Alpha Presentation
Tablet-based Point-of-Sale System

The Capstone Experience

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Fall 2011
Project Overview

• Self check out system for tablets
• Interfacing with UPC Barcode Scanners
• Interfacing with Meijer’s Point-of-Sale sub system
System Architecture

Two tablets, a Windows 7 PC, and a Barcode Scanner constitute a Lane.

- Tablet at Beginning of Lane
  - Browser or native application open to web application on PC
  - mPerks ID and PIN
  - Remove Items
  - Cancel Transaction
  - End Transaction
  - HTML 5/js/AJAX
    - Updating UI to account from interaction with scanner and for user interaction with tablet

- Tablet at End of Lane
  - Browser or native application open to web application on PC
  - Same capabilities and communication as other tablet

- Windows 7 PC
  - Barcode scanner interface
  - Web application to receive input from tablets and to push out UI updates
  - (Possibly) USB for Camera taking pictures of items

- SOAP

- Existing VPOS

- RS-232
Customer Login
# Item Scan

![Item Scan App](image)

<table>
<thead>
<tr>
<th>Item</th>
<th>UPC</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBQ Tool Set</td>
<td>41259003275</td>
<td>$10.00</td>
</tr>
<tr>
<td>25% off</td>
<td>123456</td>
<td>$6.00</td>
</tr>
<tr>
<td>Brand New Test Item</td>
<td>57894511654</td>
<td>$45.00</td>
</tr>
<tr>
<td>Another New Test Item</td>
<td>15483798654B</td>
<td>$3.00</td>
</tr>
<tr>
<td>Sub Test Item</td>
<td>15469965578</td>
<td>$0.50</td>
</tr>
<tr>
<td>Test Item</td>
<td>57897851654</td>
<td>$30.00</td>
</tr>
</tbody>
</table>

**Savings:** [Input Field]  
**Total:** [Input Field]  

[Buttons]: Help, Cancel, Finish
What’s left to do?

• Recognize and handle item exceptions
• Test against real VPOS
• Test with serial scanner
• Interface with camera unit
• Migrate from polling to Comet