

Requirements and Estimating



Railo

Peter Bell
Railo

- Development Process
- Three Types of Project
- Simplifying Specifications
- Intent Driven Design
- Managing Risk
- Agile Approaches



Who Am I?

- **Programmer** - 30-80 projects/yr
- \$1,500 - \$150,000
- **Entrepreneur** - Profitable/practical
- **Writer** - CFDJ, Fusion Authority Quarterly, Flex Authority
- **Presenter** - SoTR 2007/8, cf.objective() 2006/8/9, CF United 2007/8/9, Frameworks, Webmaniacs, Code Generation 2007/8/9, ooPSLA, Domain Specific Modeling Forum, CFCamps ...
- **Railo US** - Fast, free CFML engine: getrailo.com



Development Process

- Discovery
- Development
- Refinement
- May be iterative ...





Three Types of Project

- Configuration < \$8,000 - free spec
- Customization < \$50,000 - paid spec
- Exploration \$50,000+ - no spec



- Simplifying specifications
- Re-usable specs
- Configuration systems
 - Bounded (settings/wizard)
 - Unbounded (DSLs)



Configuration - Sample

- CMS
 - Page
 - User
 - Attorney (FirstName, LastName, VCard, PracticeAreaList ...) Paged list, Detail, Practice Area list
 - Practice Area (Title, Description, AttorneyList) List, Detail (Attorney list)
- Newsletter (<5,000 subscribers)



- Capturing requirements:
 - Intent Driven Design
- Managing risk



Intent Driven Design

- Proven process
- Best practices
- Focus on the “why”
- Traceability





Intent Driven Design

- Business Intent
- Audiences
- Objectives
- User Stories
- Use Cases



IDD: Business Intent

WHY Bother?!

+



WHY Bother?!

- Examples: +
- Cut number of support calls
- Generate more leads for a new service



IDD: Audiences/Roles

- Who will use?
 - Functional roles
 - User can have multiple roles

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IDD: Audiences/Roles

- Who will use?
 - Functional roles
 - User can have multiple roles
- Examples:
 - Visitor, Site Admin, New Prospect, Returning Customer, etc. +

IDD: Objectives

- What do THEY want?
 - Help them to get what they want ...
 - Consistent with your business intent

+

IDD: Objectives

- What do THEY want?
 - Help them to get what they want ...
 - Consistent with your business intent
- Examples:
 - Get short list of vendors
 - Check order status 24/7
 - Update home page content

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IDD: User Stories

- As a **ROLE**
- I want **FEATURE**
- so that **BENEFIT**

+

IDD: User Stories

- As a **ROLE**
 - I want **FEATURE**
 - so that **BENEFIT**

- Example:
 - As a CUSTOMER
 - I want a ORDER STATUS DISPLAY +
 - so I can CHECK ORDER STATUS ANY TIME

IDD: Use Cases

- Screens
- Actions
- Steps
- Default, alternate and error paths

+

IDD: Use Cases

- Example: Default Path

- Login screen

- processLogin action

- getUserOrderList action

- MyAccountOrderList screen

- getOrderDetail action

- OrderDetail screen

- Screens
- Actions
- Steps
- Default, alternate and error paths

+

IDD: Summary

- **Business Intent:** Why Bother?
- **Audiences:** Who use?
- **Objectives:** What want?
- **User Stories**
 - As a **ROLE** I want **FEATURE** so that **BENEFIT**
- **Use Cases**
 - Screens, actions and steps
 - Default, alternate and error paths

Managing Risk

- Four types of features
- Dealing with “Dark Matter”
- Anything within spec
- Expectation of Revisions



Four Types of Features

- Rocket Science
- Lab Experiment
- New to you
- With a twist



Reilo Dealing with Dark Matter

- What you don't know ALWAYS hurts you
- Nothing is “obvious”
- Fixed bid for system - not solution
- Not specified = not included





ANYTHING Within the Spec



Reilo Expectation of Revisions

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Reilo Expectation of Revisions



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Agile Approaches



Agile Approaches

- Larger systems - BDUF impractical

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- Scrum, Lean, Kanban, Emergent design, Complex adaptive systems, planning poker ...

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- Add “most value next”

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- Good, fast or cheap - pick 2

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- Price, scope or time - pick 2

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Summary

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- Configuration
 - Free spec, all about efficiency
- Customization
 - Intent Driven Design, Manage risk
- Exploration
 - Agile/lean, emergent design
 - Fixed price, scope or time - pick 2



Questions?

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