

LIGHTNING TALKS 2012

The Future of Web Development

By ABHINAV ANAND; HO WINSTON HARYOHO; KALPIT JAIN, KSHITIZ SHANKAR

HTML5 : Native Multimedia, Graphics on the fly, Better Security

- HTML5 Tutorial - <http://www.w3schools.com/html5/default.asp>
- A showcase of sites using HTML5 markup and APIs - <http://html5gallery.com/>

CSS3: New features such as easy Text Shadows and Columns, Gradient, Transformation -> Animation

- CSS3 Tutorial - <http://www.w3schools.com/css3/default.asp>
- A collection of impressive CSS3 demos - <http://goo.gl/kR3LK>

SASS: CSS + Programming language-like constructs, Gives new features such as Variables, Mixins, Cross Browser compatibility

- SASS Tutorial – <http://sass-lang.com/tutorial.html>
- An online SASS editor and compiler - <http://sass-lang.com/try.html>

Usability Tips for Your Next Web Project

By HENG BELSON; HO LUP KHAY, JAPHETH

Key Points

- Ensuring cross browser compatibility: Follow W3C Standards; CSS Reset; Keep testing
- Use pagination wisely: Don't use pagination for text articles; State clearly what each page is about
- Forms: Less is more, None is best: Keep forms simple; Avoid unnecessary registrations
- Sensible error messages: Be specific; Don't blame the users; Use user language; Keep it near the error
- Speed up your website: Optimize your images; Minify CSS & JavaScript
- Use colors wisely: Choose a color scheme; Check your colors

Tools mentioned:

- Checking W3C standard compliance <http://www.w3.org/QA/Tools>
- BrowserShots (for testing web pages on multiple browsers) <http://browsershots.org>
- SmushIt (Image Optimizer) <http://www.smushit.com/ysmush.it>
- Online YUI Compressor (to minify CSS & JavaScript): <http://www.refresh-sf.com/yui/>
- Color Scheme Designer: <http://colorshemesdesigner.com/>, <http://kuler.adobe.com/>
- Color Explorer: <http://www.colorexplorer.com/>
- Check My Colors: <http://www.checkmycolours.com/>

QUERIES: email to seer@comp.nus.edu.sg

Cloud Computing: A Starter Guide for Developers

By GOH JIAN WEN STEVEN; TRAN CONG HOANG; WONG TSZ LAI

Cloud computing is 'using computing services' over a network.

Cloud gives Convenient, Affordable, Reliable scalability

Five principle of cloud:

- Resource pooling: resources are pooled and not specifically allocated to individual users
- Virtualization: The resource pool is accessed through a virtualization layer
- Easy resource deployment: virtual servers can be deployed at a click of a button.
- Elasticity: Use only what you want, when you want.
- Metered Billing: Pay for only what you use.

Resources:

- Amazon Web Services: <http://aws.amazon.com/>
- Google App Engine <https://developers.google.com/appengine/>
- Microsoft Azure <http://www.windowsazure.com>

Code That Stays Correct: A Fun Way to Conquer Testing [Test Driven Development]

By MICHAEL ATMADJA; RICHARD; ZHANG SHUAI

- Three laws:
 - Do not code unless there is a failing test case
 - Do not write more test than sufficient to fail, compilation failures are failures
 - Do not code more than sufficient to pass the failing test
- Benefits:
 - Fully working and tested codes
 - Testable code
 - Better code quality
- Resources:
 - www.junit.org
 - Beck, K. (2003) "Test Driven Development by Example", Pearson

Enterprise System, Here I come: Java EE Essentials

By IRYANI BTE MOHD NASRIL; KALDYBAYEV AYAN; LUC FRANCIS EDOUARD BOISSAYE; WEN ZIHE

Enterprise System are subjected to cross-organizational uses and have high demand for Availability, Scalability, Security and Interoperability, etc.

Layers	Technologies Used
Data Layer	Entities (Java Persistence API)
Logic Layer	Enterprise Java Beans
Interface Layer	Java Server Faces

Resources

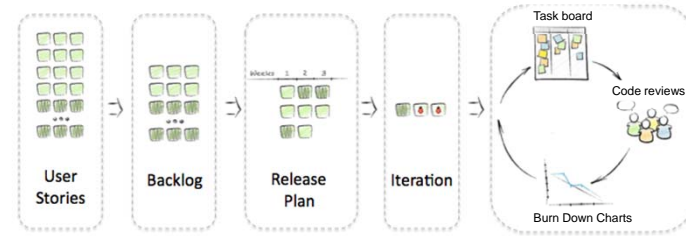
Corporation, Oracle. The Java EE 6 Tutorial.
<http://docs.oracle.com/javaee/6/tutorial/doc/>

Goncalves, Antonio. Beginning Java(TM) EE 6 with GlassFish(TM) 3: From Novice to Professional. Apress, Inc., 2009.

POO, Danny C.C. Learn to program enterprise JAVABEANS, Thomson Learning, 2007

Industry Practices for Pain-Free School Projects

By CHEN MINCHAO DANIEL; MOHD SHAHAB; NGUYEN VIET THINH



Resources:

Book: Scrum & XP From the Trenches
<http://www.infoq.com/minibooks/scrum-xp-from-the-trenches>

List of PM Tools <http://tinyurl.com/LT2012-pmtools>

Say Yes to NoSQL

By AMULYA KHARE; DOAN MANH HUNG; HUANG YIPENG; MOHIT SINGH KANWAL

- What
 - Not Only SQL
 - Set of products: MongoDB, CouchDB, Hadoop, etc.
- Why
 - High Scalability
 - High Performance
 - High Flexibility
- What
 - Eventual Consistency
 - Do not use SQL
- When:
 - Unstructured Data
 - Evolving Data

Resources:
<http://mongodb.org>
<http://nosql-database.org>

**Mobile Web the jQuery Way :
 Optimizing Web Pages for Mobile Devices**

By DAI YIQIANG; JEAN ANDRE GAUTHIER; NIRALI BHUPENDRA JIVRAJANI; ROMAIN EDELMANN

jQuery Mobile is a JavaScript web framework for optimizing web applications & sites for mobile devices.

How it works: Normal HTML pages are transformed on your mobile device using jQuery Mobile elements to make them mobile friendly.

Some main features: Adding elements like navigation bars, lists and buttons is made a lot simpler.

Mobile websites using jQuery Mobile can be further customized using plugins, themes generated from jQueryMobile Themeroller, and other features from jQuery, jQueryUI, HTML5, CSS3.

For more, see <http://jquerymobile.com>