Managing CF Projects

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Agenda

- Project Buzzwords & Myths
- Reasons for Failure
- The Development Process
  - ✓Common Mistakes
  - ✓MX Tools
  - ✓Books
  - ✓Sites
- Q&A

Project Buzzwords & Myths

Project Buzzwords

- Process
- Requirements
- Teamwork
- Consensus
- "On-time, On Budget"
- Methodology
- Empower, Synergy, etc…

"Process"

Buzzwords - "Process"

- 4 Step, 5 Step, 12 Step…
- Who designed your process?
- Do you actually follow that process?
- When did you last update your process?
- How complex/abstract is your process?

"Requirements"

Buzzwords – "Requirements"

- Do you have enough requirements before you start coding?
- Can you have too much of it?
- Are they consistent?
- Can your requirements change?
- Are they simple to understand?

"Project Mangers"

Buzzwords – Project Managers

- Project Managers are overrated
- Project Leadership vs. Project Reporters

"on time and on budget"

Buzzwords – "on time and on budget…"

- Nearly **a third** of IT projects **were CANCELED** before they could be completed.
- Over **half** of the projects cost almost **TWICE as much** as their **original approved budget**

"Teamwork"

Buzzwords – "Teamwork"

- Hierarchies can easily inhibit communication
- A development team is as strong as the strongest link.

"Consensus"

Buzzwords – "Consensus"

- Too much time and energy spent on consensus
- Great tool for Avoiding Accountability
- Promotes management by committee, slows development

Reasons for Failure

Reasons for Failure

- In software, **past performance** is your ***best indicator*** of **future performance**
- "**Project success** is determined in the **first month"**

Project Success Factors

1. User Involvement	20
2. Executive Management Support	15
3. Clear Statement of Requirements	15
4. Proper Planning	10
5. Realistic Expectations	10
6. Smaller Project Milestones	10
7. Competent Staff	5
8. Ownership	5
9. Clear Vision & Objectives	5
10. Hard-Working, Focused Staff	5

The CHAOS Report , Standish Group

Development Process – The problem

- Phase Isolation – "Plan, then do"

Discover	Plan	Develop	Test

- Requirements are created once and then set in stone
- Architecture is created once and then set in stone
- Development is done in Isolation

The Development Process

Development Process– The Solution ?

- So what is the solution ?
  - ✓RUP?
  - ✓RAD?
  - ✓XP?
  - ✓FliP?

A Clear Vision

- Storyboarding / Wireframes / Prototypes
  - ✓The Topic
  - ✓The Classifications
  - ✓The Specific Ideas
- User Personas/ Scenarios
- Evolving Simplified Documentation

Evolving Project Plan

- Strategic Methodology
  &
  Tactical Plan
- Prepare for change, "Murphy Rules"
- Beware of the "Fudge Factor"
- Parkinson's Law

The Plan – Common Mistakes

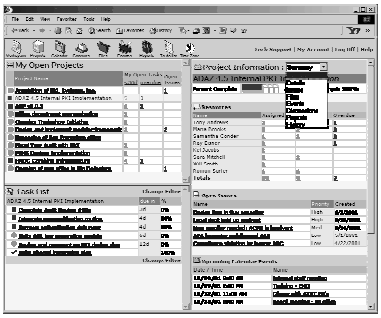
- Too Much Detail
  - ✓"Create a page showing employees, using <CFQUERY>"
- Not enough Detail
  - ✓"Task 1: Create Website"
  - ✓"Task 2: Collect Payment"
- Project and Product summary
  - ✓Plain English
  - ✓Who's who

Keeping Track of it all

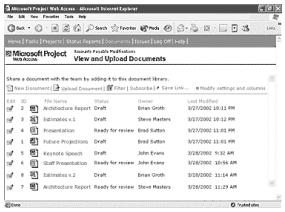
- Show and Tell instead of Reports
- MBWA
- Email, Email, Email
- AIM/MSN/ICQ
- The quintessential Project Site

The Quintessential Project Site

Online Tools –OnProject



Tools– Microsoft Project Central



Development – Famous Last Words

- "I'll patch it for now, and create the reusable component later…"
- "We only need to use this once…"
- "Can you throw together a quick prototype? Don't worry … we won't use it in production this time"

Development – Common Mistakes

- Standards and Documentation
- Code Focus vs. Product Focus
- Hand Coding Syndrome
- Cohesion & Coupling
- Application Tiers
- Build vs. Buy
- Community Involvement

Standards and Documentation

- "It's just one query…we don't need the component for that"
- "I use shorter variable names, they make my code look better"
- "I'll comment this code later…"
- "Sure, we got standards… lots of them"

Standards & Consistency

- Use one set of standards consistently
- Do not change standards in mid project unless they pose a critical risk
- Enforce standards fanatically in your team
- If it is not written, communicated and understood , it is not a standard.

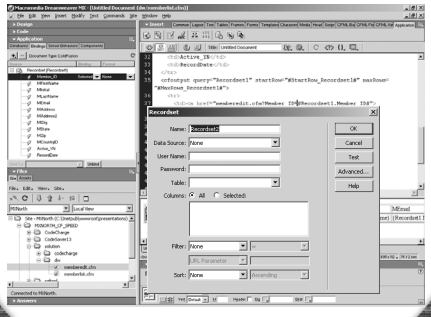
Code Focus vs. Product Focus

- The "milisecond" Trap
- Focus on the Final Result
- Scale Hardware – Not Software
- Consider Development Time when estimating cost

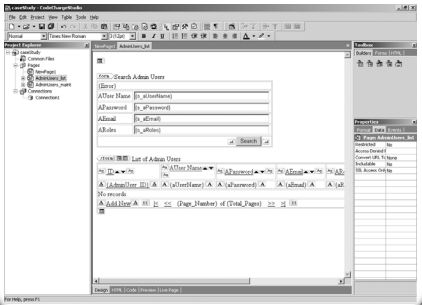
Hand Coding Syndrome

- Spend time doing real problem solving,
  - ✓Do you really want to create a new Add/Edit/Delete template?
- You cannot code faster than your computer
- Get most of your project done in minimal time

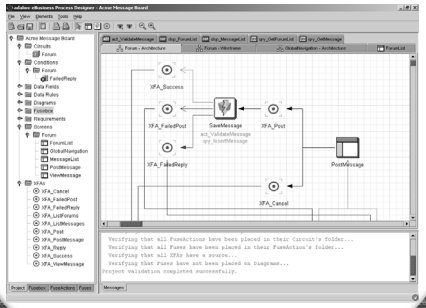
AutoCode – Dreamweaver



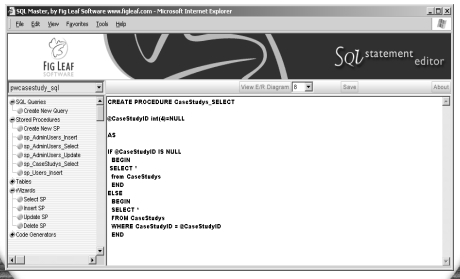
AutoCode– CodeCharge



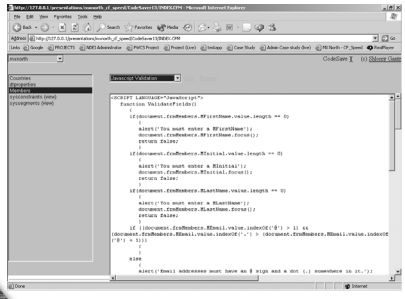
AutoCode– Adalon



AutoCode– Figleaf SQL tool



AutoCode– CodeSaver



```
<cfquery name="getMembers" datasource="mxnorth">
SELECT *
FROM Members
</cfquery>
<table border="1">
  <tr>
    <td>Name</td><td>Email</td><td>Edit</td>
  </tr>
  <cfoutput query="getMembers">
    <tr>
      <td>#Name#</td><td>#Email#</td>
      <td>
          <CFIF session.Username is "administrator">
          <a href="edit.cfm?Member_ID=#Member_ID#">Edit</a>
          </CFIF>
      </td>
    </tr>
  </cfoutput>
</table>
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  </tr>
  <cfoutput query="getMembers">
    <tr>
      <td>#Name#</td><td>#Email#</td>
      <td>
          <CFIF structkeyexists(session.permissions,"EditMember")>
          <a href="edit.cfm?Member_ID=#Member_ID#">Edit</a>
          </CFIF>
      </td>
    </tr>
  </cfoutput>
</table>
```
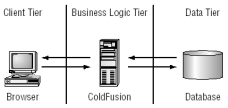

Application Tiers – 3 Tiers

- Simple 3 Tier Application

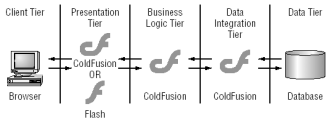


Application Tiers– 3 Tiers

```
<cfquery name="qryMemberList" datasource="#request.dsn#">
SELECT firstname,lastname FROM members
</cfquery>
<table>
     <tr>
          <td>First Name</td>
          <td>Last Name</td>
     </tr>
     <cfoutput query="qryMemberList">
     <tr>
          <td>#firstName#</td>
          <td>#lastName#</td>
     </tr>
     </cfoutput>
</table>
```

Application Tiers– n Tiers

- n-Tiered Application



Application Tiers– n Tiers

```
<!—-
Name: /c01/ShowMemberList.cfm
Description: A template displaying member list from the database
—->
<cfinvoke component=”member.cfc” method=”getMemberList”
returnVariable=”qryMemberList”>
<table>
<cf_UItableHeaders columns=”First Name,Last Name”>
<cf_UItableData query=”#qryMembers#”
   columns=”#getMembers.columnlist#”>
</table>
```

Application Tiers– n Tiers

```
<cfcomponent>

  <cffunction name=”getMemberList”>

     <cfquery
    name=”qryMemberList”datasource=”MyDatabase”>
     SELECT firstName,lastName FROM Members
     </cfquery>

  <cfreturn qryMemberList>

 </cffunction>

</cfcomponent>
```

Buy vs. Build

- Do we really need another ColdFusion discussion forum?
- Do we really need another WYSIWYG editor?
- Do you really need to build it yourself?

Community Involvement

- Mailing lists
  - ✓CF-talk
  - ✓ChattyFig
  - ✓Local user group
- Macromedia Forums
- BLOGs
- CFDJ
- Books
- Conferences

The Macromedia Process Map

http://www.macromedia.com/resources/techniques

- Discover
- Define
- Structure
- Design and Prototype
- Build and Test
- Launch
- Evaluate and Maintain

Sites

- http://www.construx.com
  Steve McConnel
- http://www.shoottheprojectmanager.com
  Robert Brents
- http://www.extremeprogramming.org
- http://www.agilealliance.org

Books

- "The Accidental Project Manager"
  - Patricia Ensworth
- "On time within Budget"
  - E.M. Bennatan
- "The Inmates are running the asylum"
  - Alan Cooper
- "Rapid Development"
  - Steve McConnel

Books

- "Necessary, but not sufficient"
  - E. Goldart
- "The Mythical Man Month"
  - Frederick P. Brooks, Jr.
- "Extreme Programming Installed"
  - Ron Jeffries, Ann Anderson, Chet Hendrickson

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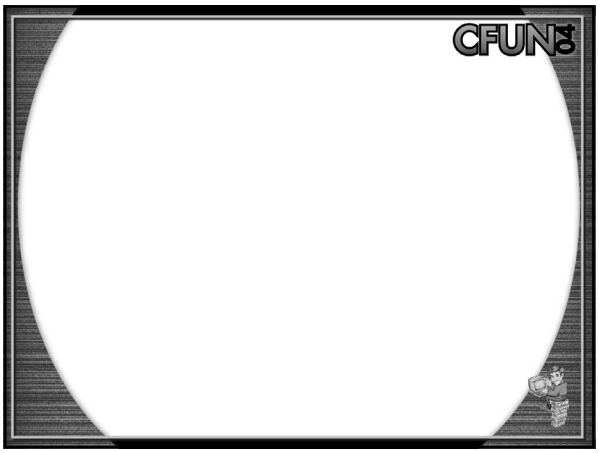
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