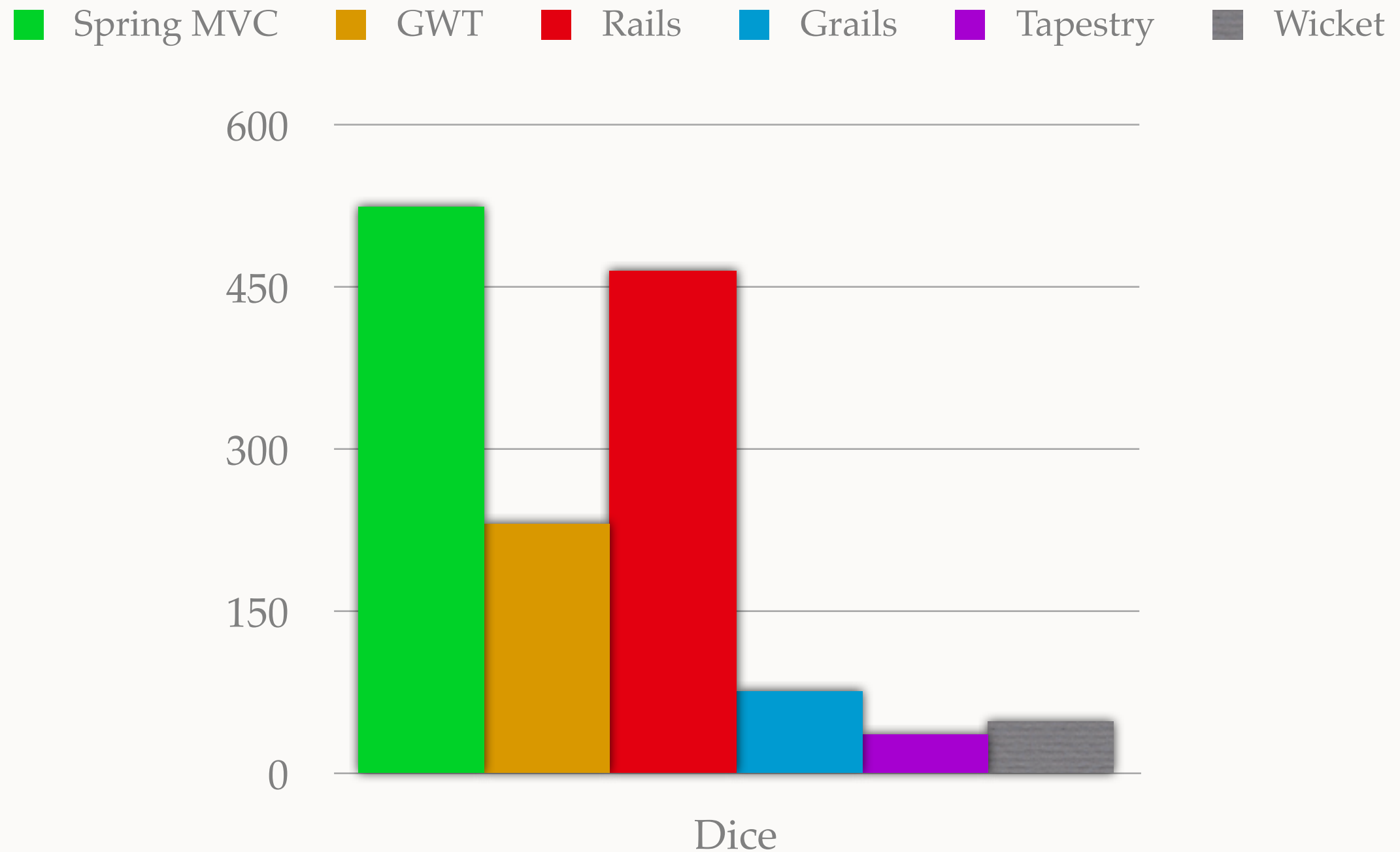
# LANGUAGE PERFORMANCE



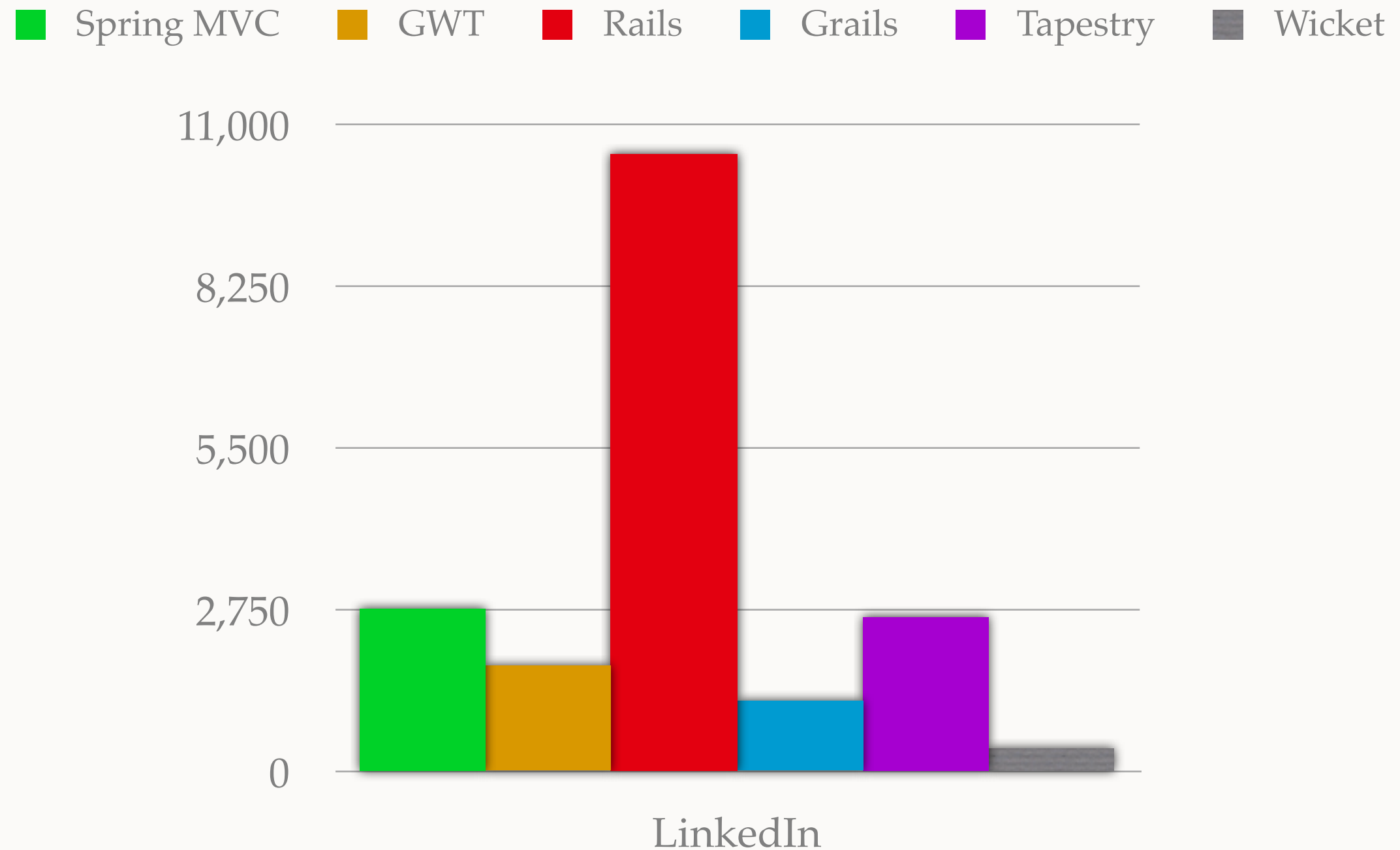
<http://blog.dhananjaynene.com/2008/07/performance-comparison-c-java-python-ruby-jython-jruby-groovy/>



# JOB IN 2010 (US)

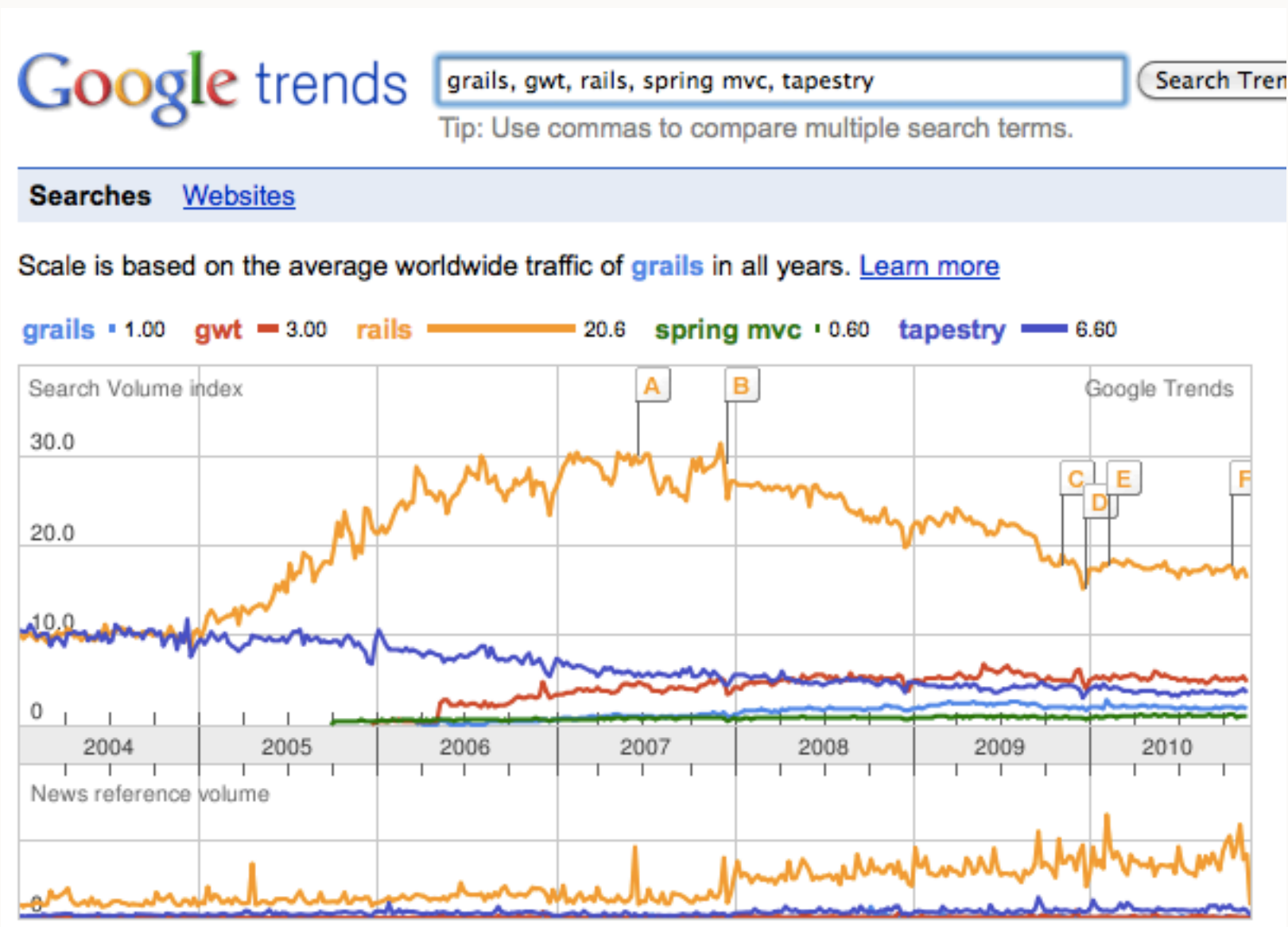


# DEVELOPER SKILLS (US)



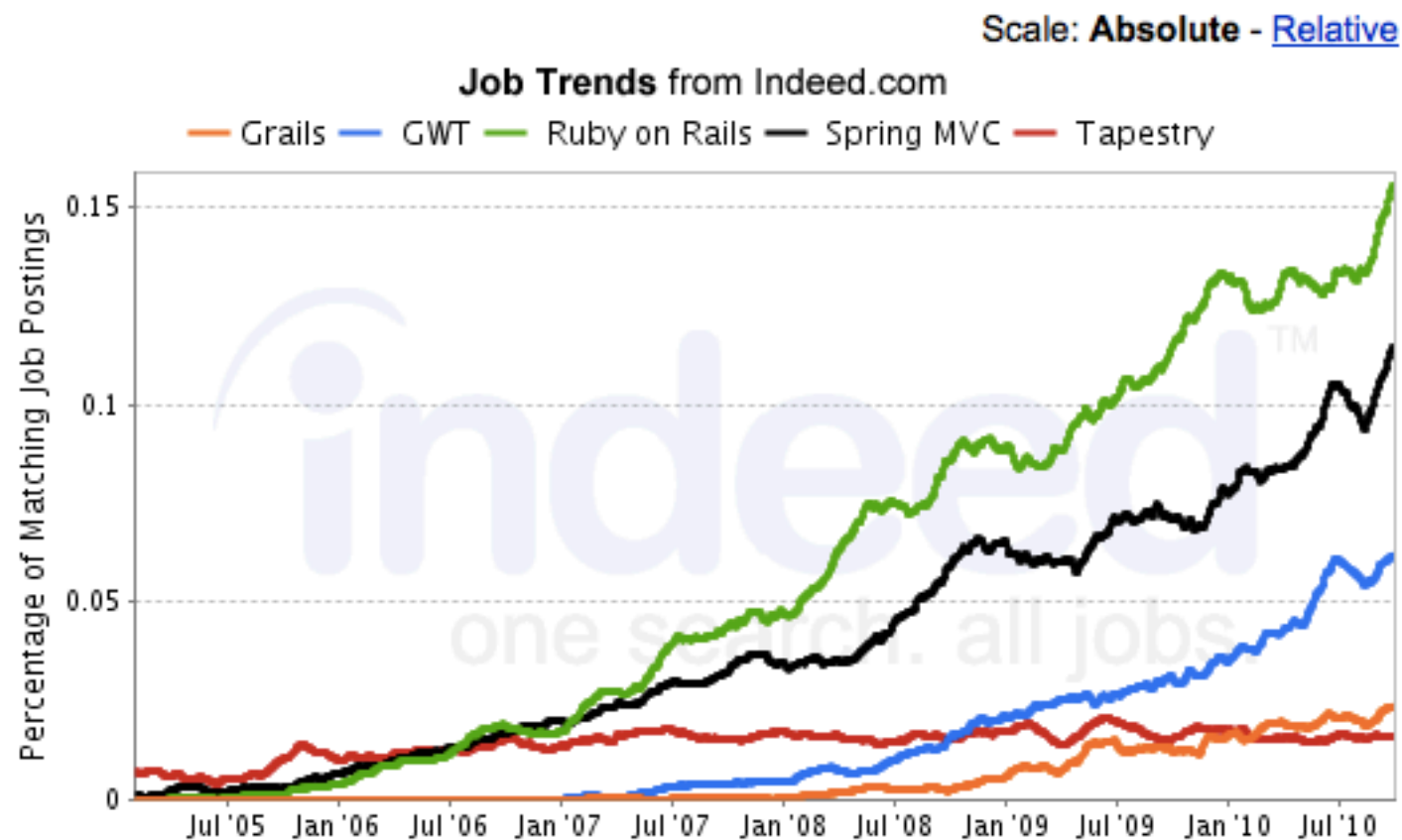


# PRETTY GRAPHS



# PRETTY GRAPHS

## Grails, GWT, Ruby on Rails, Spring MVC, Tapestry Job Trends



Indeed.com searches millions of jobs from thousands of job sites.  
This job trends graph shows the percentage of jobs we find that contain your search terms.

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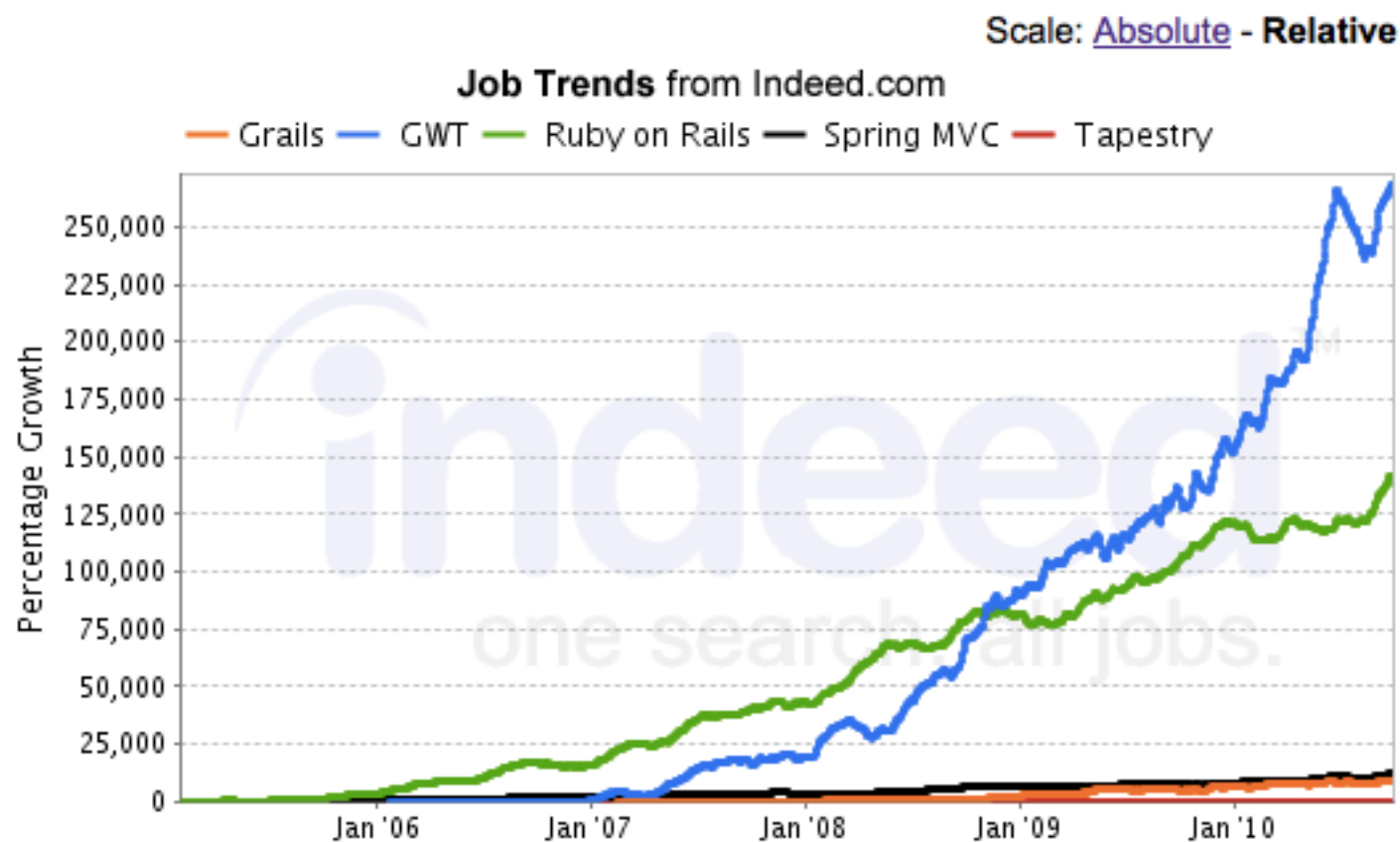
### Top Job Trends

1. [Facebook](#)
2. [Virtualization](#)
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8. [Patient Care Technician](#)
9. [Cloud Computing](#)
10. [Blogger](#)



# PRETTY GRAPHS

## Grails, GWT, Ruby on Rails, Spring MVC, Tapestry Job Trends



Indeed.com searches millions of jobs from thousands of job sites.  
This job trends graph shows relative growth for jobs we find matching your search terms.

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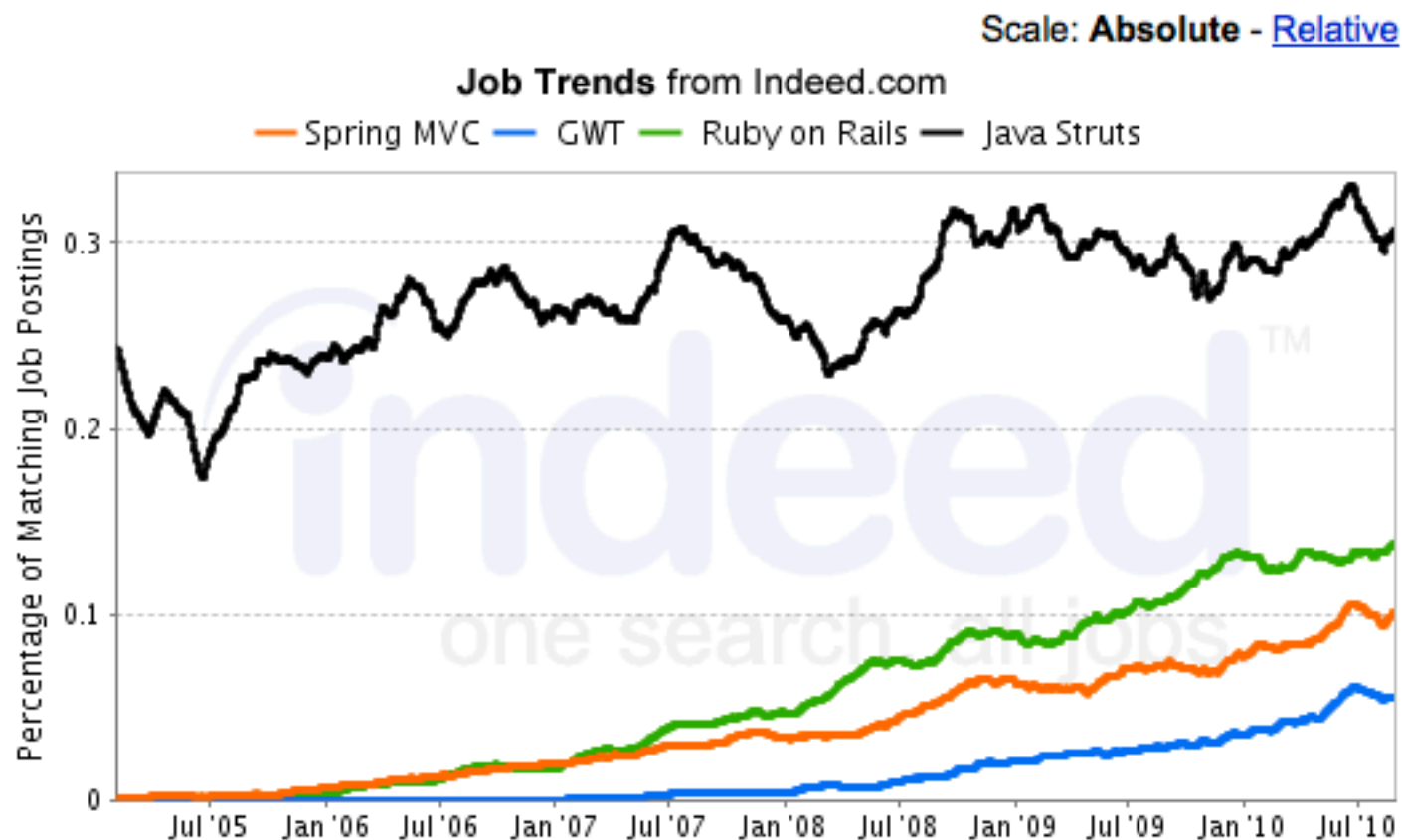
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### Top Job Trends

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6. [Twitter](#)
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8. [Patient Care Technician](#)
9. [Cloud Computing](#)
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# PRETTY GRAPHS

## Spring MVC, GWT, Ruby on Rails, Java Struts Job Trends



Indeed.com searches millions of jobs from thousands of job sites.  
This job trends graph shows the percentage of jobs we find that contain your search terms.

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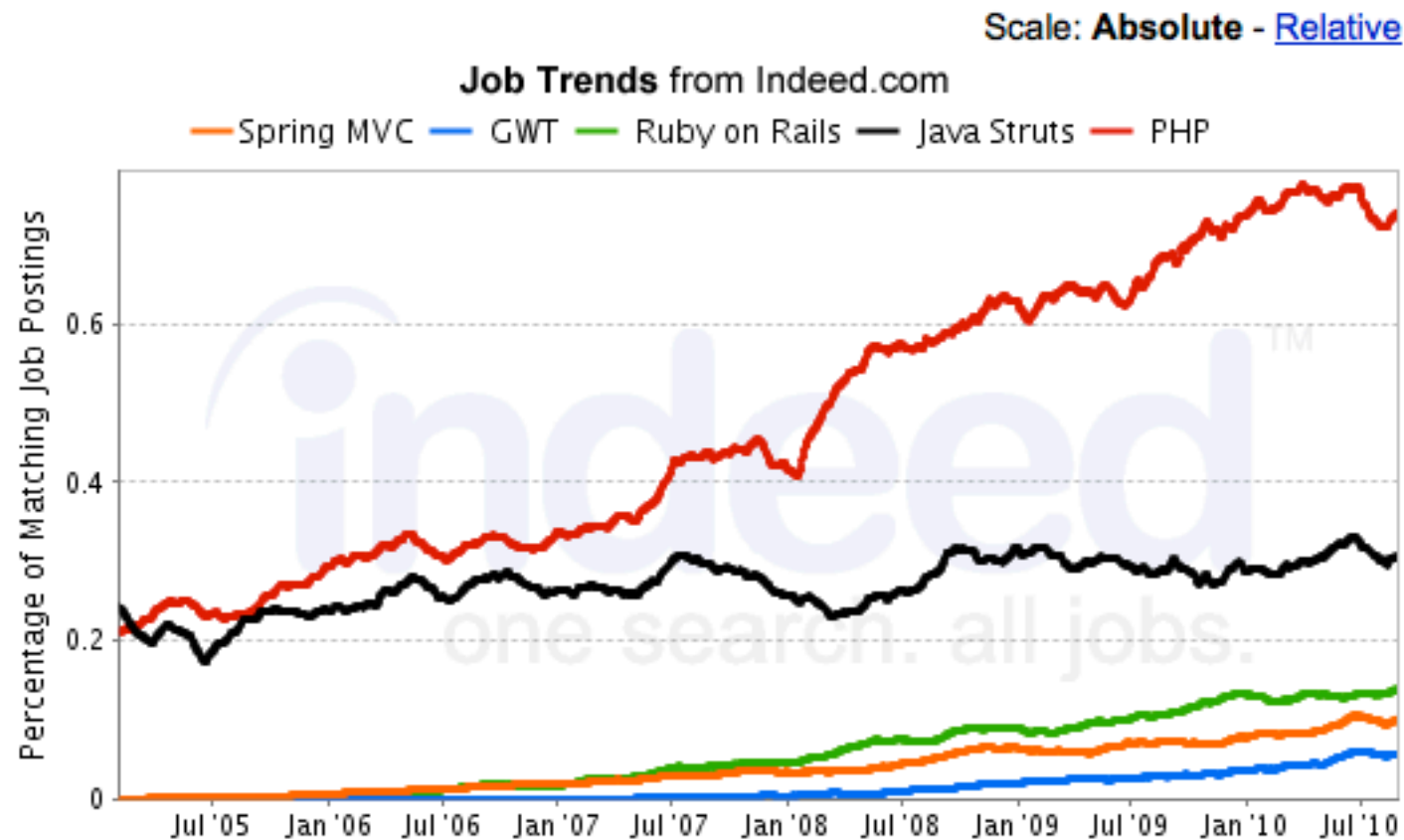
### Top Job Trends

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# PRETTY GRAPHS

## Spring MVC, GWT, Ruby on Rails, Java Struts, PHP Job Trends



Indeed.com searches millions of jobs from thousands of job sites.  
This job trends graph shows the percentage of jobs we find that contain your search terms.

Find [Spring Mvc jobs](#), [Gwt jobs](#), [Ruby On Rails jobs](#), [Java Struts jobs](#), [PHP jobs](#)

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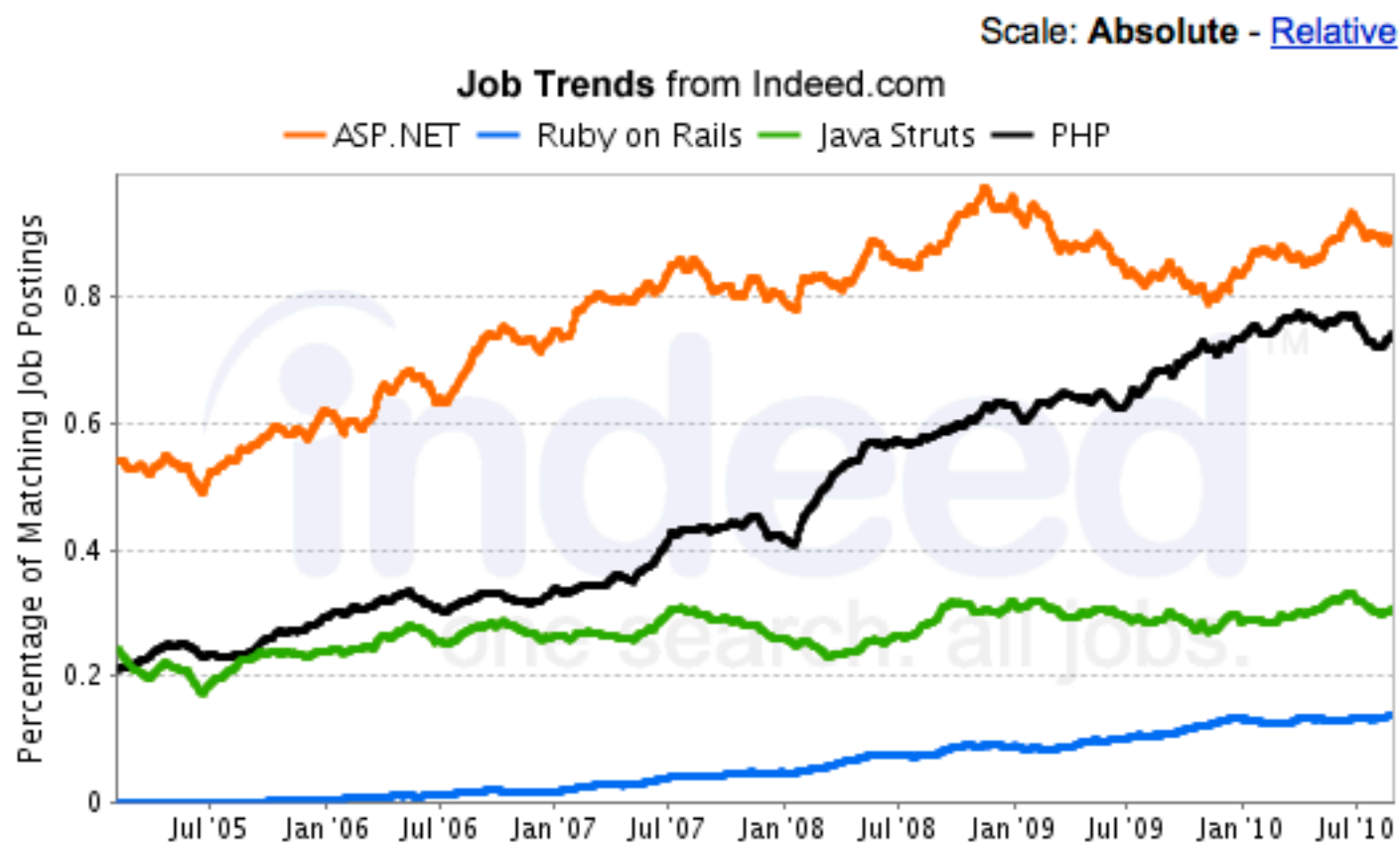
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### Top Job Trends

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# PRETTY GRAPHS

## ASP.NET, Ruby on Rails, Java Struts, PHP Job Trends



Indeed.com searches millions of jobs from thousands of job sites.  
This job trends graph shows the percentage of jobs we find that contain your search terms.

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### Top Job Trends

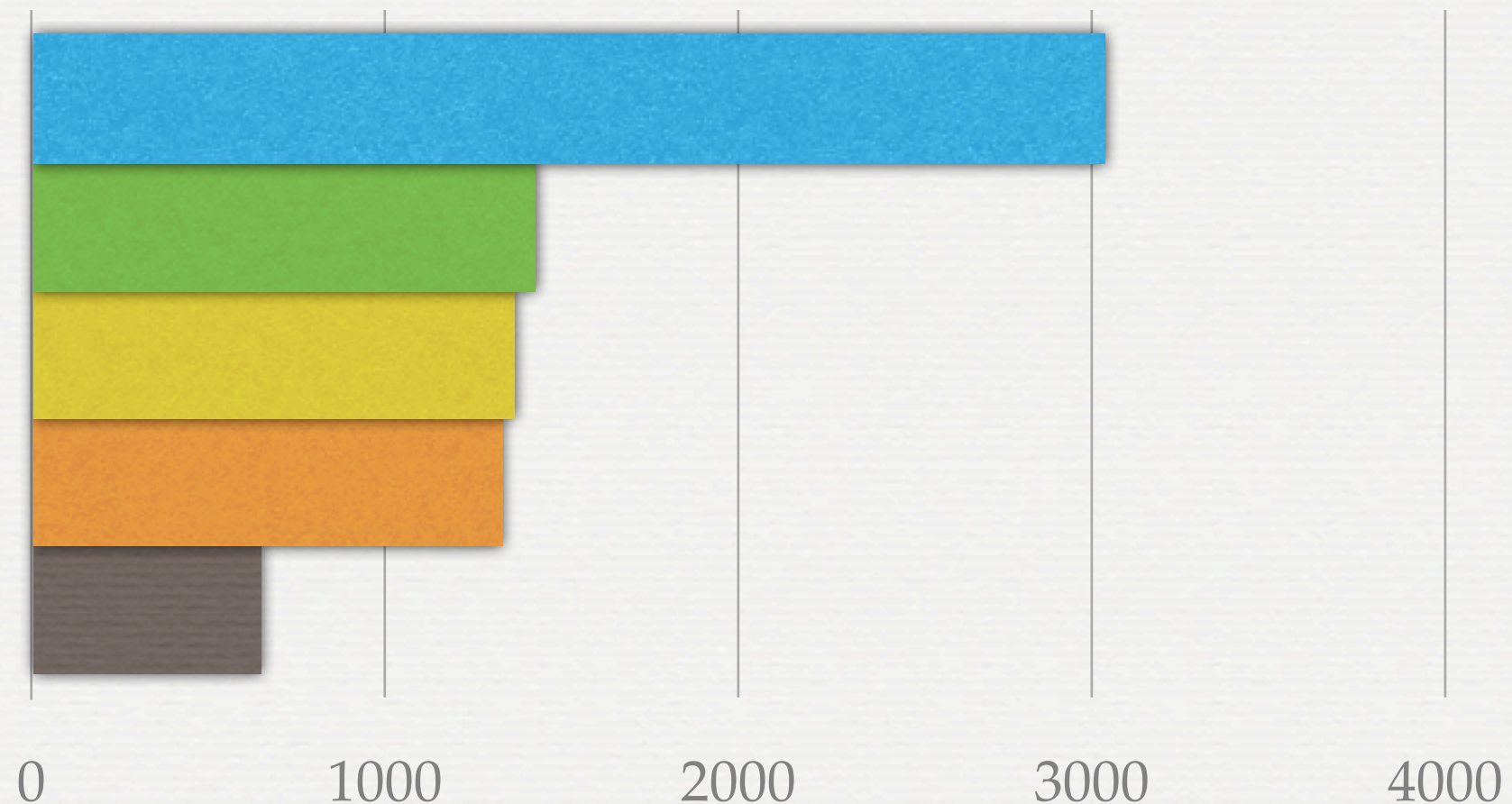
1. [Facebook](#)
2. [Virtualization](#)
3. [iPhone](#)
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5. [Sharepoint](#)
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8. [Patient Care Technician](#)
9. [Cloud Computing](#)
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# MAILING LIST TRAFFIC

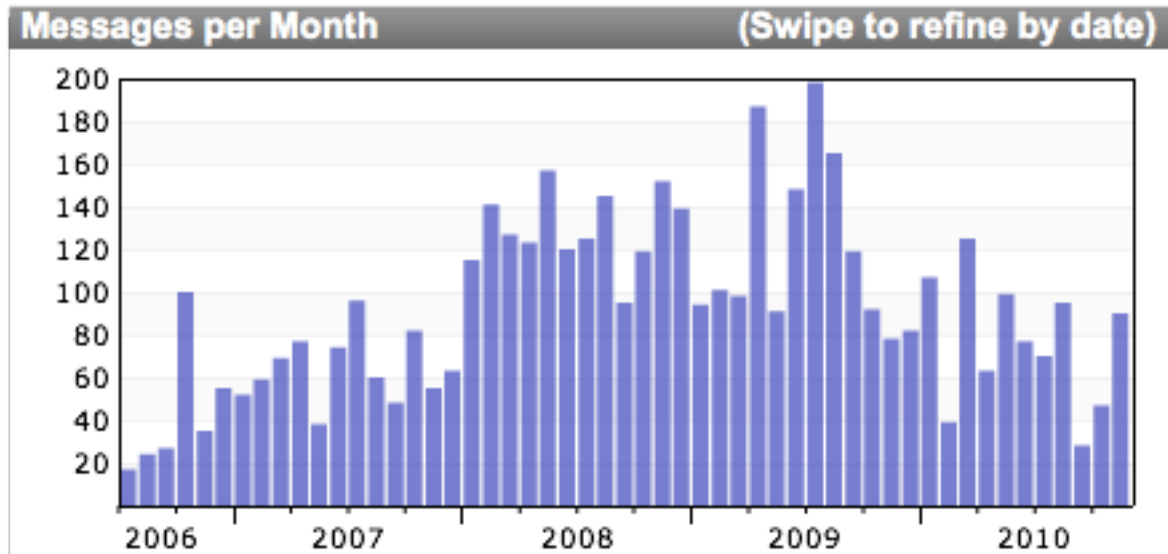
■ Rails   ■ Grails   ■ GWT   ■ Play   ■ Tapestry

September 2010

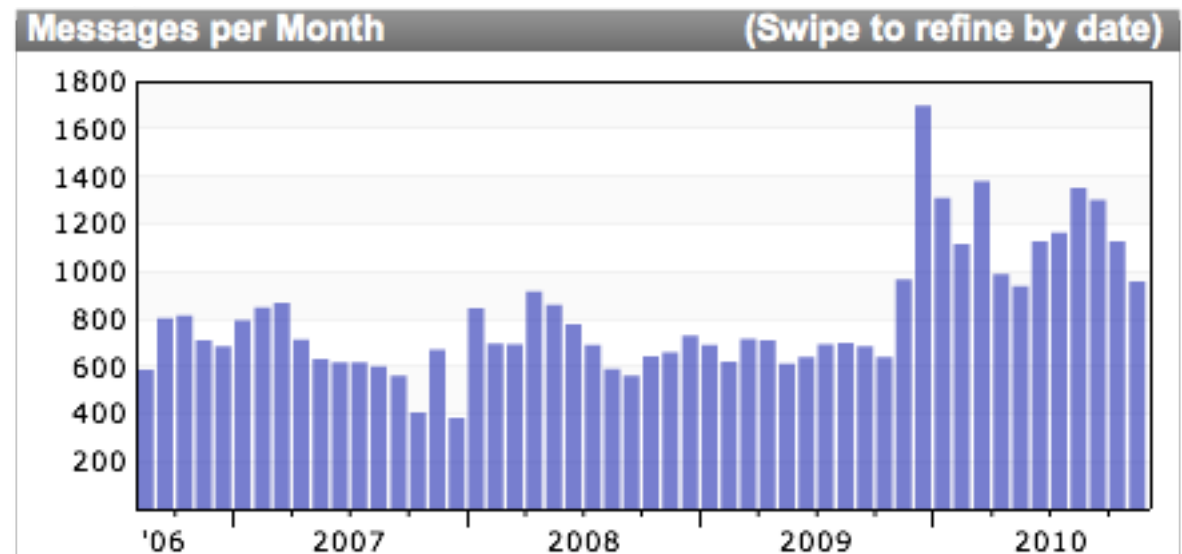


\* Spring MVC uses Forums, which don't provide this data.

# MAILING LIST TRENDS



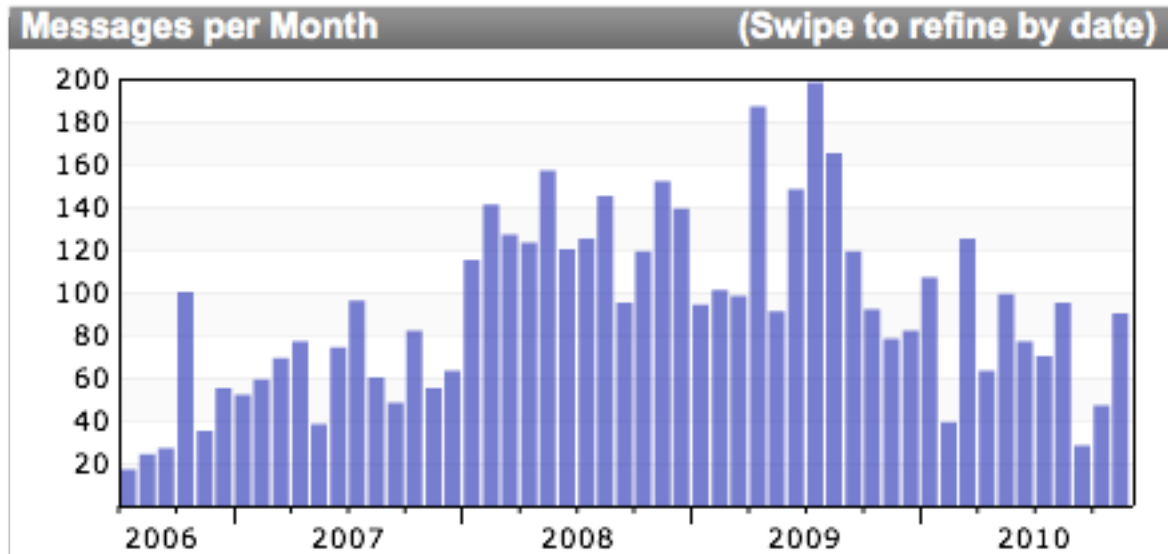
JRuby



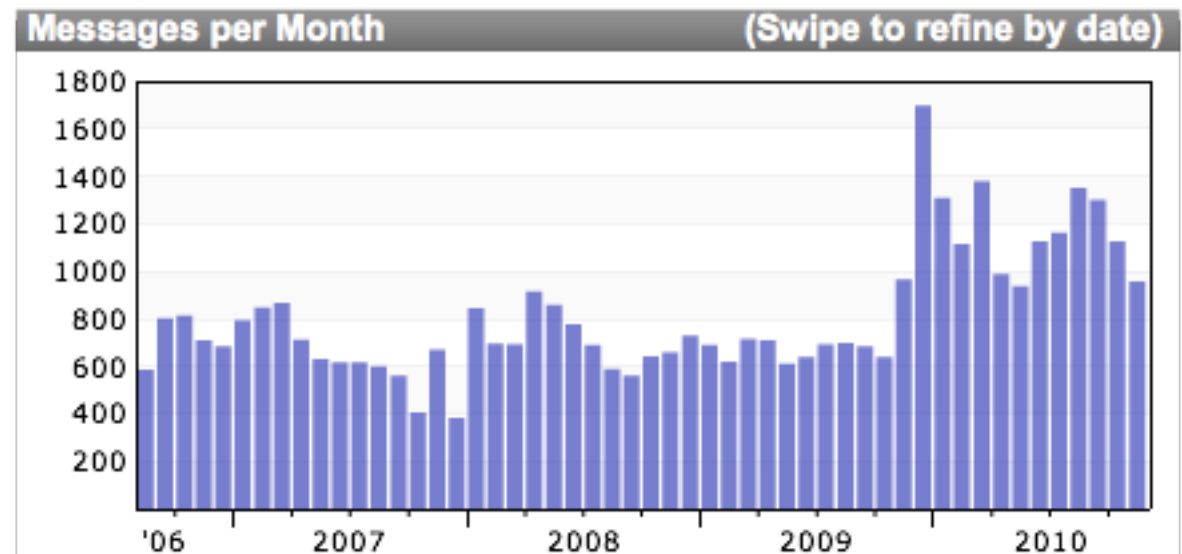
Ruby on Rails



# MAILING LIST TRENDS



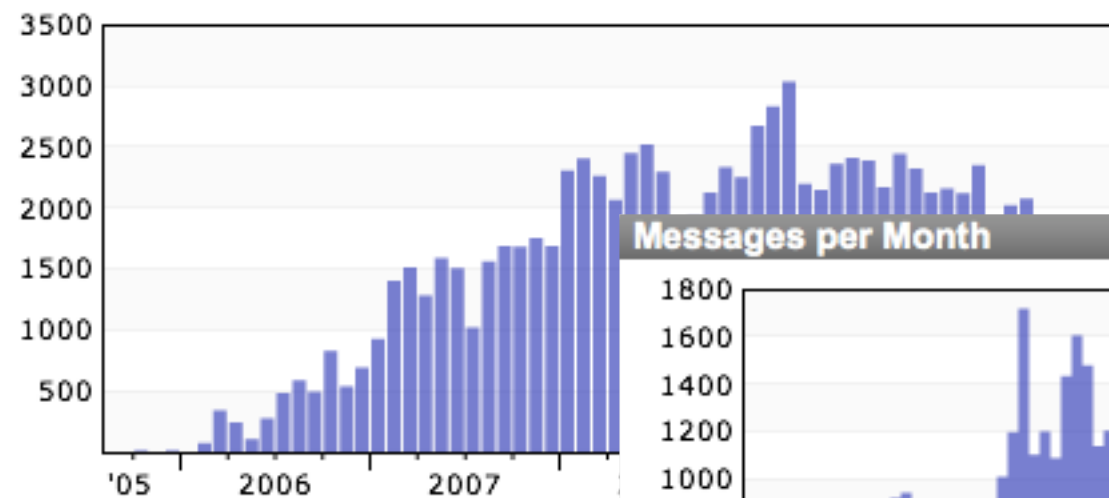
JRuby



Ruby on Rails

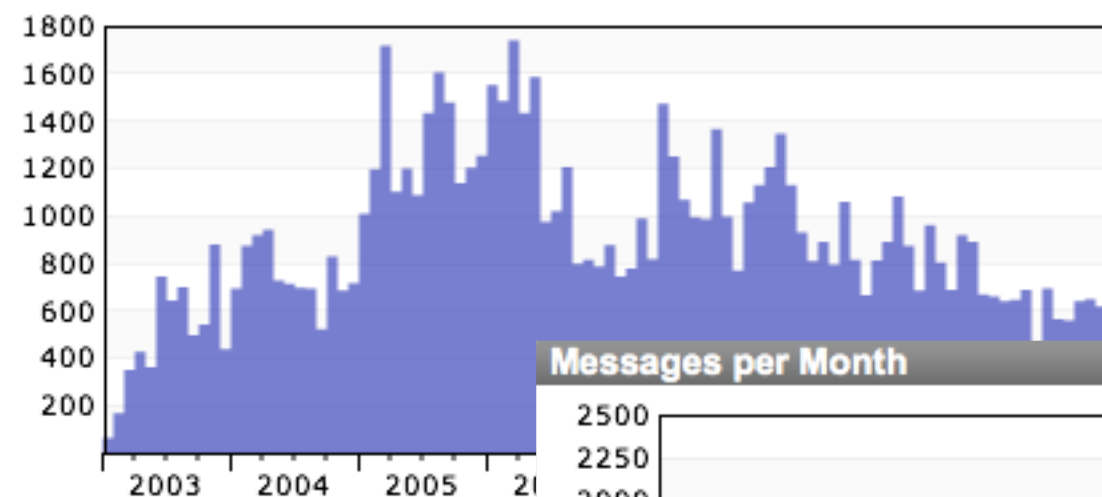
# MAILING LIST TRENDS

Messages per Month (Swipe to refine by date)



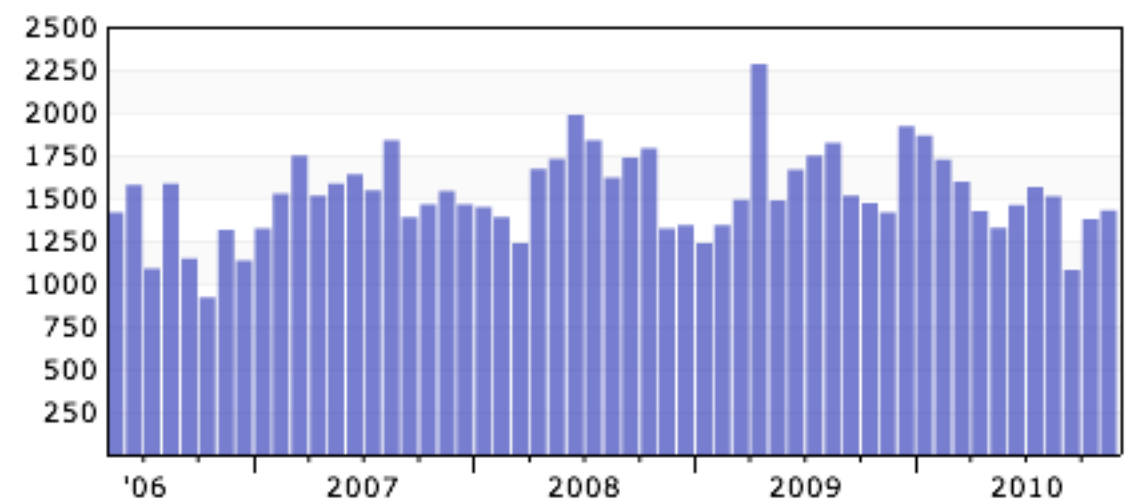
Grail

Messages per Month (Swipe to refine by date)



Tap

Messages per Month (Swipe to refine by date)



GWT

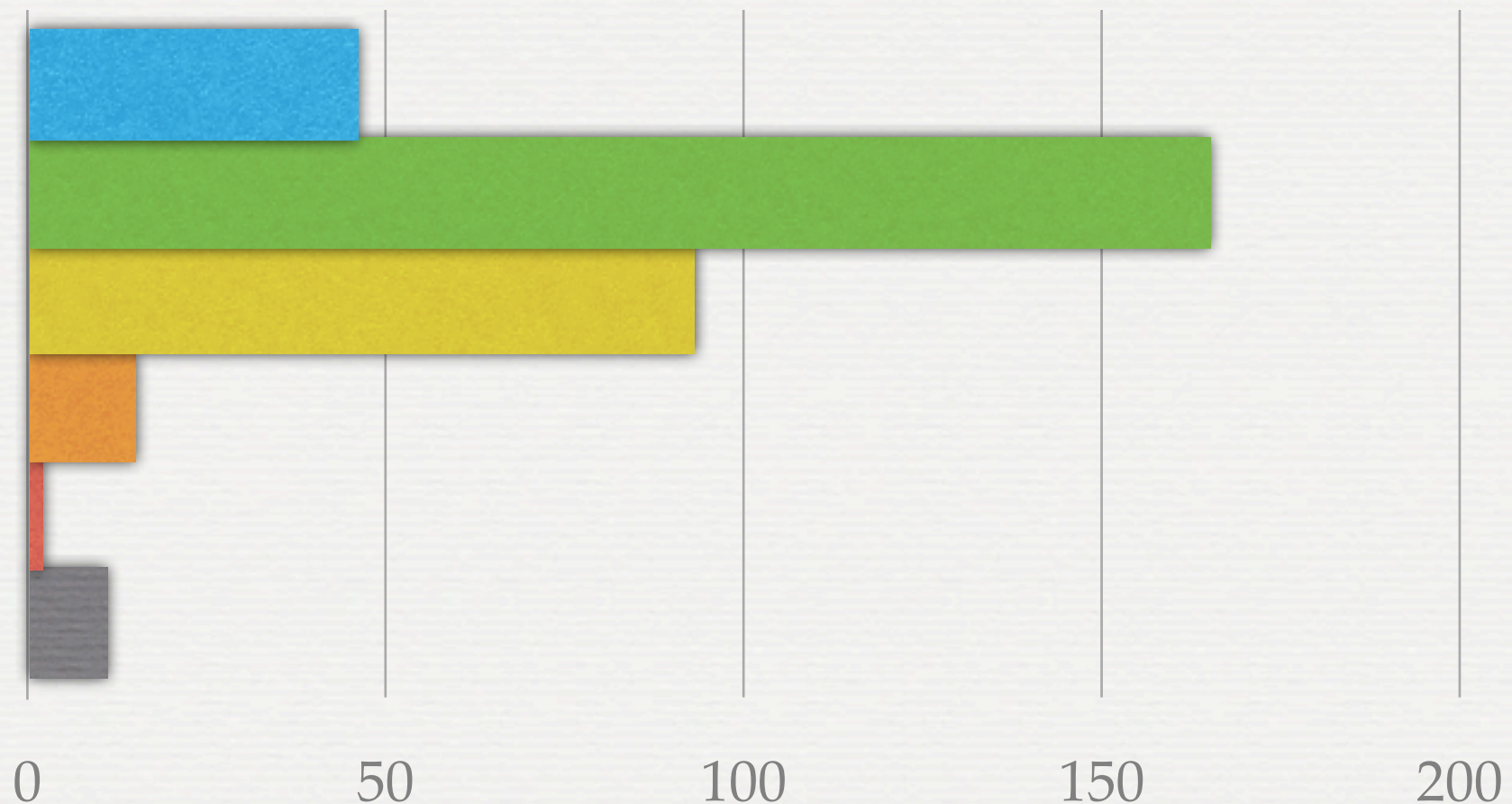
Source: <http://markmail.org>



# BOOKS ON AMAZON

■ Spring MVC ■ Rails ■ GWT ■ Grails ■ Tapestry 5 ■ Wicket

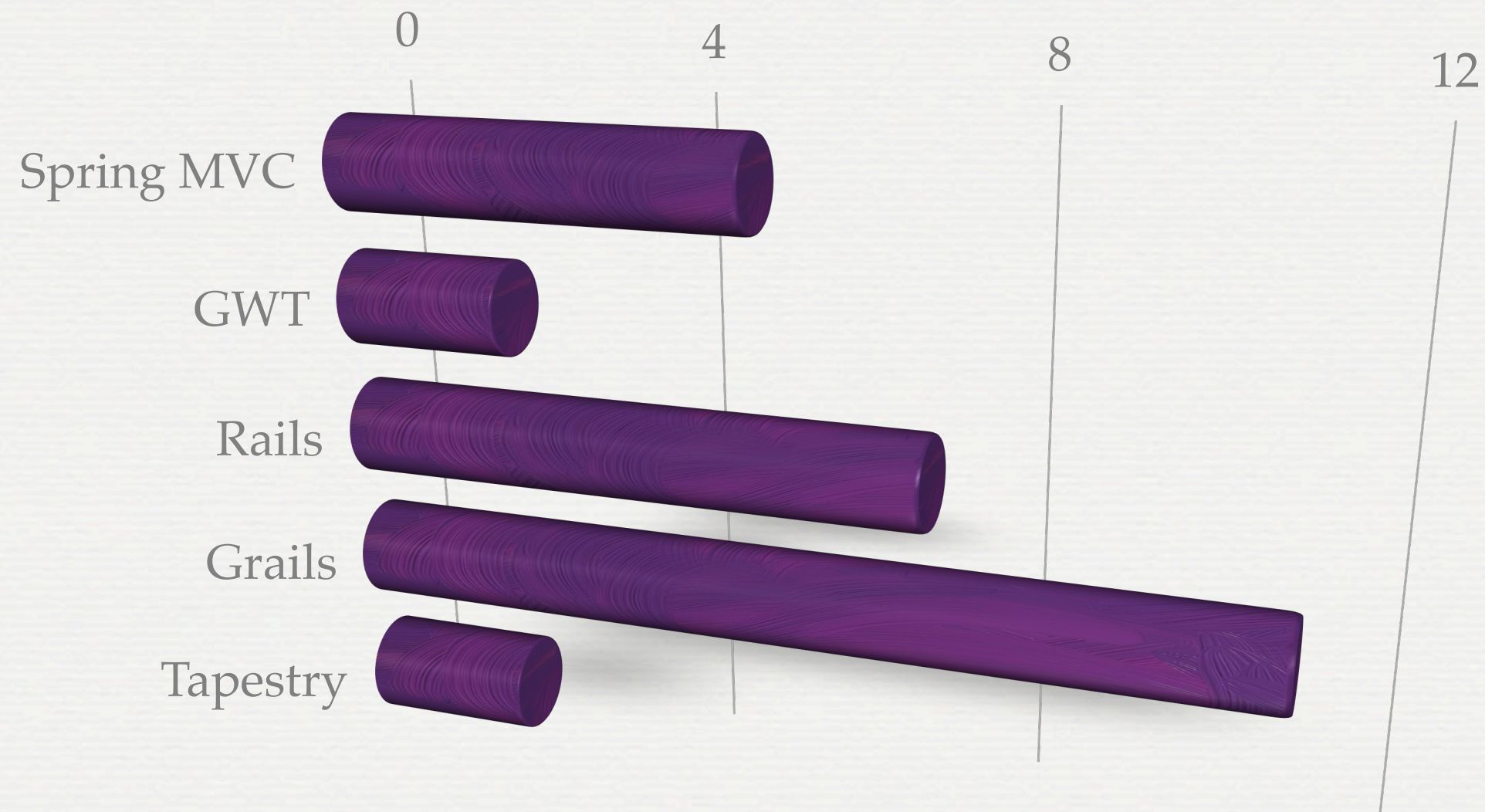
October 2010





# 2010 RELEASES

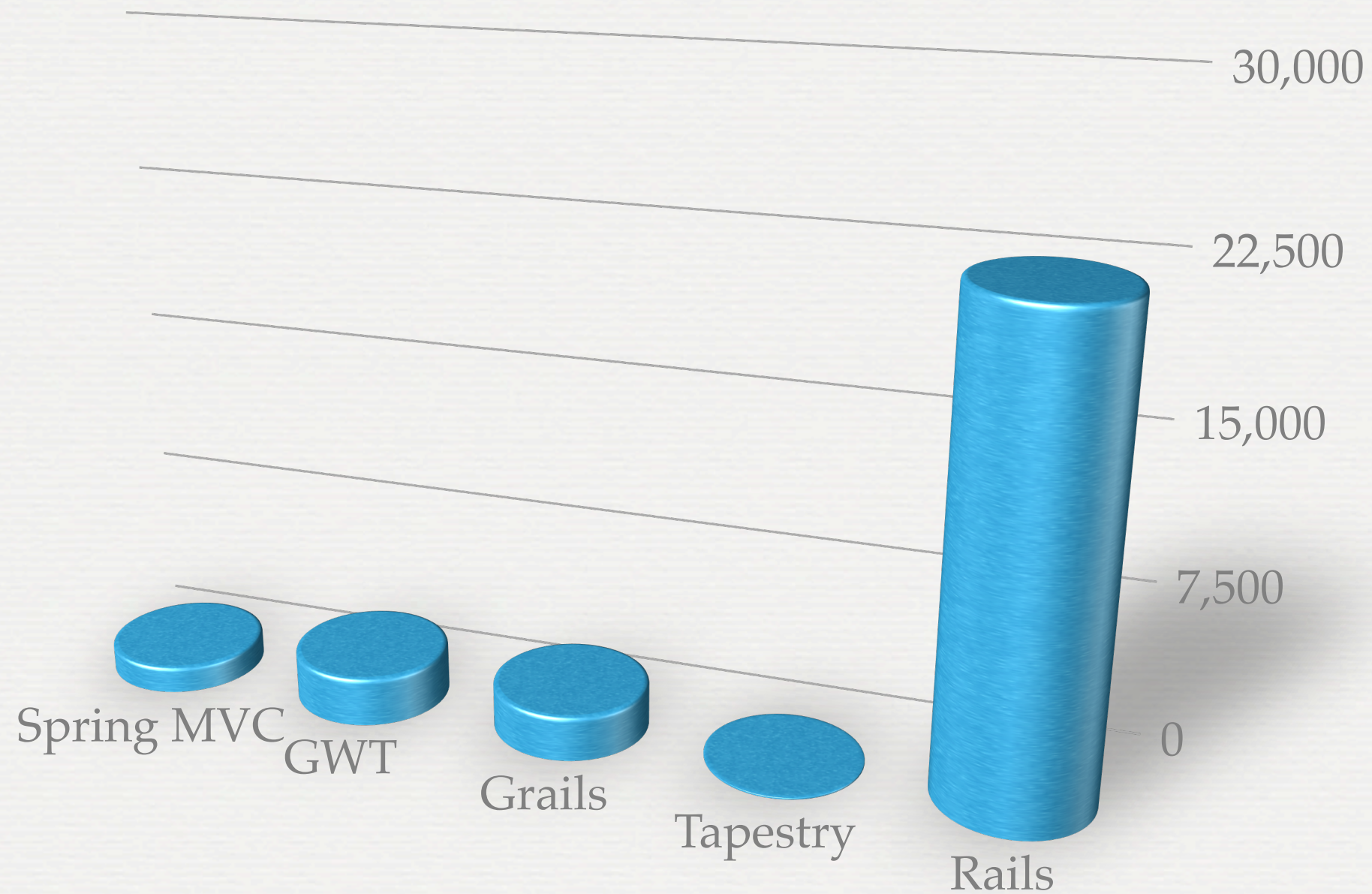
■ As of October 28, 2010





# STACKOVERFLOW

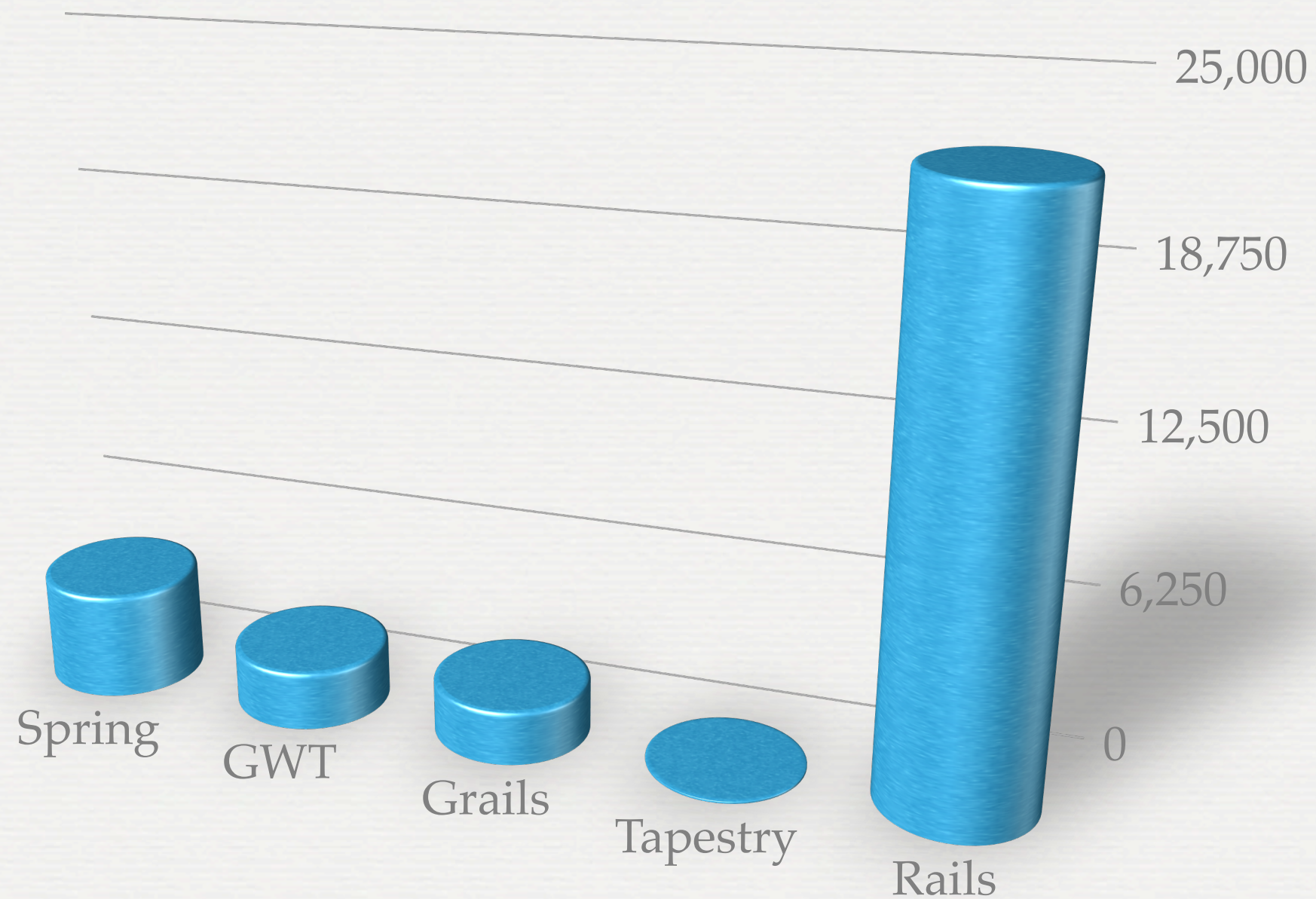
■ Tagged Questions (October 26, 2010)





# STACKOVERFLOW

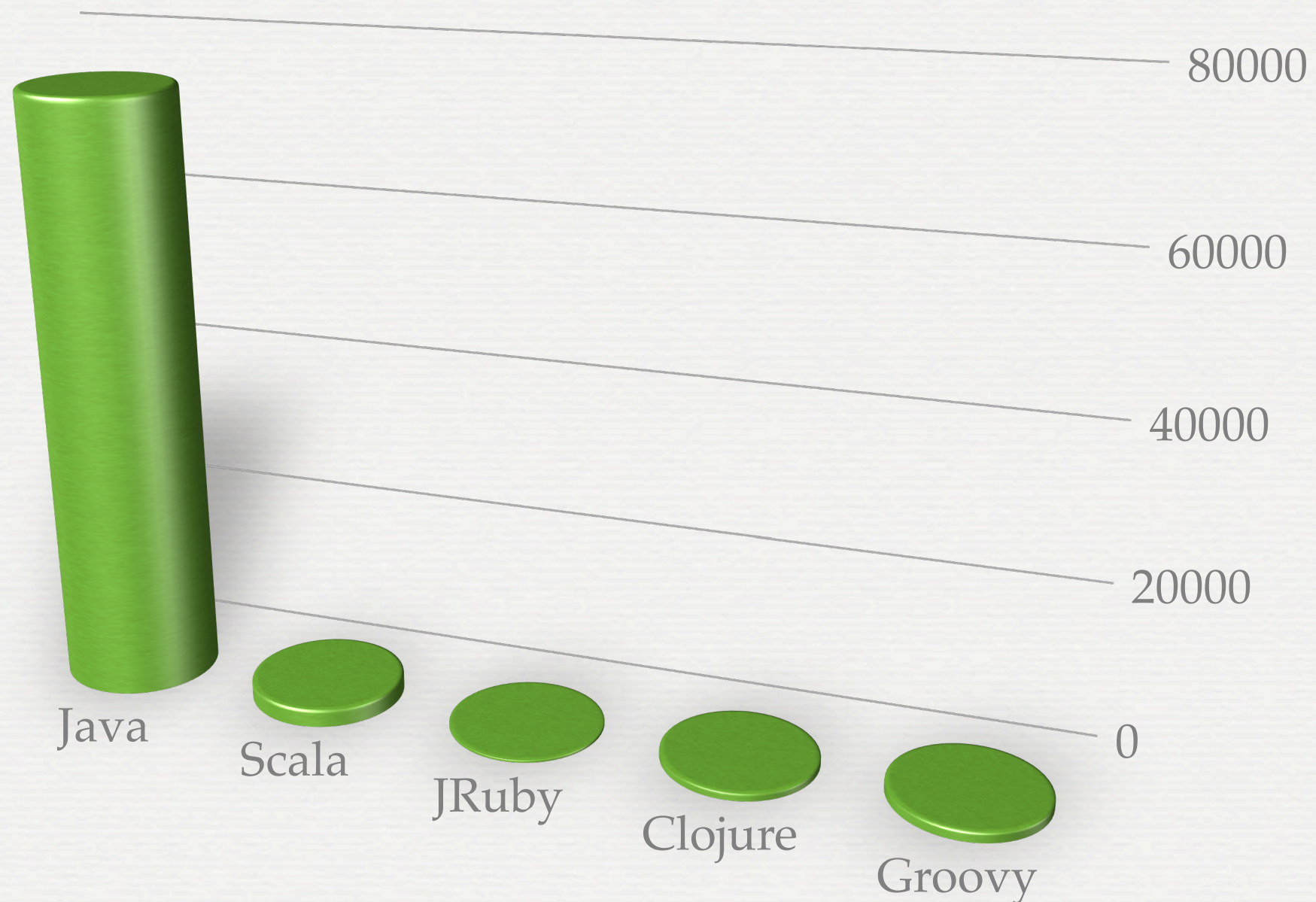
■ Tagged Questions (October 26, 2010)





# STACKOVERFLOW

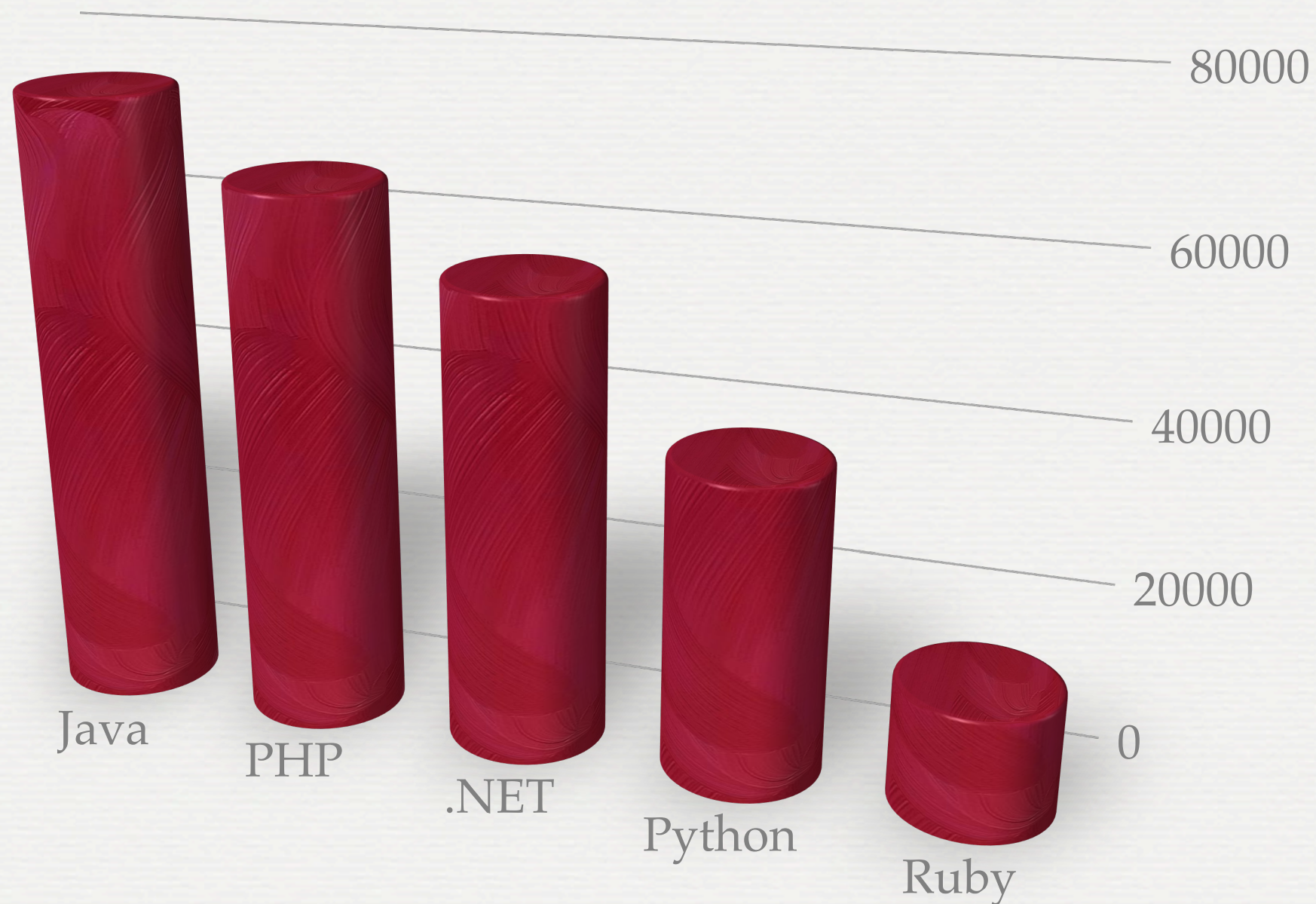
■ Tagged Questions (October 28, 2010)





# STACKOVERFLOW

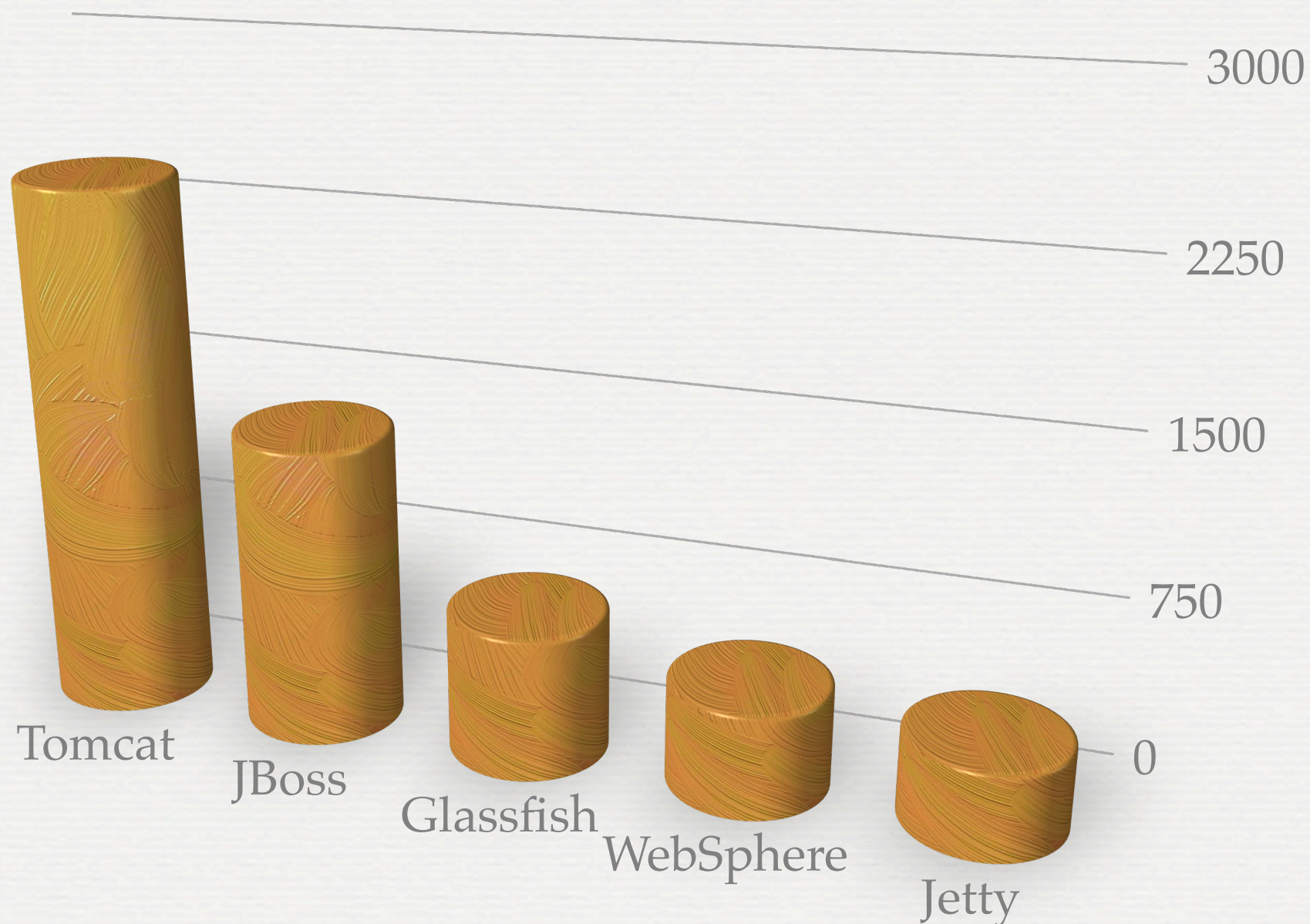
■ Tagged Questions (October 28, 2010)





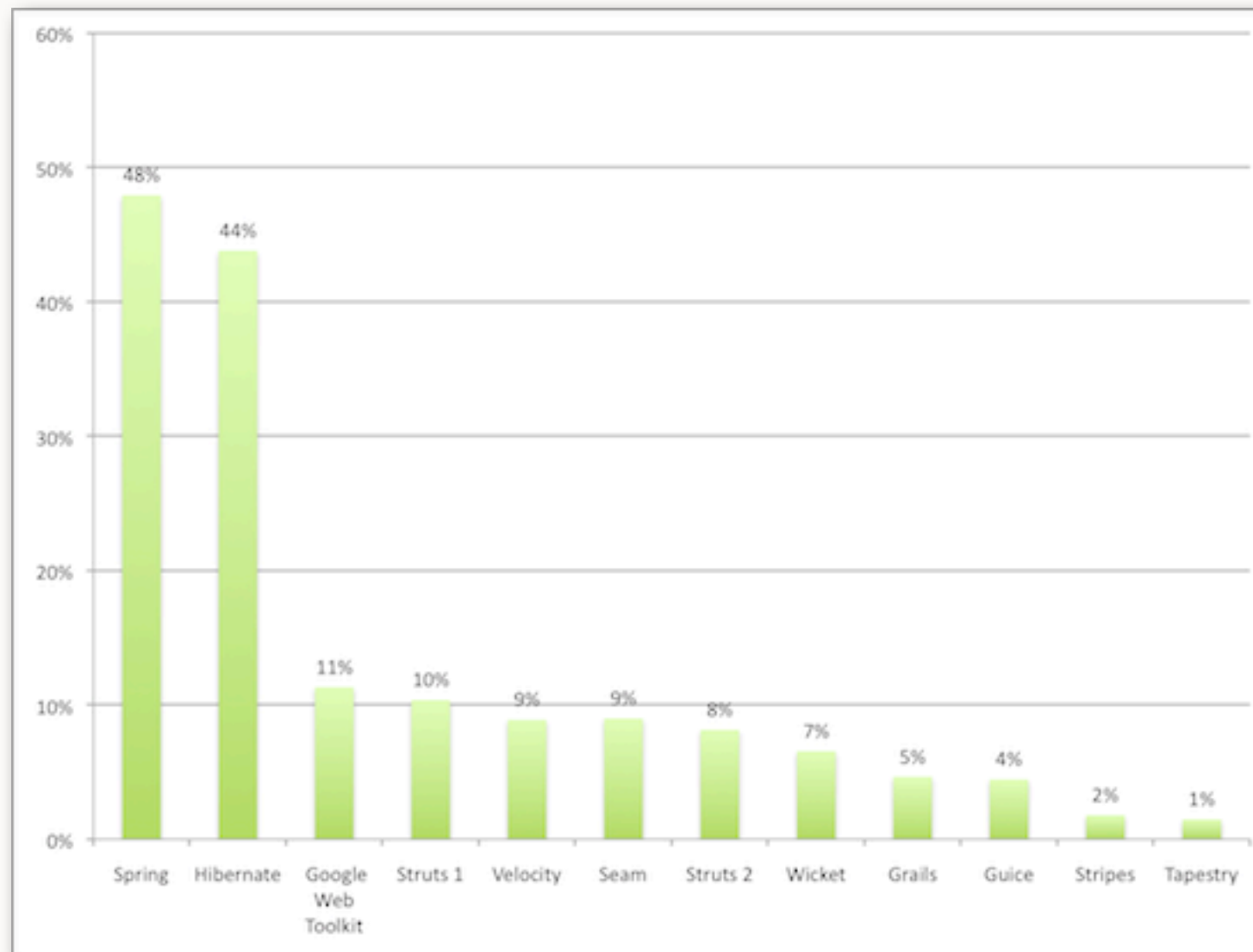
# STACKOVERFLOW

■ Tagged Questions (October 28, 2010)





## FRAMEWORK POPULARITY



Source: ZeroTurnaround's Java EE Productivity Report 2010



# GRAILS

- <http://grails.org>
- Apache 2.0 License
- Active Community @  
<http://grails.org/Community>
- Recommended Books:
  - Getting Started with Grails
  - Grails: A Quick-Start Guide
  - Programming Groovy



# RUBY ON RAILS

- <http://rubyonrails.org>

- MIT License

- Active Community @

- <http://rubyonrails.org/community>

- Recommended Books:

- Agile Web Development with Rails

- Rails for Java Developers





# GOOGLE WEB TOOLKIT

- <http://code.google.com/webtoolkit>
- Apache 2.0 License
- Active Community @ <http://groups.google.com/group/Google-Web-Toolkit>
- Recommended Books:
  - GWT in Action
  - GWT in Practice
  - Google Web Toolkit Solutions



# SPRING MVC

- <http://www.springsource.org>
- Apache 2.0 License
- Active Community @ <http://forum.springsource.org/forumdisplay.php?f=25>
- Recommended Books:
  - Expert Spring MVC
  - Spring in Action
  - Pro Spring





# APACHE TAPESTRY

- <http://tapestry.apache.org>
- Apache 2.0 License
- Active Community @ <http://markmail.org/search/list:org.apache.tapestry.users>
- Recommended Books:
  - Tapestry 5: Building Web Applications







## CONCLUSION

*What if there is no “best” web framework?*

[http://www.gladwell.com/2004/2004\\_09\\_06\\_a\\_ketchup.html](http://www.gladwell.com/2004/2004_09_06_a_ketchup.html)



# DON'T LISTEN TO ME!



# CHOOSE YOUR OWN!

- Prioritize a list of features that are important to your application.
- Pick 3-4 frameworks and do a 1-week spike with each, developing the same application.
- Document and rank each framework against your list of features.
- Calculate and choose!



# QUESTIONS?

## Contact Information

<http://raibledesigns.com>

<http://twitter.com/mraible>

## Download Presentation

<http://slideshare.net/mraible>

