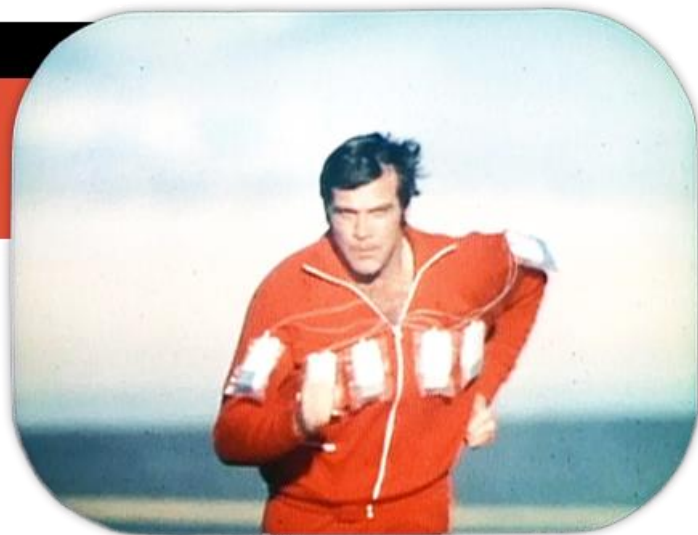


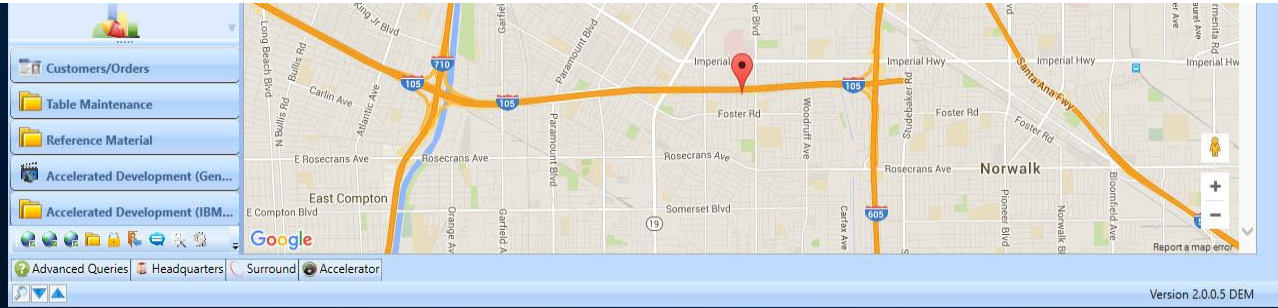
Your Legacy System

Gentlemen, we can rebuild it.
We have the technology

We have the capability to build your companies most *powerful software*.
Your legacy system will be that software.
Better than it was before,
Better... stronger... faster.



©1973 Six Million Dollar Man



Accelerating Software Development and Modernization

The CloudServices24x7 Challenge



Today's Speaker



Derek Maciak

CTO/Partner Surround Technologies

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Socialize:

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 tweet me @SurroundTech

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In this Session

We will use the CloudServices24x7 Legacy System

```
ST6
File Edit View Tools Help
Clear Erase Attn Sysreq Help
Program ID: PROG175 CloudServices24x7, Inc. 9/27/16
Order Entry Application

Customer Number: _____

Enter Customer Number Then ENTER. . .

ST6
File Edit View Tools Help
Clear Erase Attn Sysreq Help
Program ID: PROG175 CloudServices24x7, Inc. 9/27/16
Screen: Main
Customer Information
Customer # 100001

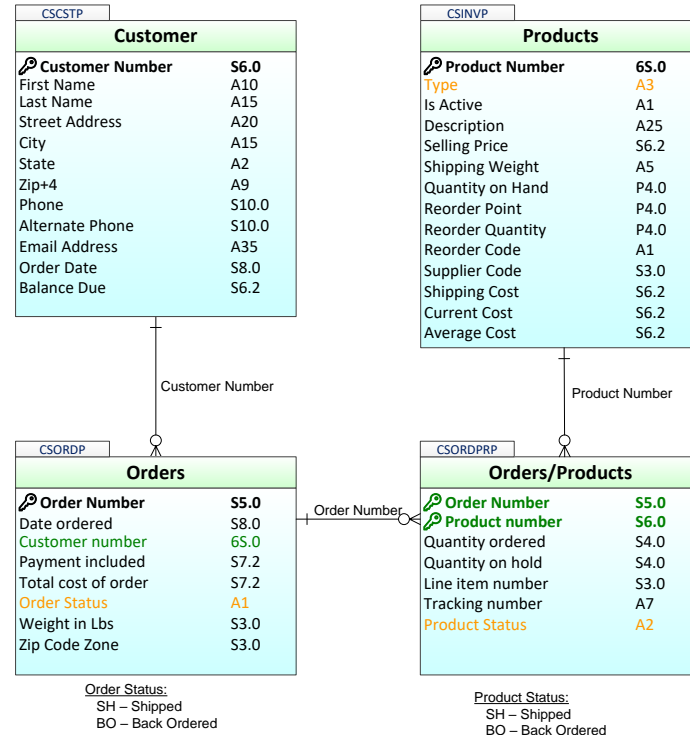
First Last Phone
NARIZA ABDUL HALIM 616-125-4115
Street City ST Zip Code
5652 N. 46TH ST. KALAMAZOO MI 49008-0000

Enter Action: Enter Order #: 
(A=ADD, C=Change)

If you are adding a new order, you don't need to enter an order number.

F3=Exit F12=Cancel
F3=Exit F12=Cancel

Online M 12:19
```



Shipping Weight: 1st 3 positions are pounds; last 2 are ounces
Is Active: Y or N
Reorder Code: Blank or R
Product Type:
LPC – Laptop Computer
HEN – Home Entertainment
GSP – Gaming System Parts
NET – Networking
MON – Monitor
PSP – PC System Parts
OFS – Office Supply
PRT – Printer

The Way Forward



**A Modern Approach
To Software
Modernization**



Define the Problem

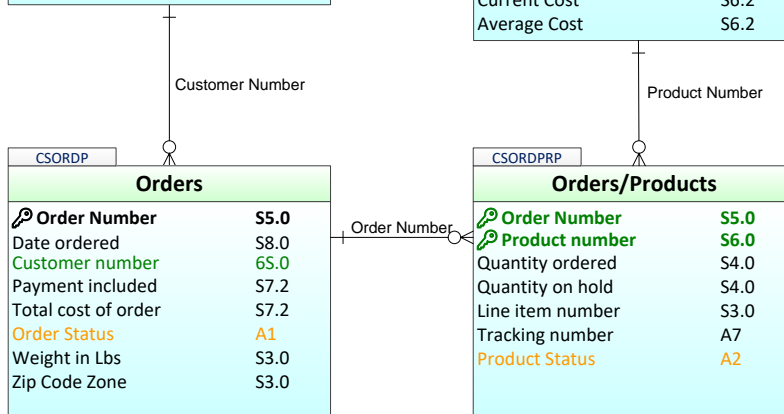
CloudServices24x7 Legacy System

- 4 Physical Files
- 45 Fields
- 3 File Relationships

CSCSTP	
Customer	
Customer Number	S6.0
First Name	A10
Last Name	A15
Street Address	A20
City	A15
State	A2
Zip+4	A9
Phone	S10.0
Alternate Phone	S10.0
Email Address	A35
Order Date	S8.0
Balance Due	S6.2

CSINVP	
Products	
Product Number	6S.0
Type	A3
Is Active	A1
Description	A25
Selling Price	S6.2
Shipping Weight	A5
Quantity on Hand	P4.0
Reorder Point	P4.0
Reorder Quantity	P4.0
Reorder Code	A1
Supplier Code	S3.0
Shipping Cost	S6.2
Current Cost	S6.2
Average Cost	S6.2

Shipping Weight: 1st 3 positions are pounds; last 2 are ounces
Is Active: Y or N
Reorder Code: Blank or R
Product Type:
 LPC – Laptop Computer
 HEN – Home Entertainment
 GSP – Gaming System Parts
 NET – Networking
 MON – Monitor
 PSP – PC System Parts
 OFS – Office Supply
 PRT – Printer



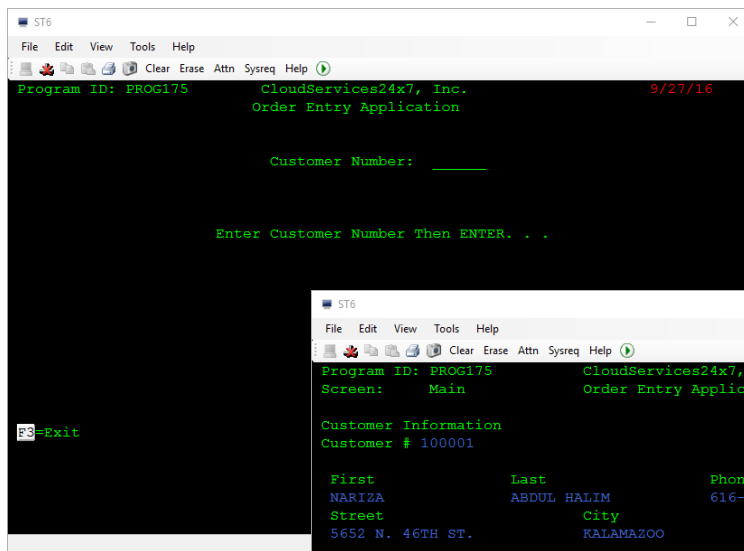
Order Status:
 SH – Shipped
 BO – Back Ordered

Product Status:
 SH – Shipped
 BO – Back Ordered

Define the Problem

CloudServices24x7
Legacy System

- 1 Program
- 5 Screens
+ one Prompt



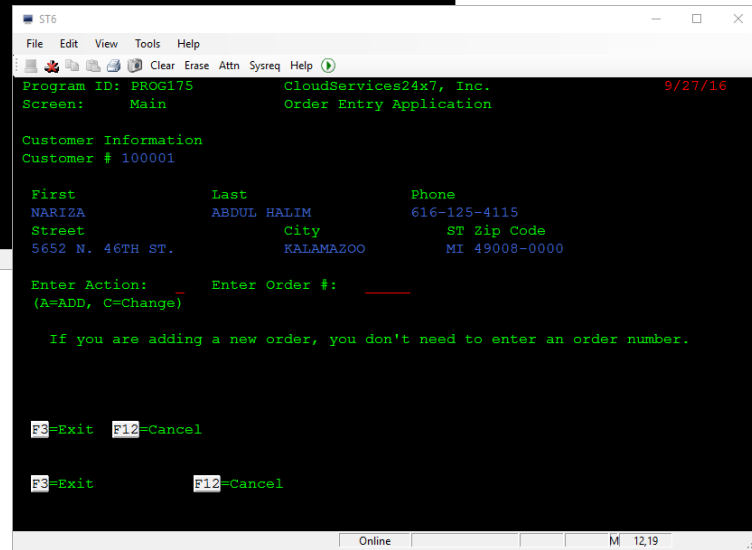
```

ST6
File Edit View Tools Help
CloudServices24x7, Inc. 9/27/16
Order Entry Application

Customer Number: _____

Enter Customer Number Then ENTER. . .

F3=Exit
  
```



```

ST6
File Edit View Tools Help
CloudServices24x7, Inc. 9/27/16
Screen: Main Order Entry Application

Customer Information
Customer # 100001

First Last Phone
NARI2A ABDUL HALIM 616-125-4115
Street City ST Zip Code
5652 N. 46TH ST. KALAMAZOO MI 49008-0000

Enter Action: Enter Order #: _____
(A=ADD, C=Change)

If you are adding a new order, you don't need to enter an order number.

F3=Exit F12=Cancel

F3=Exit F12=Cancel
  
```

Define the Problem

CloudServices24x7 Legacy System

- Navigation is clunky and confusing
- Limited Functionality
 - No way to browse (Work With) Customers.
 - No maintenance on Customers or Products
 - Property-type field values do not have look ups
(Order Status, Product Item Status, Product Type, ...)
- No support for Images

Challenge Requirements

1. This application must prompt for a Customer number. If the customer number is valid, the application will present a screen that will allow the user to change an order or enter a new one.
2. The application must allow the user to add, change, and delete orders.
3. Orders must allow for multiple line items.
4. The order items should include an image of the part.
5. An order should be exportable to a spreadsheet directly from the screen.

Building the Application

- Prep before getting here
 - Created Company and App Logo's
 - Found images for Products and Customers (created an image file)
 - Built Open Generation Technology, OGT, Plug-in
 - Hmmm? Nope, nothing else. That was it.

Building the Application

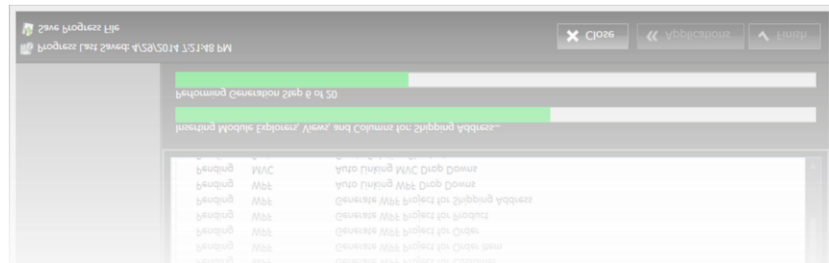
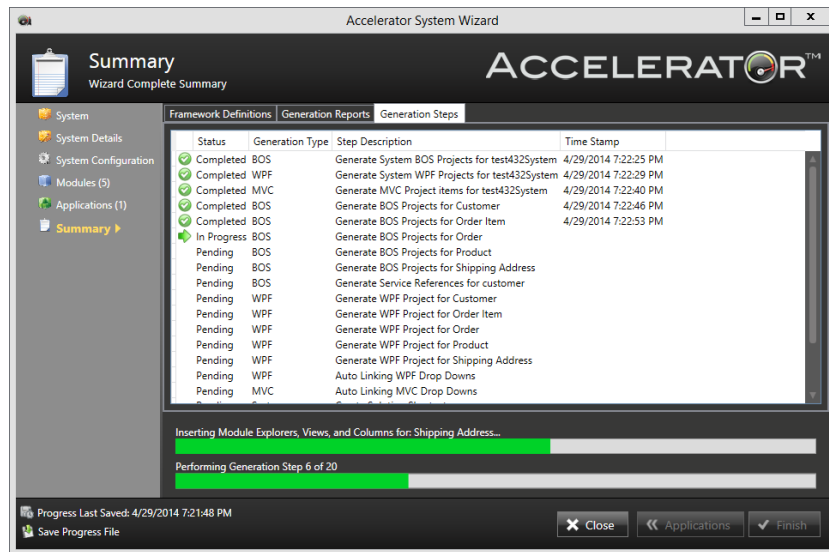
What we will do here today

- Generate **Windows, Web** and **Mobile** Apps
 - Software will be NEW well-architected software.
 - Software will be FULLY-FUNCTIONAL
(not just partial software)
- Demo generated apps

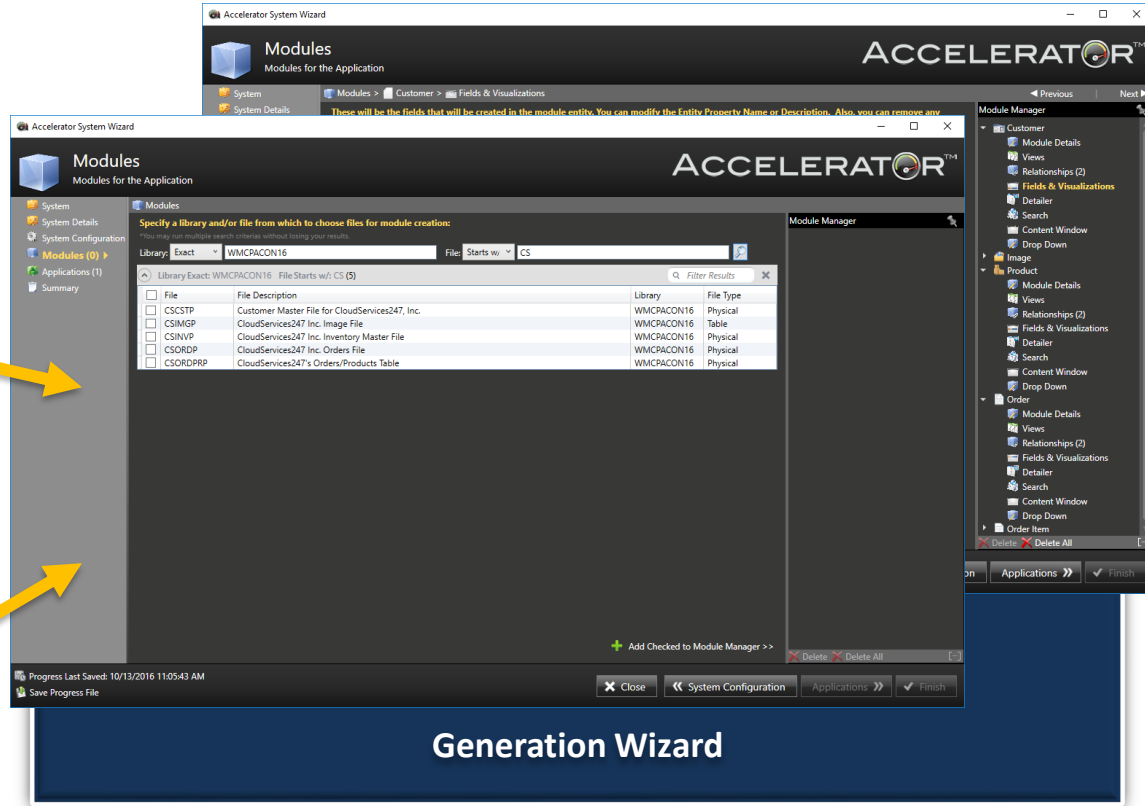
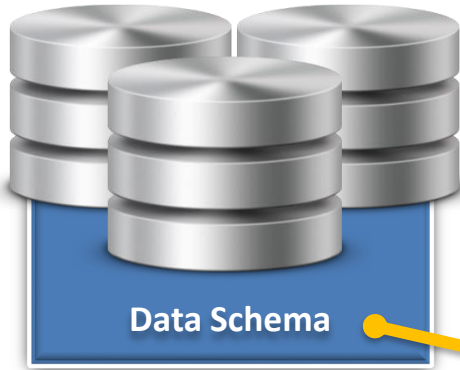


Development Accelerators

- Software Generation
 - Software Generation Wizards
 - System Wizard – Generate brand new systems
 - Application and Module Wizards – Generate new functionality for existing system
 - Open Generation Technology (OGT)
 - Standards Configuration
 - Template Substitution
 - Generation Wizard Plugin



OGT - Generation Wizard Plugin



OGT - Generation Wizard Plugin

Examples from this Challenge

- Removed keywords from file description to get a meaningful module name
- Changed all column/field descriptions to use title case
- Added module relationships
- Added joins to the image file based on module relationships
- Added virtual fields that concatenated any names or addresses

OGT - Generation Wizard Plugin

Examples from this Challenge

- Added a column rule for dates to use DateTime data type and date picker visualization
- Added column rules to set visualization, formatting and validation for Currency, Phone Numbers, Email, Checkboxes, Radio Buttons, etc.
- Set the checked state and sequence for all module options (Fields included in Searching, Data Grid Display, Detail Display, etc.)
- Added additional Accelerator Views (Accelerator Views allow an end user to select a preset sort and column arrangement)

Demonstration

Building Software Efficiently and Effectively



Starting with
Complete System Generation

Demonstration

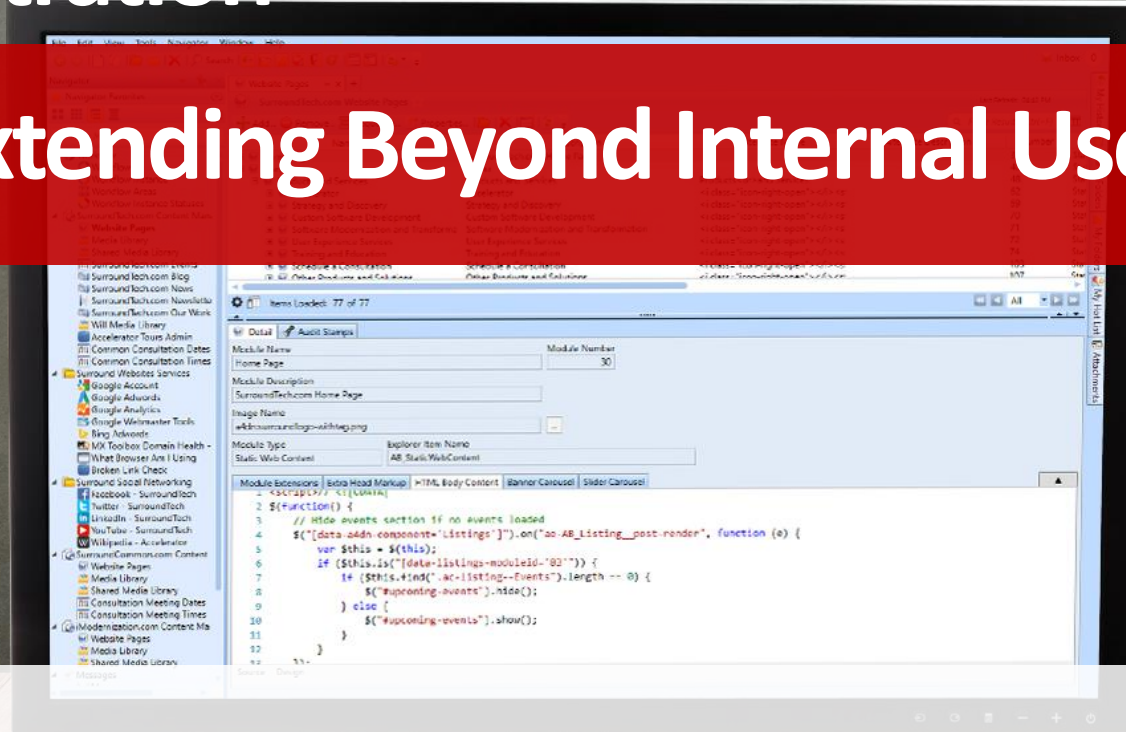
Providing Robust Applications to your Users



Responsive Web Desktop-style and Mobile Application
Windows Desktop Application

Demonstration

Extending Beyond Internal Use



A CMS for Websites and Portals

What we did different

- NOT just the UX
- Rewritten application with new architecture
- Web Service Enabled
- Both Windows and Desktop Style Web/Mobile Web
- eBusiness Website
- UX Design
- No additional Technical Debt

What we did different

- No additional Technical Debt
- No Proprietary Technologies
- No Limitations
- No Technology Lock-in

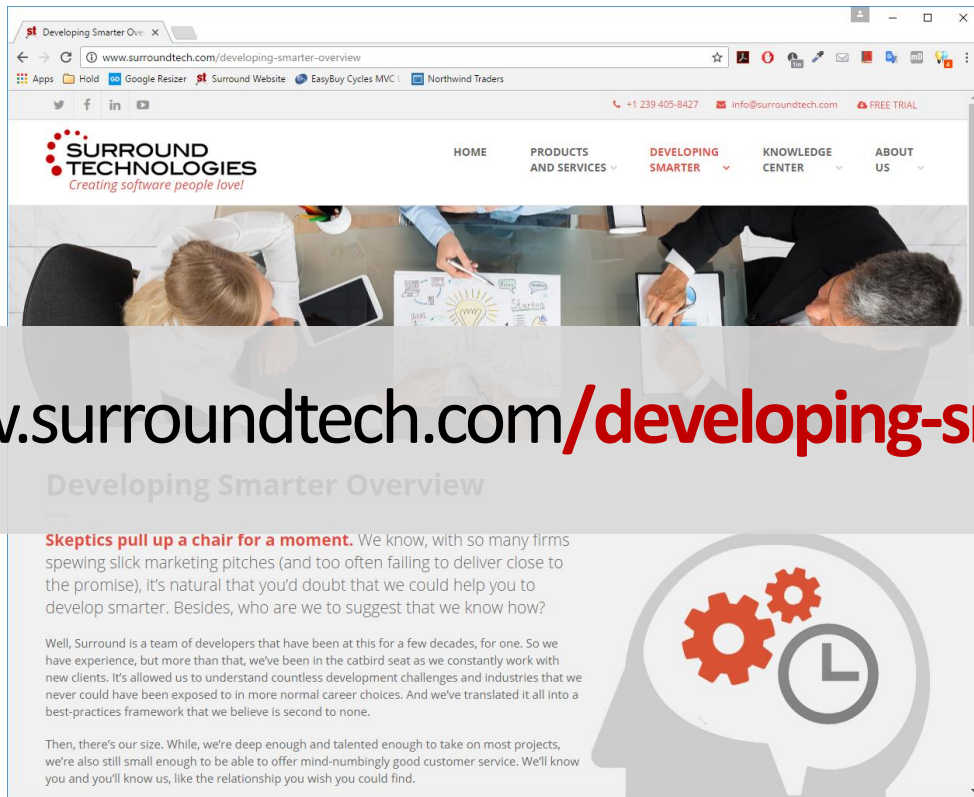
How long did it take

- OGT Plugin (1 hour)
- Generation (15 min)

We did it here in front of you. Did you time it?

- CMS based Website (4 hours)
- What would be next
 - Deployment (will take about 30 min)
 - You can see all of this again at
<http://cloudservices24x7.surroundtech.com>

Developing Smarter



**SURROUND
TECHNOLOGIES**
Creating software people love!

HOME PRODUCTS AND SERVICES **DEVELOPING SMARTER** KNOWLEDGE CENTER ABOUT US

Developing Smarter Overview

Skeptics pull up a chair for a moment. We know, with so many firms spewing slick marketing pitches (and too often failing to deliver close to the promise), it's natural that you'd doubt that we could help you to develop smarter. Besides, who are we to suggest that we know how?

Well, Surround is a team of developers that have been at this for a few decades, for one. So we have experience, but more than that, we've been in the catbird seat as we constantly work with new clients. It's allowed us to understand countless development challenges and industries that we never could have been exposed to in more normal career choices. And we've translated it all into a best-practices framework that we believe is second to none.

Then, there's our size. While, we're deep enough and talented enough to take on most projects, we're also still small enough to be able to offer mind-numbingly good customer service. We'll know you and you'll know us, like the relationship you wish you could find.

<http://www.surroundtech.com/developing-smarter-overview>

Our Strategies

We apply our broad industry experience to analyze and assess where you are today and where you wish to be in the future to provide an agile phased strategy to getting there over a timeframe that makes sense for your business.

- **Tactical and Strategic**
(Evolve and adapt)



Our Core Strategy

- **Accelerated Software Development**

Build Great Software – Fast

<http://www.surroundtech.com/accelerating-software-development>

- **Applied To Modernization**

The Faster, Smarter Way Forward

<http://www.surroundtech.com/accelerating-application-modernization>

Tool Enablement

ACCELERATORTM



Develop Software People Love - Fast

<http://www.surroundtech.com/accelerator>

Modernization Options

- Accelerator
 - Architecture
 - Frameworks
 - Generation
 - Development Accelerators
 - User Experience
- Fresche Legacy's Looksoftware
 - Reuse legacy 5250 and 3270 Uis
 - **Plugs into Accelerator-based Apps**
Provides strategic approach with rapid, tactical, low-risk return
- Fresche Legacy's X-Analysis
 - Detailed analysis of Current State
 - File/Module Relationships
 - Screen Designs, Relationships and Layouts
 - Business rule extraction and code conversion
 - **Feeds Accelerator Generation**
Significantly reduces re-write development effort and time

ACCELERATOR[™] Flexibility

Deliver the **right** application
to the **right** user
on the ***right device***

.....

- Line Of Business
- Customer Self-Service
- Ecommerce
- Mobile
- Tablet
- Kiosk
- Etc ...



ACCELERATORTM Options

Develop what you need at **your pace** when **you need it**.

- Write new software
- Rewrite existing software
- Extend existing software
- Reuse and integrate with existing programs
- Reuse and transform existing 5250/3270 “Green Screen” User Interfaces
- Rapidly deliver enterprise Windows, Web and Mobile applications
- Evolve legacy systems to new modern applications at your pace.
- Combine new, legacy and other systems into one seamless unified user experience.
- Stop building more legacy and accumulating even more technical debt.
- Advance developer skills, learning the most modern technologies quickly.
- Use best practices software design and architecture.
- Have superior application performance and reliability.
- Eliminate your change request backlog.



ACCELERATORTM Freedom



No Proprietary Technologies
No Limitations :: No Dead Ends

DEVELOP



FASTER



BETTER



MORE

SMARTER



ACCELERATORTM





Reach your
Software Superhero Status!

Create Software Users Will Love



We believe that **you can be a software superhero** by creating software your users will love, and your business will see value and return.





Q&A



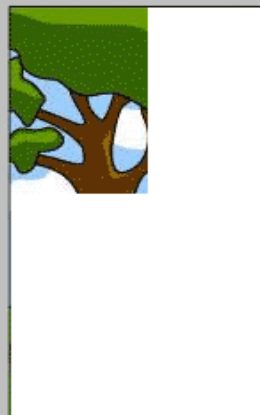
How the customer explained it



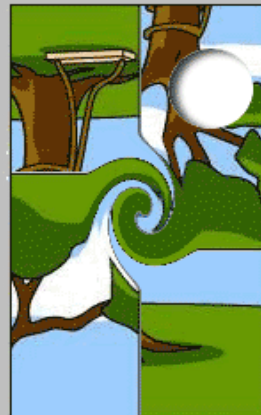
How the Project Leader understood it



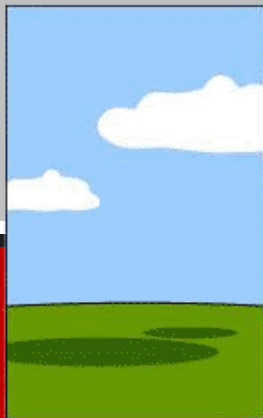
How the Analyst designed it



How each developer integrated with others



How QA got the 1st, 2nd, and 3rd build



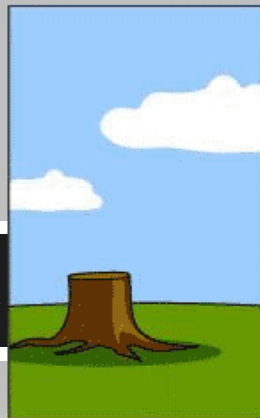
How the project was documented



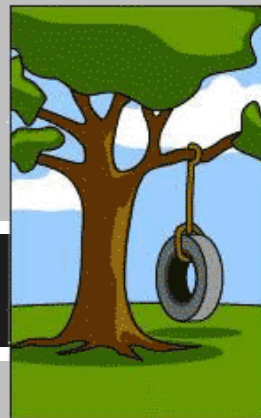
How the Business Consultant described it



How the customer was billed



How it was supported



What the customer really needed

Thanks for listening



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Socialize:



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