The Deli-cious Developers

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Agenda

• Project Context
• Architecture
• Process
• Current Status
• Reflection
• Demonstration
• Future Goals & Work
Project Context

Congestion in high traffic areas

Long lines when ordering Deli, Subs, etc

Need a long term store-wide solution

Increase Deli efficiency
Project Context

Create a distributed kiosk system

Engineer a backend usable by many departments

Reporting and Administration capabilities

Build with mobile, and distributed management in mind
Admin Console connects to a Kiosk Server to administer various properties

Servers contains Item catalogs and functionality for potentially many departments

Any device can use server APIs for both customer and employee experiences

The server can print to many customer and employee printers
Abstract item catalogs are necessary for multi-departmental use

Remote management capabilities are integral to large-scale deployments

Stores may have multiple customer and/or employee endpoints

Using a platform agnostic RESTful API ensures compatibility with any device
The Architecture

Tech Stack

- ASP.NET
- Management
- Console
The Architecture

Dynamic Workflows

Deli

Container

Attributes

Shopping Cart

Meat

Bologna

Bologna

Tonnage Type

Slice Type

Loaf

Tonnage Type

Slice Type

Cheese

American

Tonnage Type

Slice Type

Swiss

Tonnage Type

Slice Type
Process

Iterative Prototyping

Statement of Needs

Requirements
- Initial Elicitation
- Individual Features

Design
- System Architecture
  - Class Structure

Development
- Tablet & Server Skeletons
- Fully Functioning Applications

Evaluation
- Is this what we want?
- Did we build it right?

Deployment
**Process**

**Elicitation**

- **First Iteration**
  - Gather risks up front and prepare for future iterations
  - Primary goal of first iteration

- **Future Iterations**
  - Smaller details became more apparent as time goes on
  - Tackle big items first, and smaller details later
Process

Team Foundation Service

Requirements mapped to specific, tangible tasks

Tasks estimated and assigned

Each team member responsible for assigned tasks

Progress easily monitored

Task Management
Iteration 3
Current Status

Feature – Complete

Complete End-to-End functionality

Customer & Employee applications
Current Status

Some documentation clean up

Need to finish up unit tests & Technical Report

Additional development is frozen
Reflection

Addressed risks well

Hit all of our deliverables

Lower prioritization of metrics towards end

Lower prioritization of testing towards end
Demo
We actually did more than anticipated...

- Customs Wegman Logo Printing
- Barcode and Coupon Printing
- Multiple, more complex splash screens
- Administration Console
- Email, Text Alerts & Employee Tracking
- Order Time Estimation
- Shopper’s Club
...But there is still more to be done

Project re-use

Integration with Mobile

Extension to multiple departments
Questions?