



The Deli-cious Developers

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Shaw

# Agenda

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

# Project Context

## The Problem

Congestion in high traffic areas

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Long lines when ordering Deli, Subs, etc

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Need a long term store-wide solution

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Increase Deli efficiency

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# Project Context

## The Solution

Create a distributed  
kiosk system



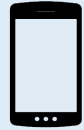
Engineer a backend  
usable by many  
departments



Reporting and  
Administration  
capabilities



Build with mobile, and  
distributed  
management in mind



# The Architecture



Admin Console connects to a Kiosk Server to administer various properties



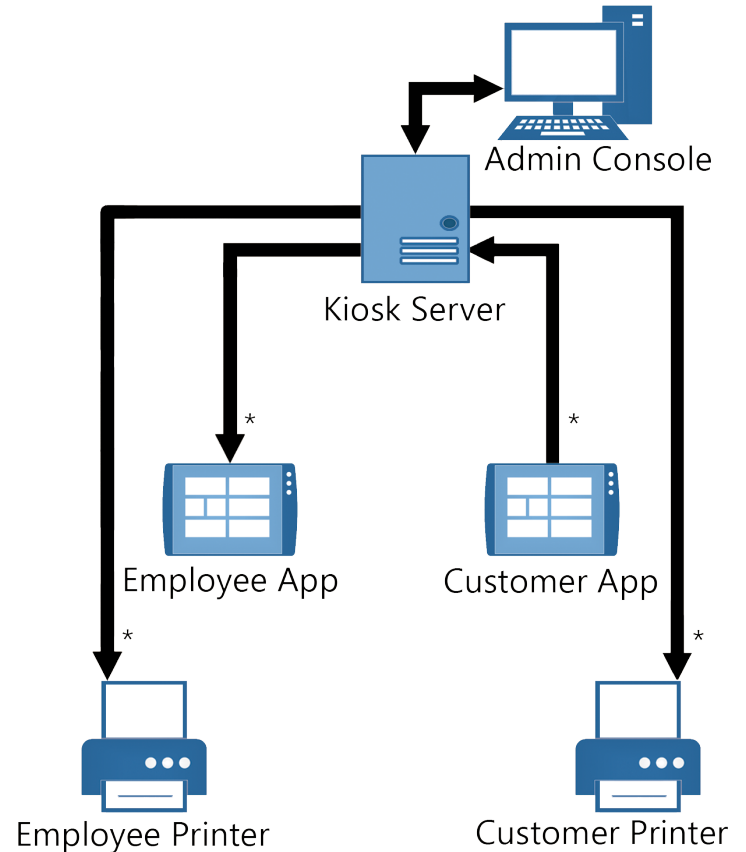
Servers contains Item catalogs and functionality for potentially many departments



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



The server can print to many customer and employee printers



# The Architecture

Why?

Abstract item catalogs are necessary for multi-departmental use

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Remote management capabilities are integral to large-scale deployments

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Stores may have multiple customer and/or employee endpoints

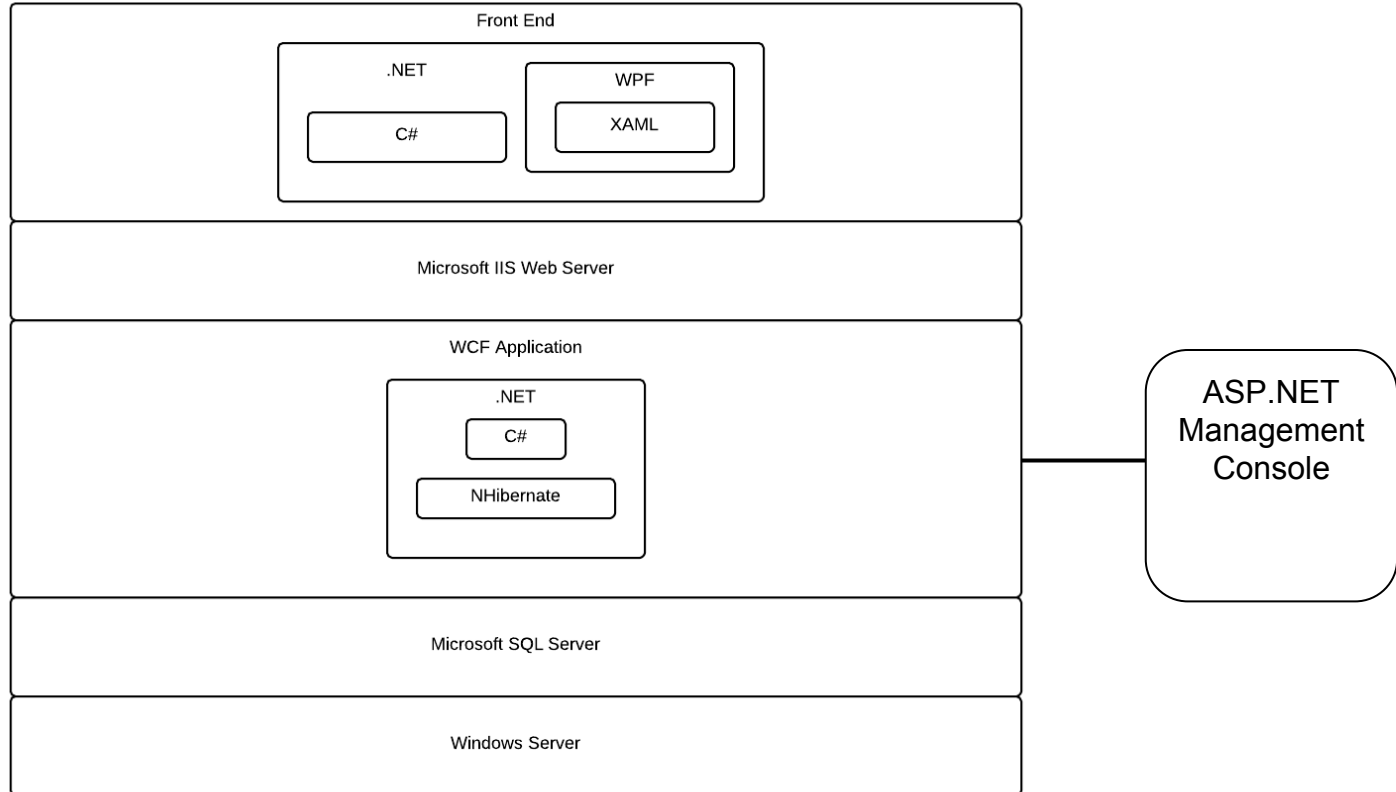
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Using a platform agnostic RESTful API ensures compatibility with any device

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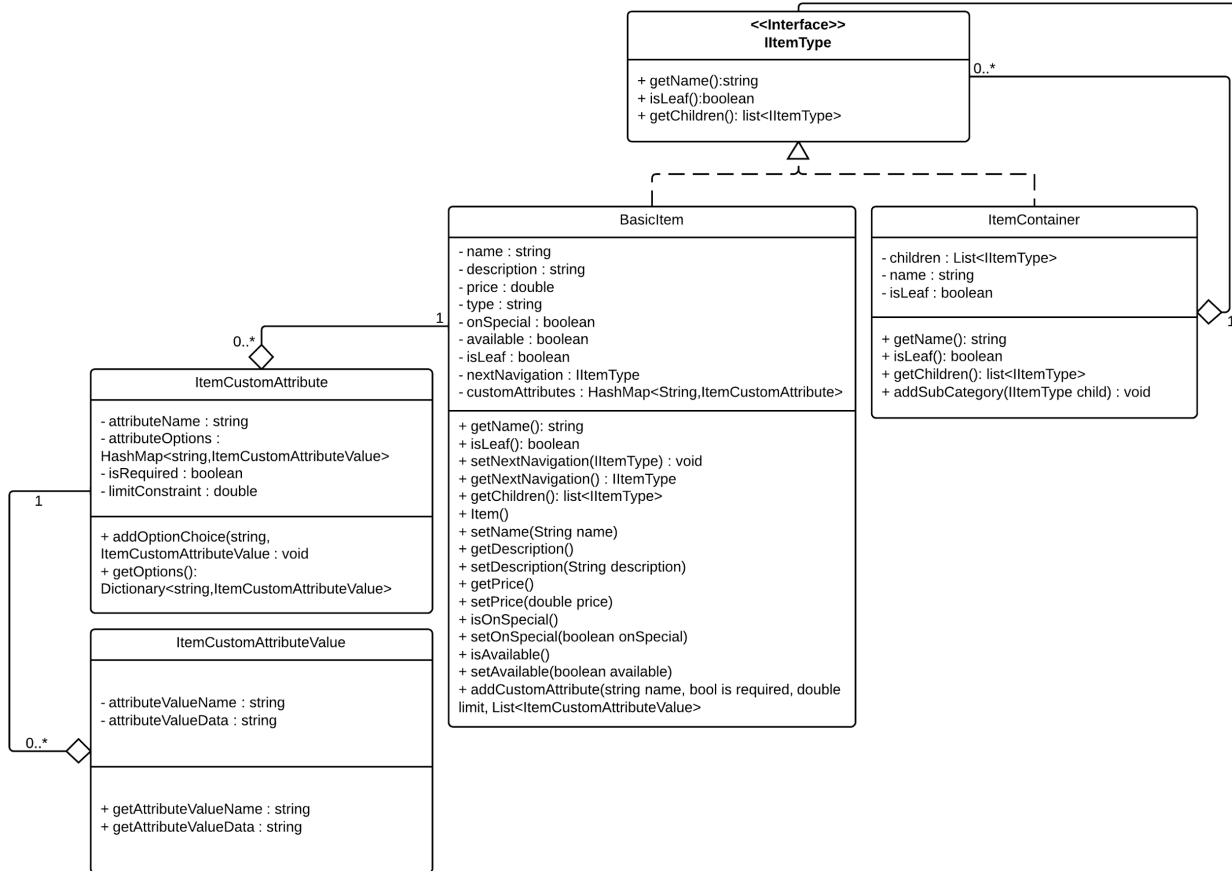
# The Architecture

## Tech Stack



# The Architecture

# Server Design

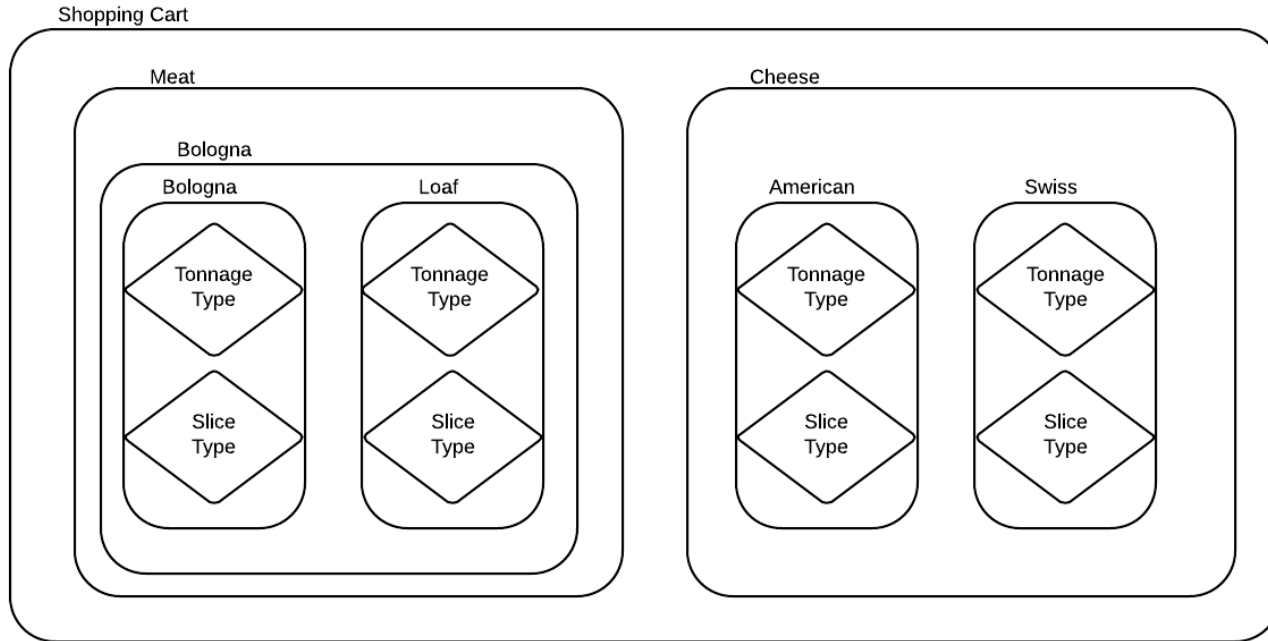
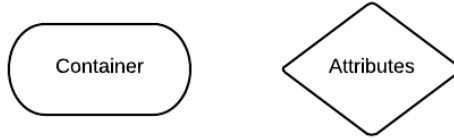




# The Architecture

# Dynamic Workflows

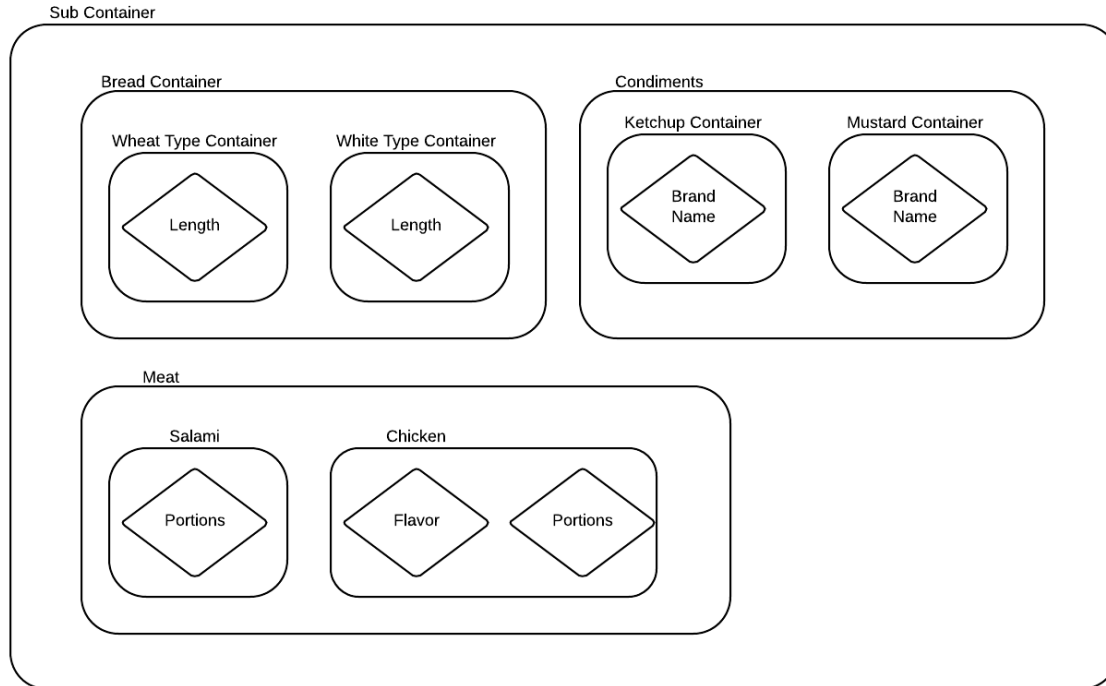
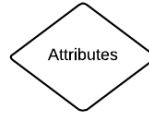
Deli



# The Architecture

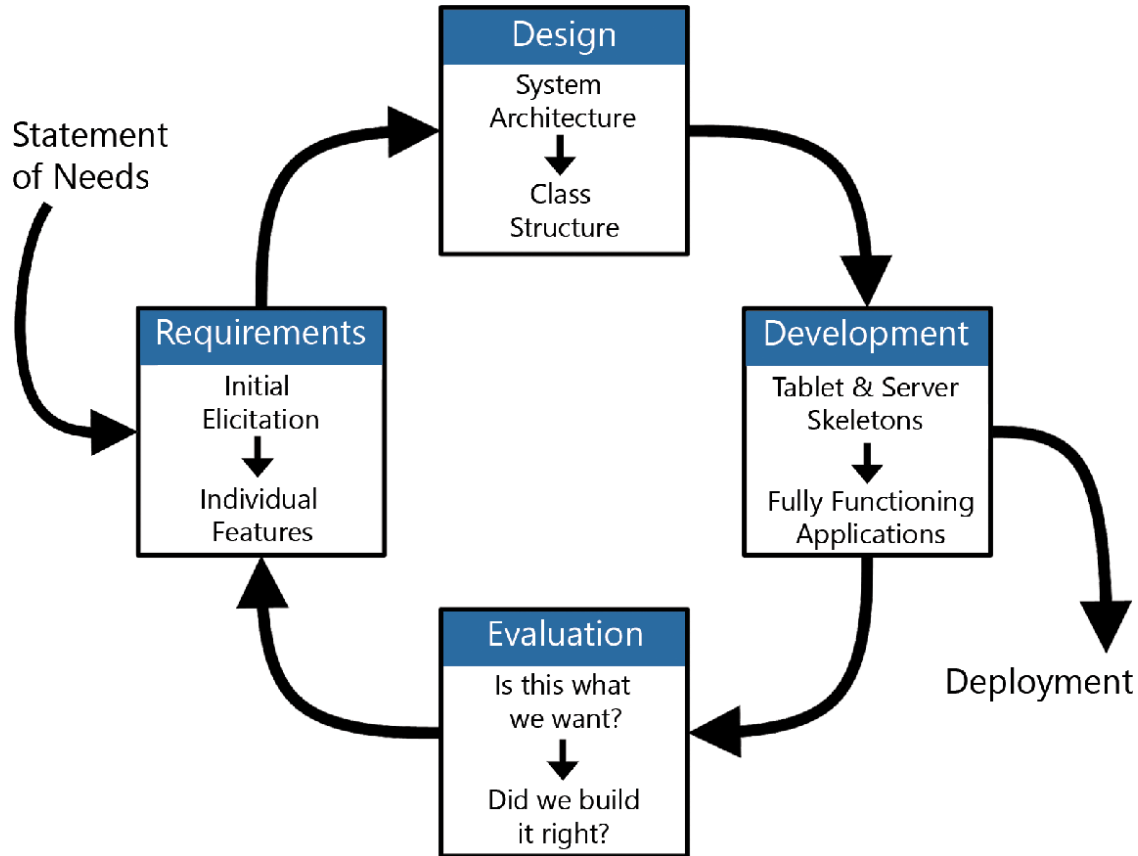
# Dynamic Workflows

Subs



# Process

# Iterative Prototyping



## 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

Team Foundation  
Service

Requirements mapped to specific, tangible tasks

Tasks estimated and  
assigned

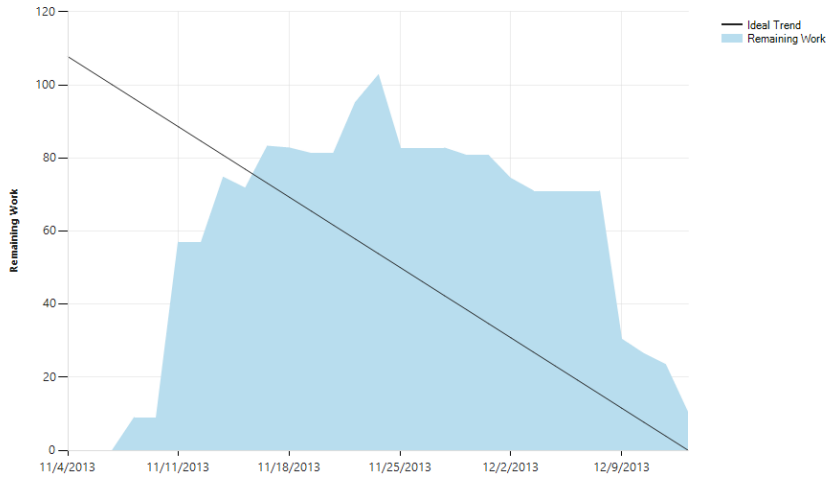
Each team member responsible for assigned tasks

Progress easily monitored

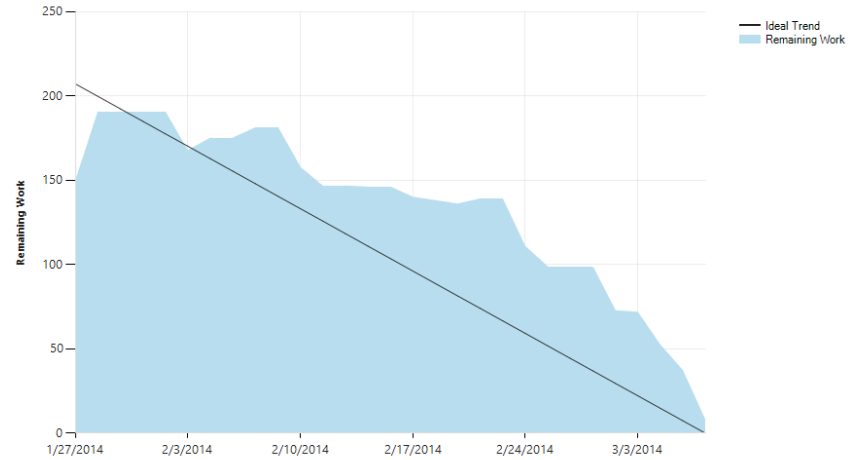
# Process

# Team Foundation Service

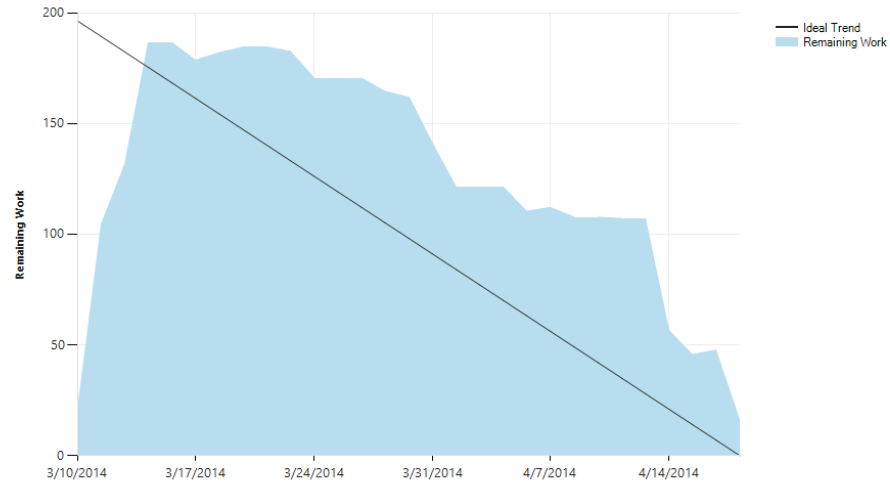
## Iteration 1



## Iteration 2



## Iteration 3



# Current Status

Feature-  
Complete

Complete End-to-End functionality

Customer & Employee applications





# Current Status

Some documentation clean up

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Need to finish up unit tests & Technical Report

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Additional development is frozen

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# Reflection

Addressed risks well

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Hit all of our deliverables

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Lower prioritization of metrics towards end

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Lower prioritization of testing towards end

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# 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

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Integration with Mobile

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Extension to multiple departments

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Questions?

