

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

Windows 8 Apps for Smart Appliances

The Capstone Experience

Team Whirlpool

Robert Carpenter
Kathy Cummings
Zachary Pauley
AJ Sundheimer
Chris Thomas

Department of Computer Science and Engineering
Michigan State University

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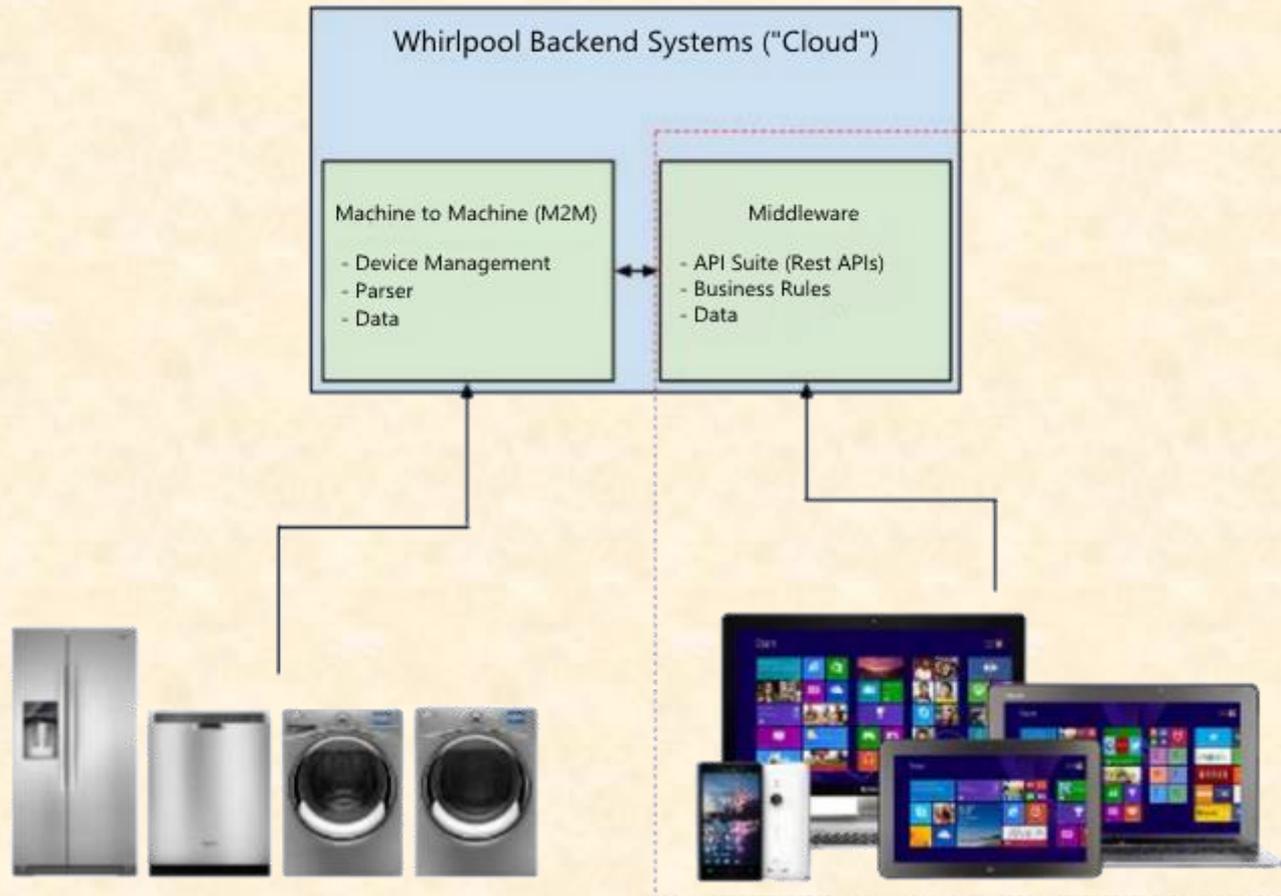
*From Students...
...to Professionals*

Project Overview

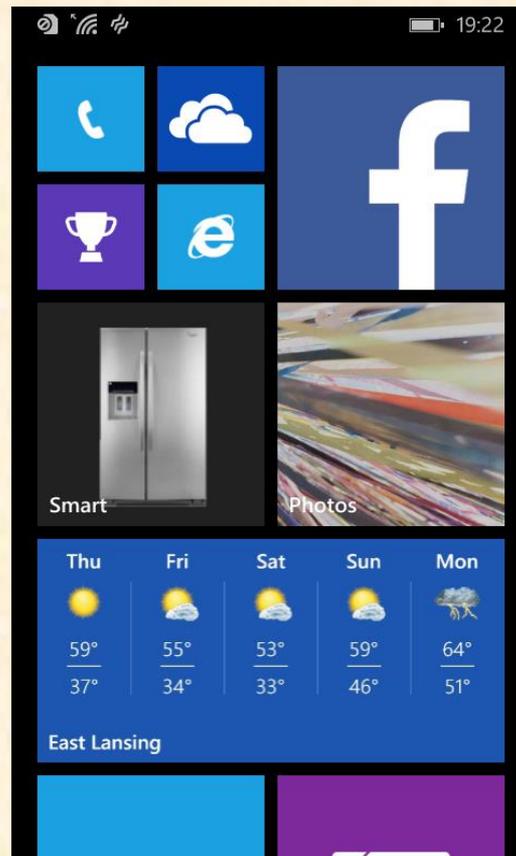
- Windows 8 application for desktops, tablets and phones
- Remotely control Whirlpool Smart Appliances
- Monitor appliance status and condition
- Report to users energy information and usage history



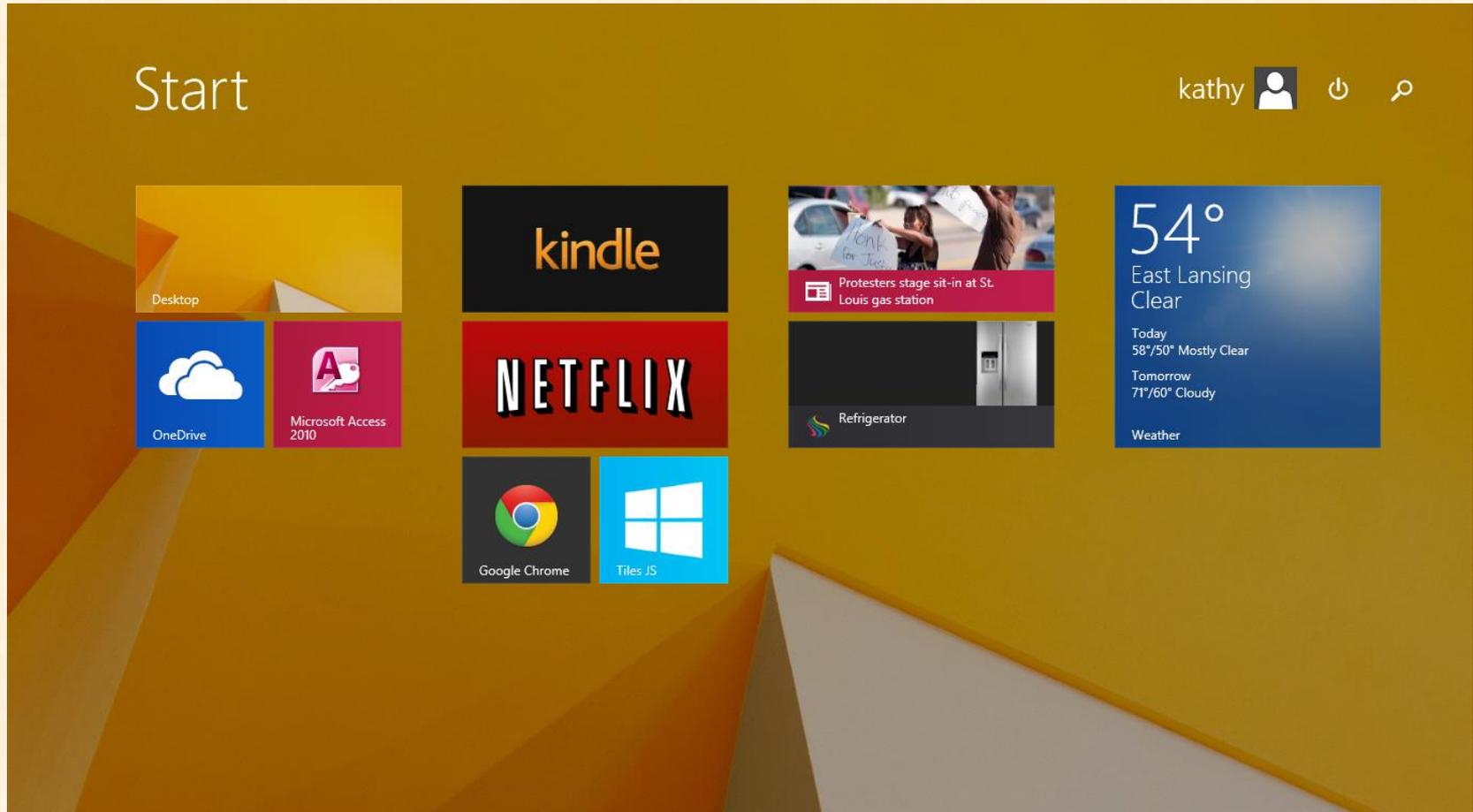
System Architecture



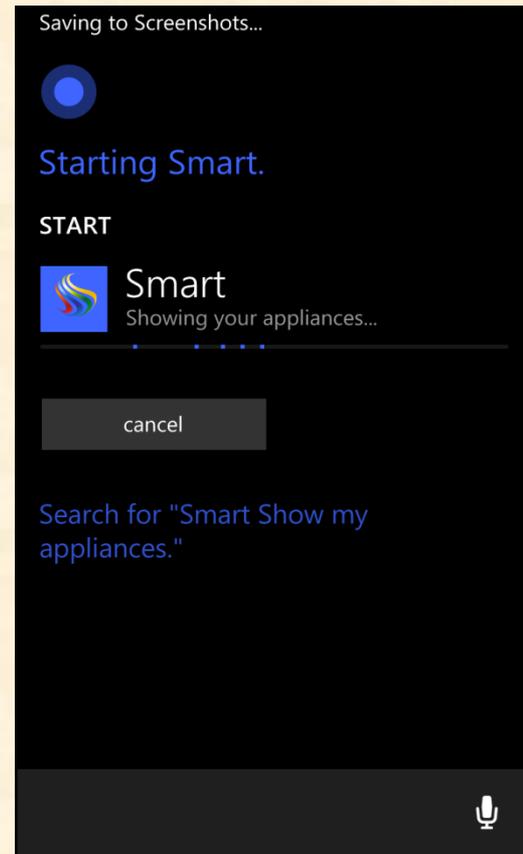
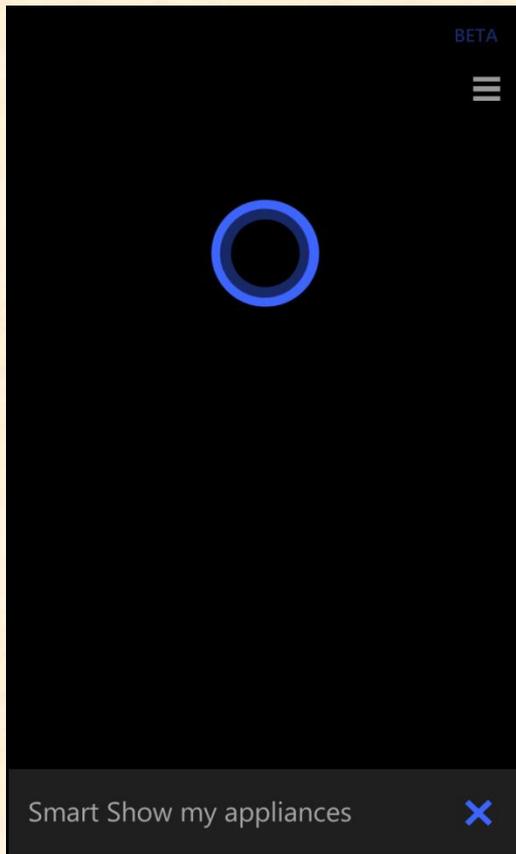
Live Tiles



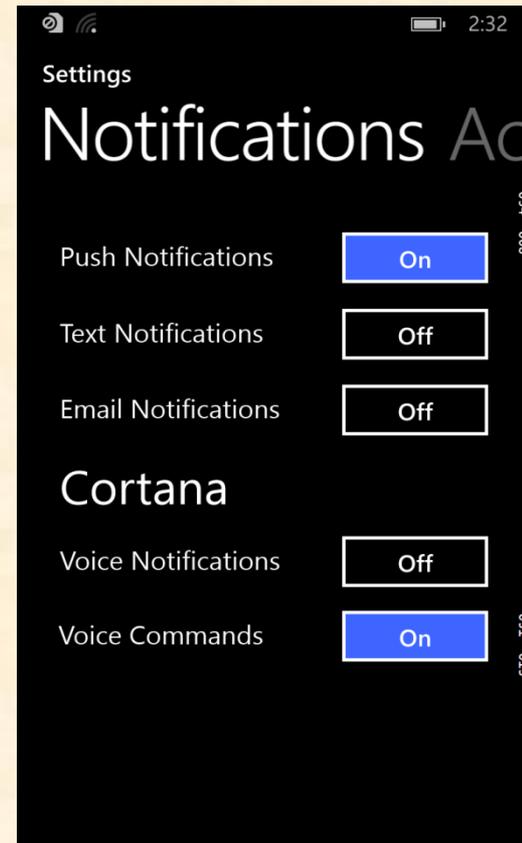
Live Tiles



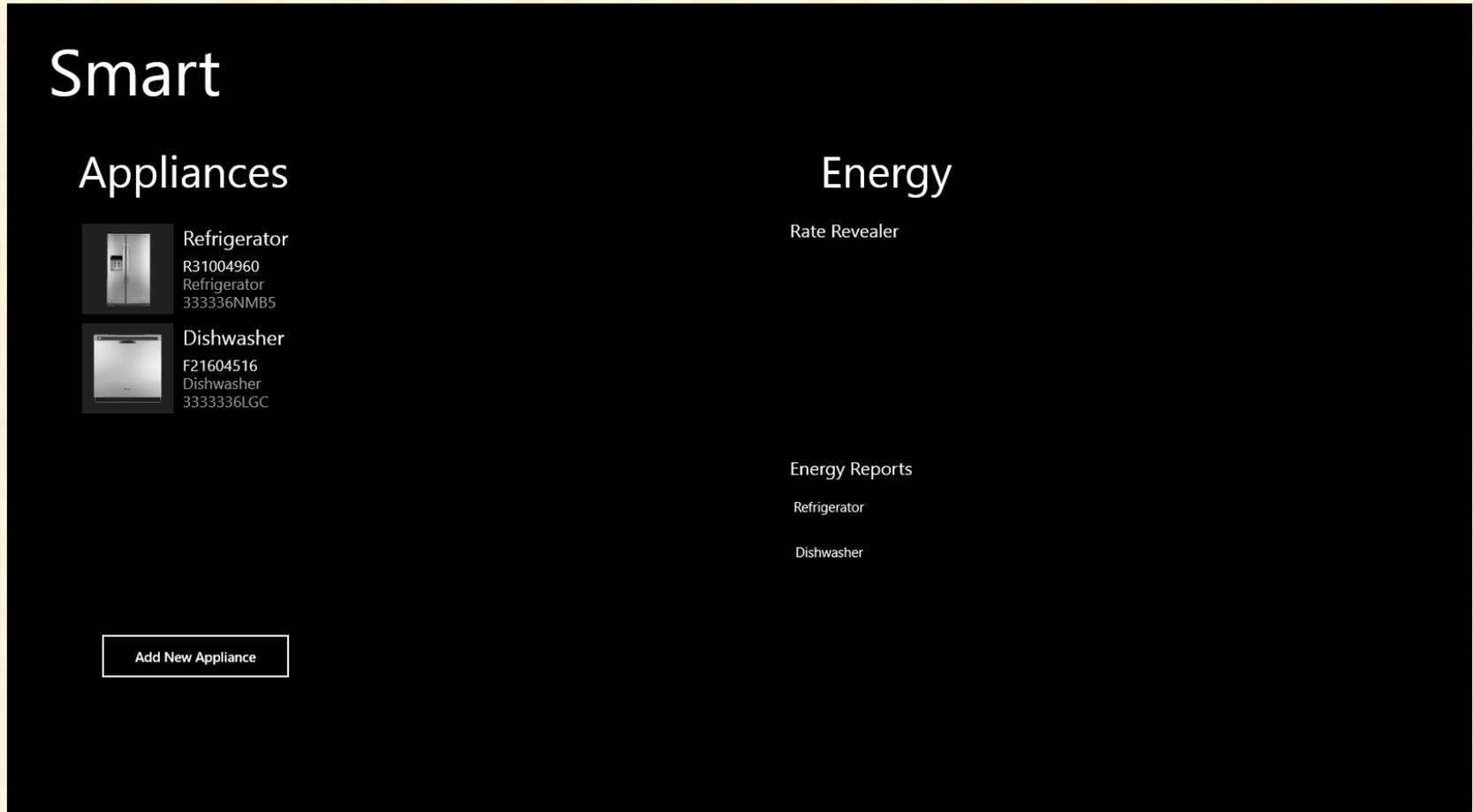
Cortana



Account Appliances and Settings



Account Appliances and Energy



The screenshot shows a user interface for managing smart appliances and energy. It is divided into two main sections: 'Smart Appliances' and 'Energy'. Under 'Smart Appliances', there are two entries: a Refrigerator (R31004960) and a Dishwasher (F21604516). Under 'Energy', there is a 'Rate Revealer' section and an 'Energy Reports' section with sub-entries for the Refrigerator and Dishwasher. An 'Add New Appliance' button is located at the bottom left.

Smart Appliances

Refrigerator
R31004960
Refrigerator
333336NMB5

Dishwasher
F21604516
Dishwasher
333336LGC

[Add New Appliance](#)

Energy

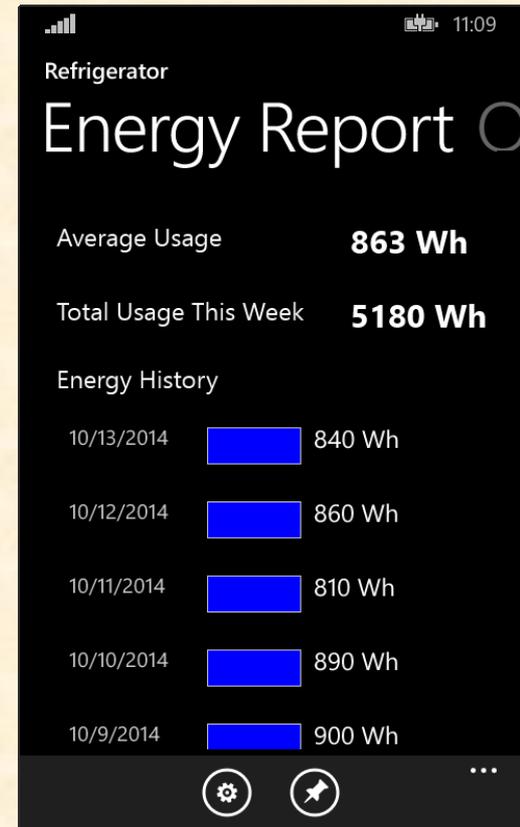
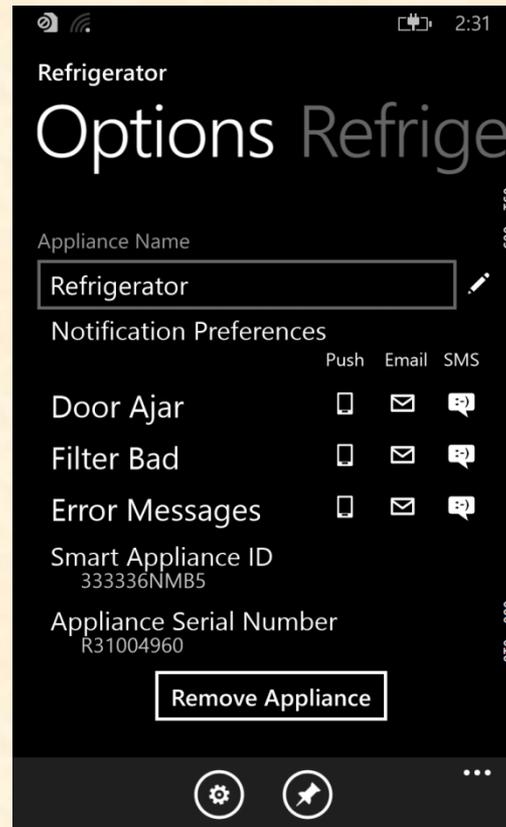
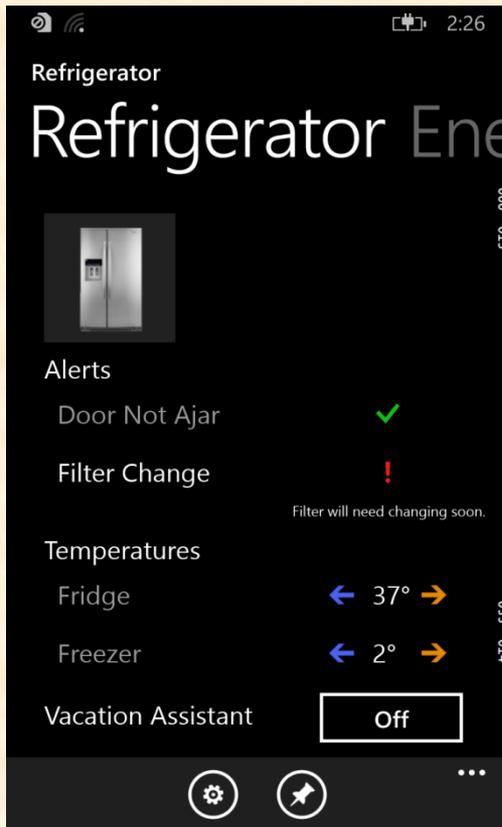
Rate Revealer

Energy Reports

- Refrigerator
- Dishwasher



Refrigerator And Refrigerator Options



Refrigerator, Energy, and Options

← Refrigerator

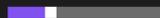


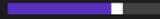
Alerts

Door Closed ✓

Filter Change !
Filter will need changing soon.

Temperatures

Fridge 35° 

Freezer 2° 

Vacation Assistant Off

Energy Report

Average Usage **863 Wh**

Total Usage This Week **5180 Wh**

Energy History

Date	Usage	Date	Usage	Date	Usage
10/12/2014	840 Wh	10/11/2014	860 Wh	10/10/2014	810 Wh

Options

Appliance Name

Notification Preferences

Door Ajar Push Email SMS

Filter Bad Push Email SMS

Error Messages Push Email SMS

Smart Appliance ID
333336NM85

Appliance Serial Number
R31004960



What's left to do?

- Complete integration of washer and dryer
- All appliance energy components
- Refine Cortana implementation
- Dynamic notifications and live-tile updates
- Saving and loading Account Settings

