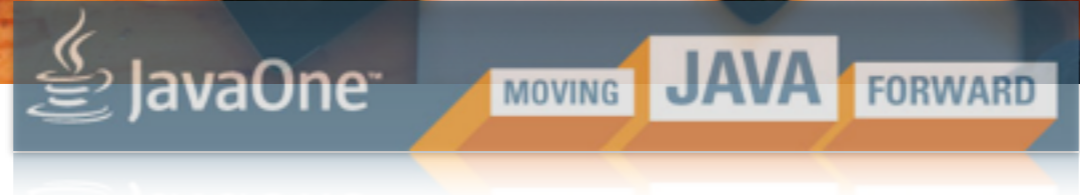




<http://www.flickr.com/photos/lukew/6171377827/in/photostream/>



Explorando o poder do Java na Internet Móvel

Marcelo Quinta

Triangulum / UFG / Globalcode










MEDICINA

PAPELARIA
ESCRITÓRIA

 JavaOne™

MOVING

JAVA

FORWARD

6-8 DECEMBER 2011
SÃO PAULO, BRAZIL



5.6 bilhões de celulares fora os tablets



http://www.cepolina.com/photo/people/crowd/5/crowd_supporters.jpg



MOVING

JAVA

FORWARD

6-8 DECEMBER 2011
SÃO PAULO, BRAZIL



Aumento de 2500% do tráfego em 5 anos



http://alifeindrive.com/wp-content/uploads/2011/09/highway_traffic.jpg

2010: Transações móveis > U\$2 bi
2009: U\$600 mi

eBayTM

eBay Mobile
Bid and buy on t

http://ebayinkblog.com/wp-content/uploads/2008/06/title_screen_v6.png

- 1. Apple iPad MB292LL/A Tablet (16GB, Wifi) by Apple 76 New & Used from \$600.00
- 2. Traveler Folio Case for iPad by XGear LLC \$69.99
- 3. Premium Black Thick Soft Gel Silicone Skin for Apple... by Lux \$2.38
- 4. Shadow Snap-on Case for iPad by XGear LLC \$43.74
- 5. Apple iPad Tablet (16GB, Wifi) by Apple 47 New & Used from \$789.00
- 6. CaseCrown Faux Suede Zip Sleeve Case (Blue) to... by CaseCrown

Apple iPad MB292LL/A Tablet (16GB, Wifi)

by Apple

★★★★☆ (69 reviews)



See all buying options

Add to Cart Add to Wish List

76 New & Used Offers from \$600.00

Customer Reviews (69)

Product Features

- Apple iPad Tablet
- Its capacity 16GB

U\$1 bilhão em compras utilizando dispositivo móvel 2010

Jeff Bezos



**US\$10 milhões em pagamentos
por dia**

<http://www.ipadd.fr/wp-content/uploads/2010/04/Amazon-iPad-2.png>

m-commerce > e-commerce em 2015



<http://www.retailcustomerexperience.com/article/186029/Gartner-says-more-m-commerce-than-e-commerce-by-2015>





Adaptar estrutura existente Criar nova experiência



Usuários querem resposta rápida



e com a famosa Experiência do Usuário



TAMANHO DA TELA

QUANTIDADE DE CORES SUPOSTADAS

CAPACIDADE DE PROCESSAMENTO

CAPACIDADE DE ARMAZENAMENTO

TEMPO DE VIDA DA BATERIA

MECANISMOS DE INTERAÇÃO LIMITADOS

LARGURA DE BANDA E CUSTO DE PLANO

DE DADOS

FALTA DE PADRONIZAÇÃO NO SUPORTE A

MÍDIAS



Timeline



Mentions



Messages



Search



Lists



Favorites



Nearby

A plataforma é o browser (móvel)

used in iOS, Android, Palm WebOS, Nokia Qt, Bada, Symbian and new Blackberry...

primarily used on feature phones supporting Java ME...



WebKit

+



OperaMini



watch these...

proxy browser...

lots of new browsers, variation and of course – legacy browsers



proxy browsers



E a maioria dos dispositivos serão simples

FUTURE ★ FRIENDLY



**Uma visão direta (ágil) sobre
desenvolvimento móvel**

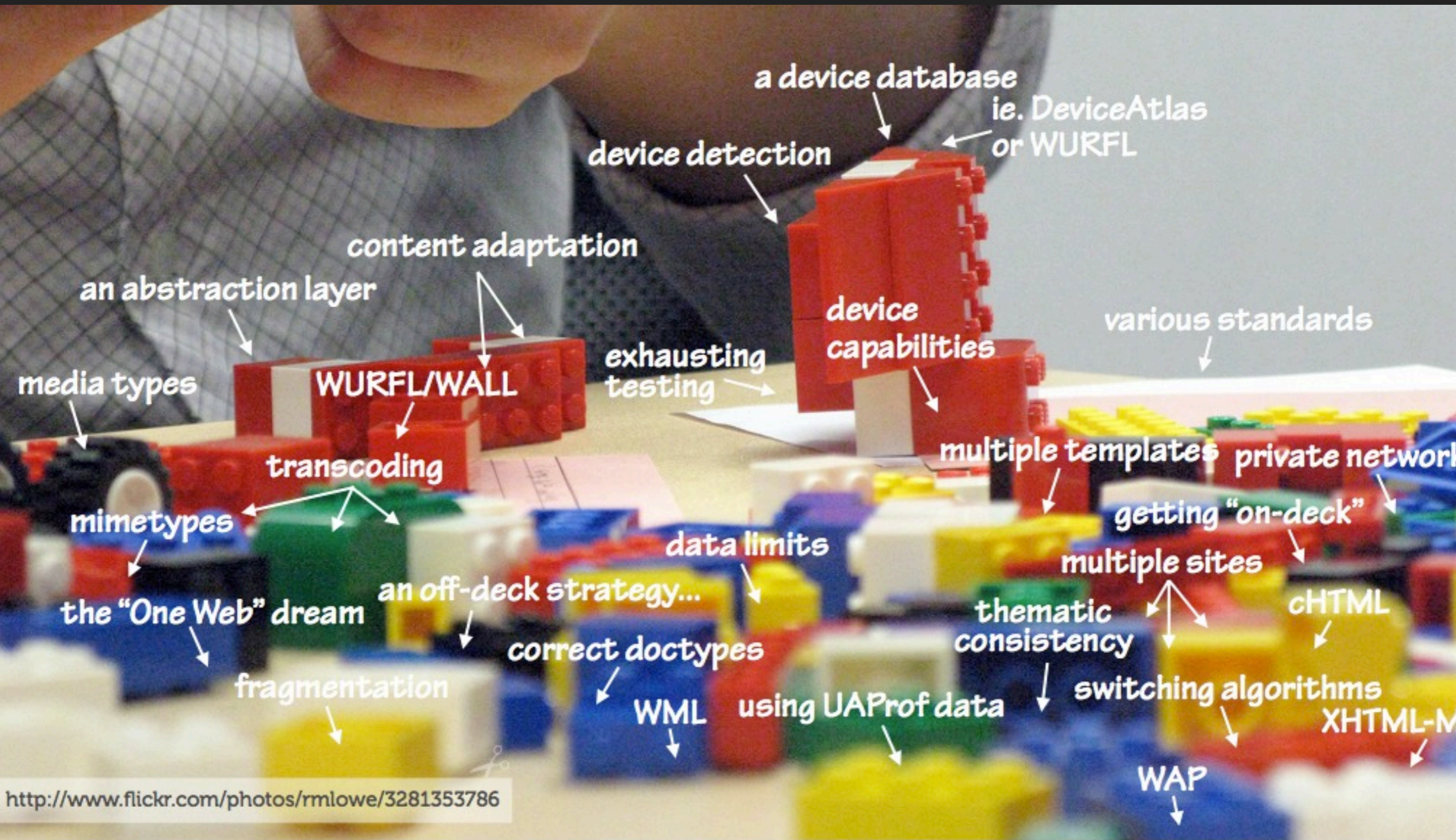
<http://futurefriend.ly/>

Já usou Java para fazer funcionar seu cliente móvel na web?



http://simage1.sportsmansguide.com/adimgs/111147761_ts.jpg

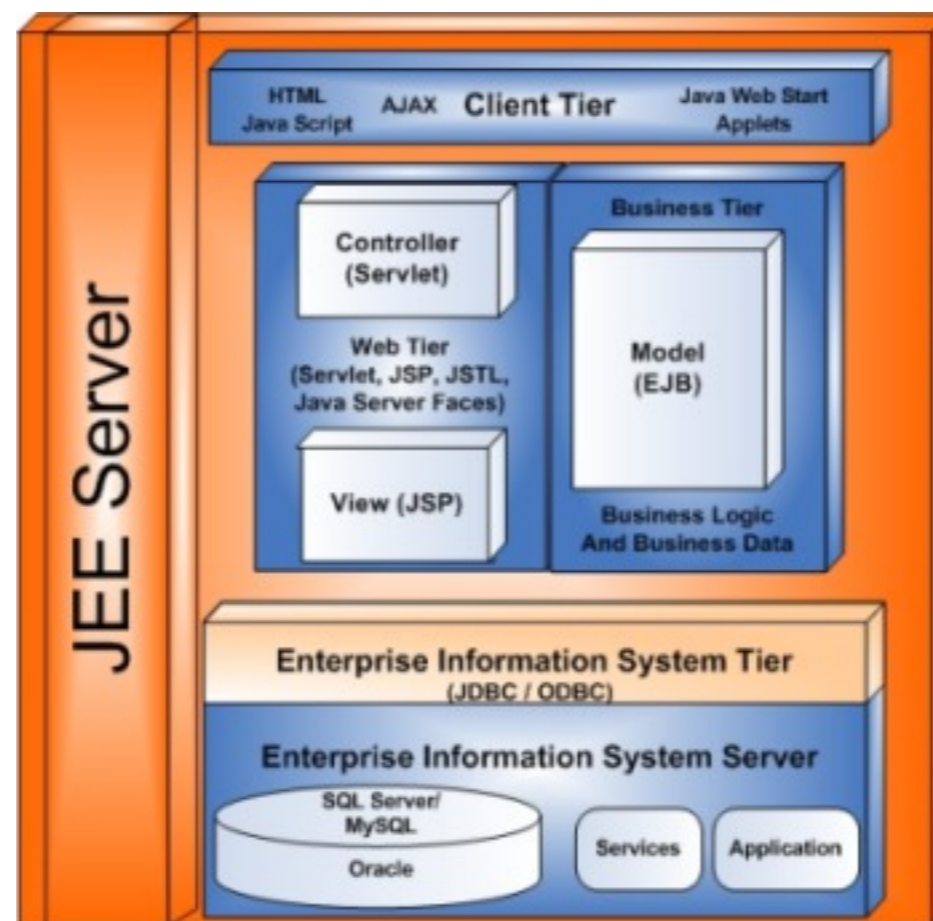
Oncocomeço?



<http://www.flickr.com/photos/rmlowe/3281353786>

Sei Java (JSF e JSP). Por onde eu começo?

VOCÊ JÁ SABE!
BASTA ESCOLHER A MELHOR TÉCNICA
PARA SEU CENÁRIO



I've seen the

FUTURE

It's in my

BROWSER



JPA

Glassfish

Mas o melhor não é isso

Spring

JDBC

JAX-RS

Entity beans



Técnica



<http://futebolbusiness.com.br/imagens/2011/06/Neymar-Santos.jpg>

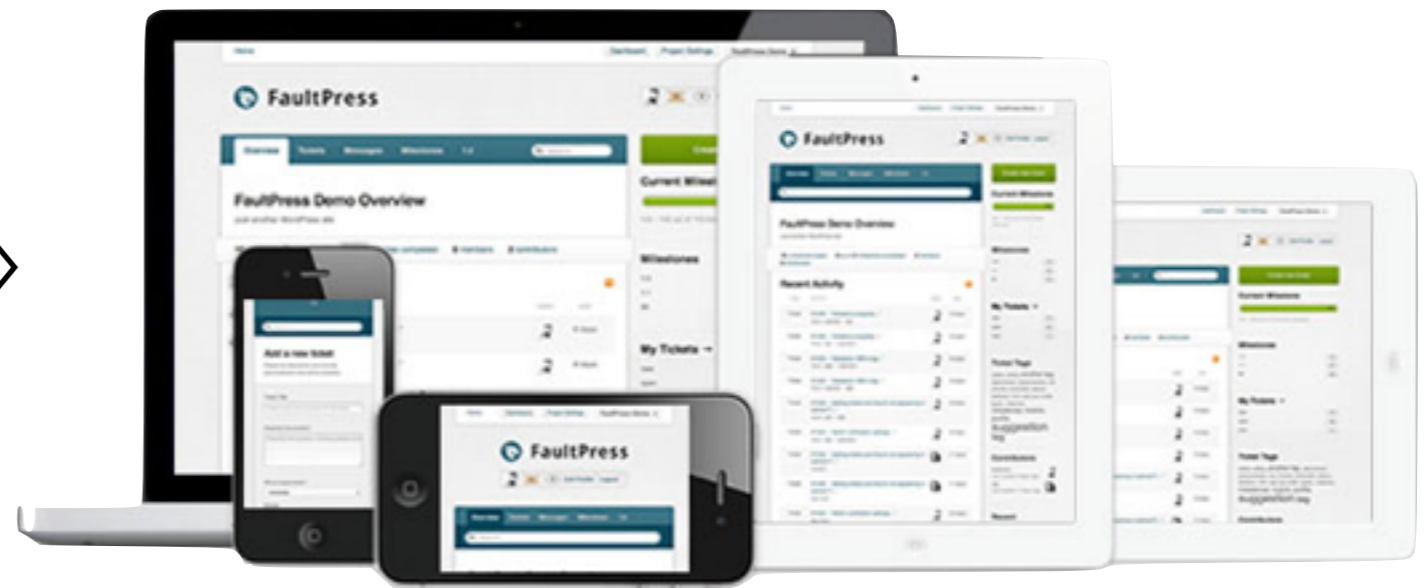
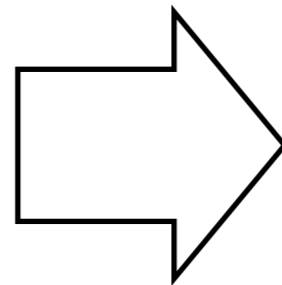
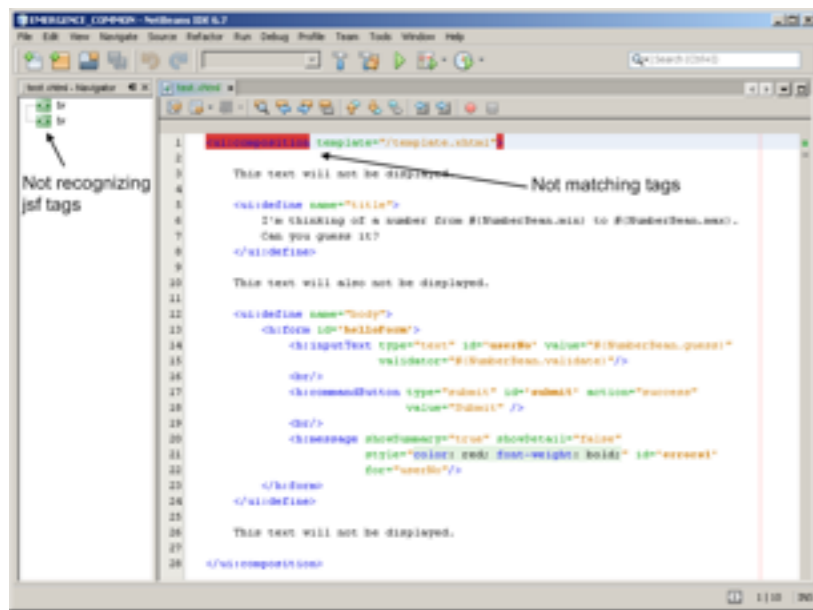
Responsive Web design

- O mesmo HTML para todos os dispositivos;
- Grid flexível;
- **Media queries;**
- Imagens flexíveis;
- Não há adaptação de conteúdo no servidor;
- **Resolve bem o problema de resolução de browser;**
- **Future-friendly;**
- **Manipulação ineficiente de imagens;**
- **Só resolve problema da resolução;**

Responsive Web design

CSS

```
1 /* Portrait */
2 @media screen and (orientation:portrait) {
3     body { opacity: 1; }
4 }
5 /* Landscape */
6 @media screen and (orientation:landscape) {
7     body { opacity: 0; }
8 }
```



Página JSP/JSF

Mobile First



Luke Wroblewski

<http://static.lanyrd.net/cropped-profile-photos/6bc54848de8f99c13a1025ac9420b96b01257e09.jpg>

Progressive Enhancement

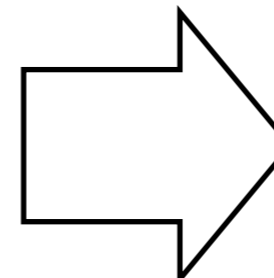
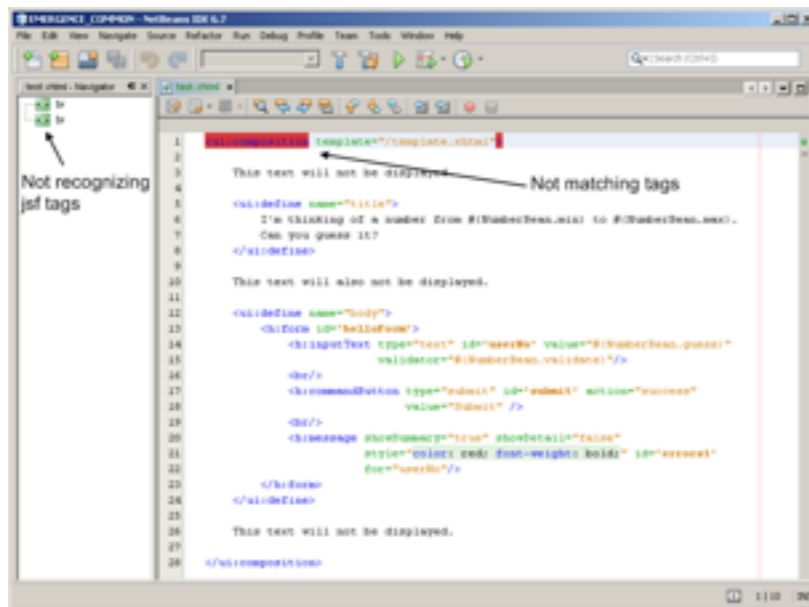
- O mesmo HTML “base” para todos os dispositivos;
- **Java script para cada perfil;**
- Melhoramento progressivo, de acordo com a demanda;
- A adaptação vai mais para o lado cliente;
- **Resolve bem o problema de resolução de browser e já ocorre uma adaptação mais fina;**
- **Confiar demais na engine do navegador cliente;**
- **Mesmo HTML e imagens continuam...**

Progressive enhancement

CSS

```
1 /* Portrait */
2 @media screen and (orientation:portrait) {
3     body { opacity: 1; }
4 }
5 /* Landscape */
6 @media screen and (orientation:landscape) {
7     body { opacity: 0; }
8 }
```

Página JSF



Javascript



Server-side adaptation

- Mais antiga e mais utilizada em grandes aplicações;
- **Detecção de dispositivo e entrega de conteúdo refinado;**
- Usada por Google, Facebook, Amazon, Youtube, eBay, Yahoo, INF-UFG...;
- “It is difficult to find a successful mobile website that does *not* use server-side content adaptation” goMobi;
- **Maior adaptação possível, com riqueza de detalhes;**
- **Bibliotecas de detecção de dispositivo com preço caro;**
- **Maior tempo de implementação;**

Detecção de dispositivo



<http://www.sagacent.com/blog/wp-content/uploads/Mobile-Devices.jpg>

WURFL

- Repositório de descrição de dispositivos;
 - XML;
- Atualizado periodicamente pelo ScientiaMobile;
- Licença comercial e não-comercial
- Utilizado pelo Facebook e Google;
- API em Java
 - <http://wurfl.sourceforge.net/njava/>
 - Configurável com Spring;
 - Uso comprovado em containers Web Java;
- 1500+ dispositivos;
- 150+ características;



Device Atlas

DeviceAtlas™

- Repositório de descrição de dispositivos;
 - XML;
- Pertence a dotMobi;
- SaaS na Nuvem;
- Utilizado por Nokia, Adobe, Sprint...
- API em Java
 - Uso comprovado em containers Web Java;
- Ótimo suporte;
- 1500+ dispositivos;
- 150+ características;



Famílias de dispositivos

http://www.cs.gmu.edu/~jessica/VizTree_files/tree.gif

Para interface gráfica

- <https://github.com/omarbenhamid/JSF-4-Mobile/>
- PrimeFaces
 - Mobile UI kit to create mobile web applications for handheld devices.(iPhone, Palm, Android, Blackberry, Windows Mobile and more)



Para serviços

Spring Projects

SPRING MOBILE



Spring Mobile is an extension to Spring MVC that aims to simplify the development of mobile web applications.

Building a native Android app? Take a look at [Spring Android](#).

FEATURES

- A [Device resolver abstraction](#) for server-side detection of mobile devices
- [Site preference management](#) that allows the user to indicate if he or she prefers a "normal" or "mobile" experience
- A [site switcher](#) capable of switching the user to the most appropriate site, either mobile or normal, based on his or her device and optionally indicated site preference

LATEST NEWS

- [Spring Mobile 1.0.0.M3 Released](#)
- [Spring Mobile 1.0.0.M2 Released](#)
- [Spring Mobile 1.0.0.M1 Released](#)

RESOURCES

- [Downloads](#)
- [Reference Documentation](#)
- [API Javadoc](#)



[View Maven Artifacts](#)

QUICK JUMP

[Download](#)

[Issue Tracker](#)

O poder que podemos usar de um bom App Server



Glassfish

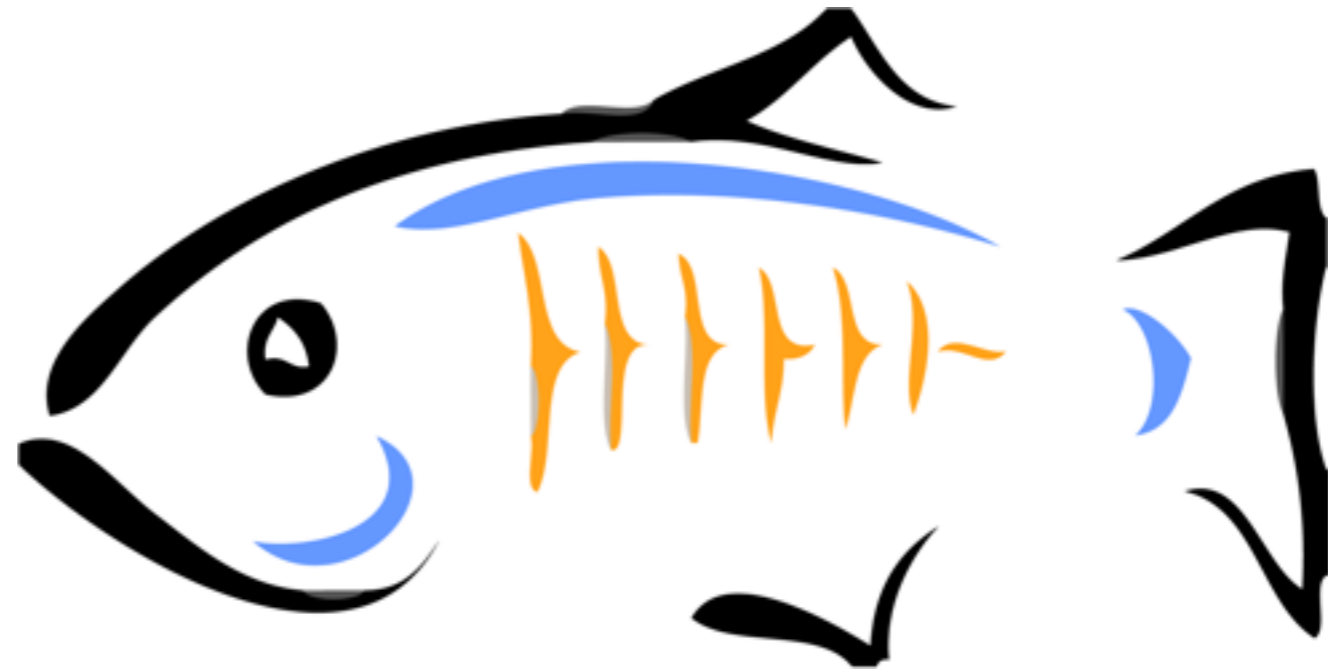
@arungupta

<http://www.centexoracle.com/wc/wp-content/uploads/2010/06/IMG00549-20100614-1716.jpg>

Web Services

Java EE

Java



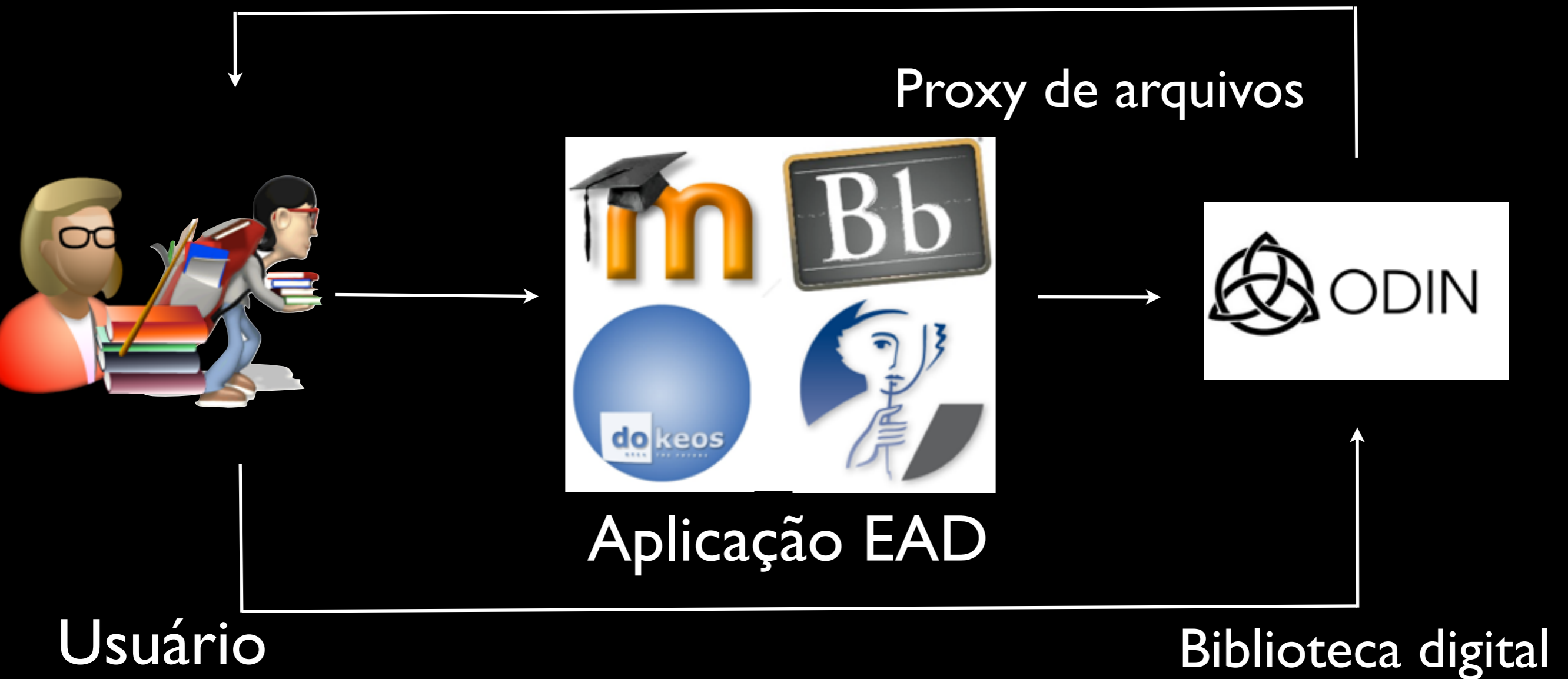
Segurança

JSF, JSP...

JMS

Robustez

Minha história com adaptação e Java



HSQldb

JSP



Bibliotecas FFMpeg

API baixo nível JVM

Glassfish

JMS

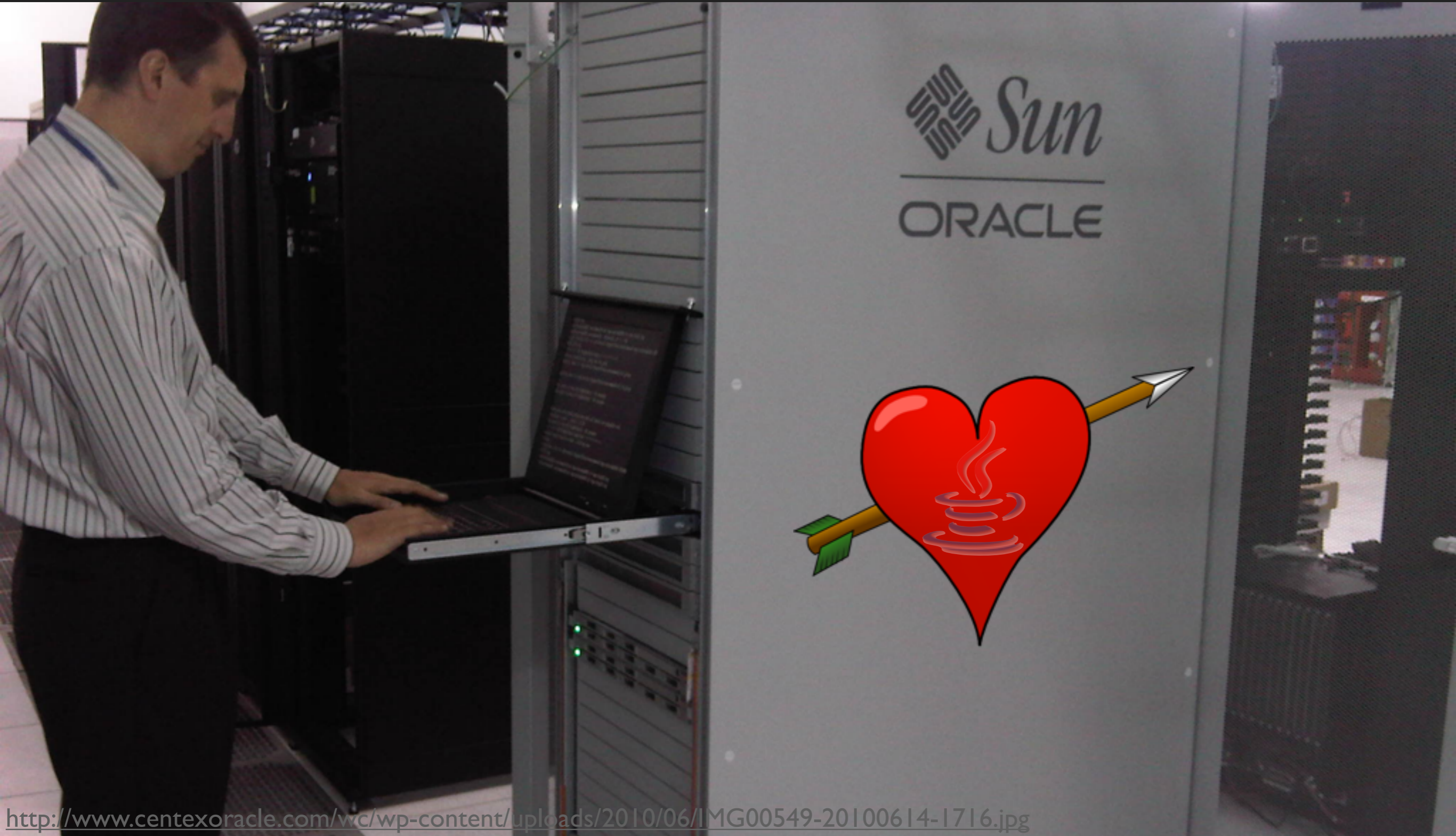
JAX-RS

Spring

JPA

Odin: Tudo em Java (rápido, sozinho)

Desenvolvedor móvel sabendo Java EE?



<http://www.centexoracle.com/wc/wp-content/uploads/2010/06/IMG00549-20100614-1716.jpg>

Abordagem híbrida

Server-side

+

**Responsive Web design
(Mobile First)**



http://www.photochopz.com/gallery/data/918/PSP_Practice_Animal_Hybrid_2_.png



WORLD WIDE WEB CONSORTIUM
Tenth Anniversary

<http://www.w3.org/Talks/2005/1227-W3C-22C3/Cake.jpg>

Obedeça os padrões

Seu sistema móvel está bom?

dotMobi

mobiThinking

mobiForge

mobiReady

DeviceAtlas

find.mobi

goMobi

mobiReady

YOU ARE HERE: [home](#) > [page results](#)


Username: Password:

Use your mobiForge sign-in - [Sign up@mobiForge](#) - [Lost password](#)

Page results


URL tested: <http://maxibiz.blogspot.com>

<http://maxibiz.blogspot.com>



Overall

BAD



It will probably display very poorly on a mobile phone.

Your mobi.readiness score is calculated from the results displayed below. Failing tests and large page sizes both lower the score. Read through the report to understand how to improve your score - and your site.

About this report



Ready.mobi uses industry standard tests developed with the W3C and leading mobility companies.

Ready.mobi provides an analysis of how your web content is likely to function on a mobile device.

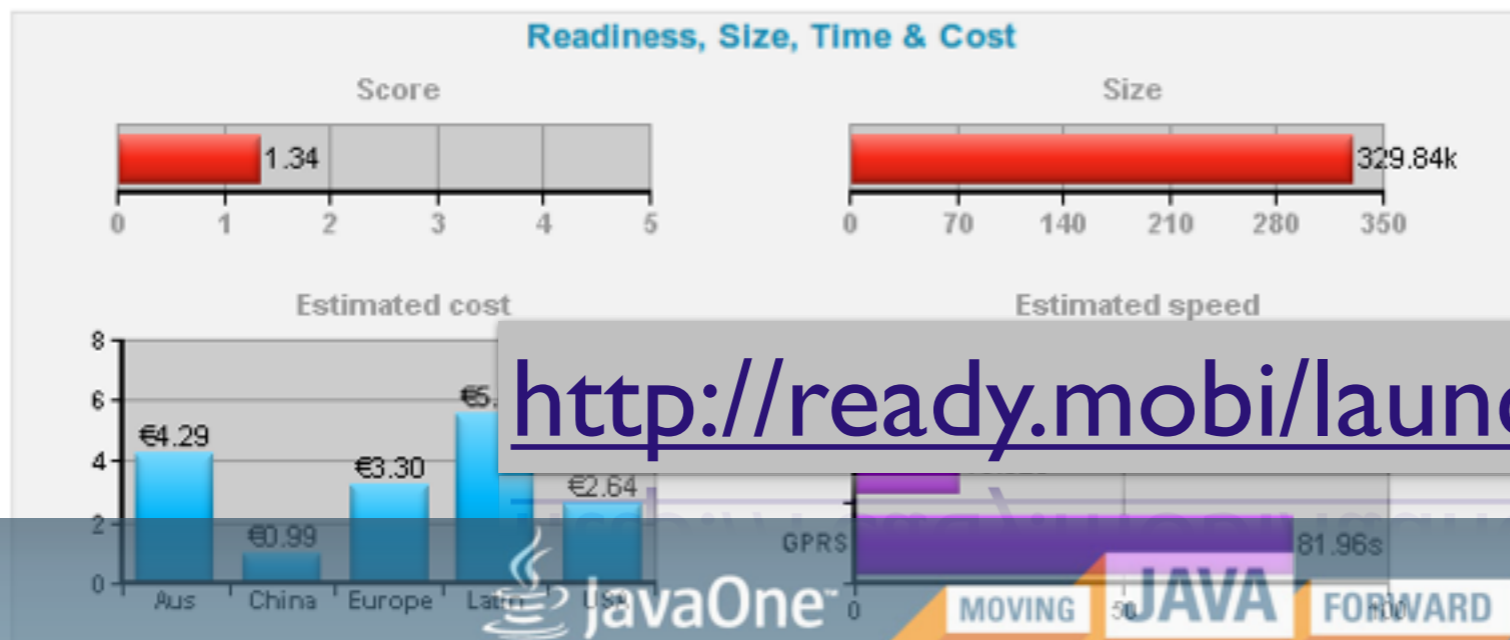


Many tests performed by ready.mobi are defined by the W3C in the [MobileOK Basic Tests 1.0](#) document.

More testing?



[Back to start page](#)



MARTIN KOOL
games - web - dad - sarien.net - q42 - livejs - handcraft

How to use Firebug on your iPad and iPhone 58

Web developers targeting HTML5 on iDevices would really benefit from having Web Developer Tools or Firebug on Mobile Safari. Enter **Firebug Lite!** However, iPads, iPhones and bookmarklets don't go well together, so I put together this little howto.

All credits to **Joe Hewitt** for creating Firebug.

1. Surf to this page on your iPad or iPhone and bookmark it
2. Rename the bookmark to "Firebug". As you can see, the URL is uneditable right now
3. Tap on this textarea `javascript:(function(F,i,r,e,b,u,g,L,I,T`
4. Tap it again, choose "Select All" followed by "Copy"
5. Edit the Firebug bookmarklet, remove the URL and paste the bookmarklet
6. Choose "Done" (on the virtual keyboard) and you're all set

HOME
ABOUT
ARCHIVE
ASK

Search

Want! RT
@technabob:
Forget ABC
#Blocks, the
#Wooden #iPhone
in for Modern

<http://bit.ly/testemobile>

<http://www.w3.org/Talks/2005/1227-W3C-22C3/Cake.jpg>

É possível debugar no dispositivo



Esse é você, desenvolvedor Java

http://farm1.staticflickr.com/32/93338013_6b3b60abef_b.jpg



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@mrquinta