“Does anyone remember ‘why’ we did this?”

The Challenge to Recover 15 Years of “Why” Behind a Product Design

Kevin Dunipace
Staff Software Engineer
Intuit Real Estate Solutions
Business Overview

• Property Management solution for owners, managers and tenants of real estate world wide. (North America, Europe, Asia, Australia)

• Investors in and/or managers of commercial (retail, office, industrial) and/or residential real estate.

• Companies who use a substantial number of real estate locations in conducting their primary business.
**Existing Product**

- Over 2,000,000 lines of code (99 % VB)
- Approximately 250 objects/components
- Product includes object and meta data (no source)
- Highly adaptable/extensible application (through meta data)
- Business logic being implemented in a combination of code and meta data.
Issues

• Aging Technical Platform
• Heavily Modified / Enhanced Design (spaghetti effect)
• Talent / Experience Loss
• Limited Requirements / Design Documentation (last 3-4 years only)
• Heavily Configurable Product (used differently by locale and business)
The Challenge

- Shift to .Net Platform
- Rediscover Requirements satisfied by the Existing Product Offering
- Validate those requirements with existing client / market needs
- Create New Designs to satisfy identified requirements
- Re-Implement
Currently Implemented requirements:

- Multiple Sales Taxes
- Transferred Sales Taxes
- Recoverable / Non-recoverable Taxes
- Tax Election
- Subcontractor Withholding Taxes
- Tax on Tax
- Tax by Item vs Tax by Totals
- Tax Point Date
- Inclusive Tax
## Example 2 / Entering Invoices

### Invoice Entry Detail

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor ID: *</td>
<td></td>
</tr>
<tr>
<td>Invoice Number: *</td>
<td></td>
</tr>
<tr>
<td>Invoice Date:</td>
<td>11/5/2005</td>
</tr>
<tr>
<td>Due Date:</td>
<td></td>
</tr>
<tr>
<td>P.O. Number: *</td>
<td></td>
</tr>
<tr>
<td>Invoice Session ID:</td>
<td>000008</td>
</tr>
<tr>
<td>Expense Period: *</td>
<td>11/04</td>
</tr>
<tr>
<td>Separate Check?:</td>
<td>N</td>
</tr>
<tr>
<td>Tax Amount:</td>
<td>0.00</td>
</tr>
<tr>
<td>Discount:</td>
<td>0.00</td>
</tr>
<tr>
<td>Amount Paid:</td>
<td>0.00</td>
</tr>
<tr>
<td>Net Due:</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Item Details

<table>
<thead>
<tr>
<th>Entity ID</th>
<th>Cash Type</th>
<th>Account Number</th>
<th>Department</th>
<th>Job Code</th>
<th>Reference</th>
<th>Original Item Amount</th>
<th>Item Amount</th>
<th>Disc Am&lt;br&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>@</td>
<td></td>
<td></td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Current Session ID: 000008

Options: Add, Delete, Apply Allocation, Calculate Tax, Apply Proration, Expense Overview, Change Session, Save and New, Save, Cancel, Close.
Example 2 / Behind the page

Metadata +

Coded Logic
“Does anyone remember ‘why’ we did this?”

The Challenge to Recover 15 Years of “Why” Behind a Product Design

Kevin Dunipace
Staff Software Engineer
Intuit Real Estate Solutions
Questions?