The Wild Wild Web
Navigating the World of Web Development

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October 19, 2010
Who am I?

- Senior Technical Yahoo, Yahoo! Atlanta
- Formerly Director of Technology, Schematic
- Technical Lead, Community Connect Inc.
- Systems Administrator in the past
- Started in 1998
My roles over the years

- 50% agency, 50% product-focused company
- Worked primarily in web development
- Specialize in PHP, open source technologies
- Technical leader on many projects
- More recently, focusing on mobile app development
Today’s agenda

• Taking a product from start to release
  • People
  • Disciplines
  • Processes

• Comparing development life in agencies vs. product companies
Building an application
Business first

- Sell it!
  - Internally
  - ...or to a paying client
- Settle on
  - Budget
  - Timeline?!!
Requirements

- “Defines what, but not how”
- Defined with a sufficient level of detail
- Document them
- Must be actionable
- Related to business goals
User experience

• End user interaction with application
• How the user feels about the system
• Perceptions on ease of use, utility, efficiency
• Product: wireframes
Global News for the Global Citizen

Presented by Monita Rajpal, CNN International's new show Art of Life showcases all that is elegant, stylish, and desirable, taking viewers to some of the world's most exclusive and exciting locations.

Weekends. Air times vary.

MOST POPULAR
- CNN Programming for 11/7 - 12/7 (all times ET)
- 2008 TBS and TNT Programming Highlights
- 2008 MLB TBS Post Season Schedule
- TBS Programming for 11/7 - 1/31 (all times ET)
- TNT Programming for 11/7 - 12/7 (all times ET)

WHAT'S NEW
- truTV Kill Notice for select items on February TAP Tape
- Updated HLN Logos
- 2009 January TNT Highlights
- 2009 January TNT In HD Highlights
- Boomerang Benefits
- NBA Thursdays Ad Slacks (SD and HD)

AVAILABLE SPOTS
- CNN Anderson Cooper 360 Accountability
- TNT NBA All Star
- truTV The Smoking Gun: WDC
- TBS 10 Items or Less
- Cartoon Network Star Wars: The Clone Wars

HEADLINES & HIGHLIGHTS
- TNT and Headline News logos have been updated
- Get ready for the Digital Transition on February 17, 2009!
- Cartoon Network HD Marketing Support Now Available
- NBA on TBS regular season begins Tuesday, October 28th
- CNN Student News airs on HLN Mon - Fri 3:12 - 3:22am ET
- TCM Presents The Family Classics
- Promote your HD products!
- CNN's Planet in Peril Looks at Environmental Battle Lines
- Election Night: Ratings Success!
- A Story of Success and Struggle, Pain and Pride
- TBS in HD opportunities to drive your HD business
- Upcoming Originals available on TBS and TBS in HD!
- CNN's Planet in Peril Looks at Environmental Battle Lines
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FUNCTIONAL NOTES
The TurnerResources.com Authenticated Homepage is maintained by an admin (with the appropriate permissions).

1. Featured Content
- Area to promote featured content. Completely editable in admin.

2. News & Events
   - The News & Events area promotes big events that are currently going on.
   - The admin can determine the text that makes up the links in this section (and the link destination). Fully editable HTML in admin.

3. Most Popular
   - The Most Popular area is the only area of the authenticated homepage that an admin cannot control.
   - The 5 most downloaded assets appear in this area automatically.

4. What's New
   - This area promotes editorially-selected new content and promotions on the site.
   - The admin selects assets from the database and the asset's name is used as the link.

5. Available Spots
   - This area promotes editorially-selected spots.
   - The All Spots link loads the Video Spots page.
   - The admin selects spots from the database and the asset's name is used as the link.
Software architecture

• By now, you have a good idea of what has to be built
• What are our software components?
• How are we going to build it?
• What are our hardware needs?
• Traffic expectations?
• Deployment process?
Estimating

- Estimating is difficult
- Think about what it takes to build X
- ...and how long it should take you
- In my experience, granular estimates reduce risk
- Dependencies
- Agile development can take away some of the pressure
Setup toolset

- Source control
- Establish coding standards, project guidelines
- Unit testing -- start it from day one!
- Use an issue tracker (Mantis, Bugzilla, etc.)
- Environments: Dev, Staging, Production
  - Same setup as Production!
if ($success) {
    print 42;
}
Quality assurance

• Team devoted to testing applications
  • Manually or with automation tools
• Comparing wireframes, designs to functional product
• Tickets are filed, assigned and resolved
• You should have a thorough test suite, too!
• As a developer, you should fear the QA team
Approval and deployment

• Stakeholders give their approval
• Application meets specs and expectations
• Deployment time!
  • Take your time planning
  • Launch day should be relatively easy going and stress-free
Release process

Turner Resources 2.0; release process (applicable to Staging, Production)
Biggest problem areas

- Team members don’t really review and understand all functionality
  - Leads to additions, changes later
  - Increases development time due to refactoring
- Designers or front end devs take liberties that add complication
- Crucial that team members communicate
Applying an SDLC
Agile

- Initial planning
- Planning
- Reqs.
- Analysis
- Implementation
- Testing
- Evaluation
- Deployment
Agency vs. a product-focused company
<table>
<thead>
<tr>
<th>Agency</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great variety in types of projects</td>
<td>Lengthy assignments, can feel “neverending”</td>
</tr>
<tr>
<td>Technologies used tend to be more diverse</td>
<td>Pigeon holed into a small set of technologies</td>
</tr>
<tr>
<td>High quality software isn’t valued as highly</td>
<td>Quality and long-term maintainability is a concern</td>
</tr>
<tr>
<td>You develop, deliver, and move on to your next project</td>
<td>You care for and nurture product over time</td>
</tr>
<tr>
<td>Typically, devs have less pronounced sense of ownership</td>
<td>More pride in building great products</td>
</tr>
</tbody>
</table>
Agency challenges

• RFP process
  • Business development takes time
  • You can’t win them all!

• Typically, you’re working on a fixed budget

• Time-and-materials only jobs are rare, especially in this economy

• Most clients have a launch date in mind
Building great products

- I don’t want to maintain them forever
- Better design yields:
  - More maintainable system
  - Happier client / stakeholder
  - Freedom to take on different tasks over time
- Give the stakeholders tools to maintain it!
- Write good documentation
  - Budgets don’t always allow for it, though
Takeaways
So, what now?

• Every environment is different
  • What we’ve discussed may not be seen everywhere!

• Wide range of development processes in the real world

• You don’t choose your co-workers!
  • They come from many different backgrounds
  • Everyone has a different work ethic
What can you do?

- Strive to build the best software possible
- Use your common tools
  - Design patterns!
  - Become an expert it at least one language
- Aspiration for greatness will rub off on others
- Be positive -- make the best of situations
Books!
Thanks!

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