

MICHIGAN STATE
UNIVERSITY

Alpha Presentation

Connected Appliances Analytics Dashboard

The Capstone Experience

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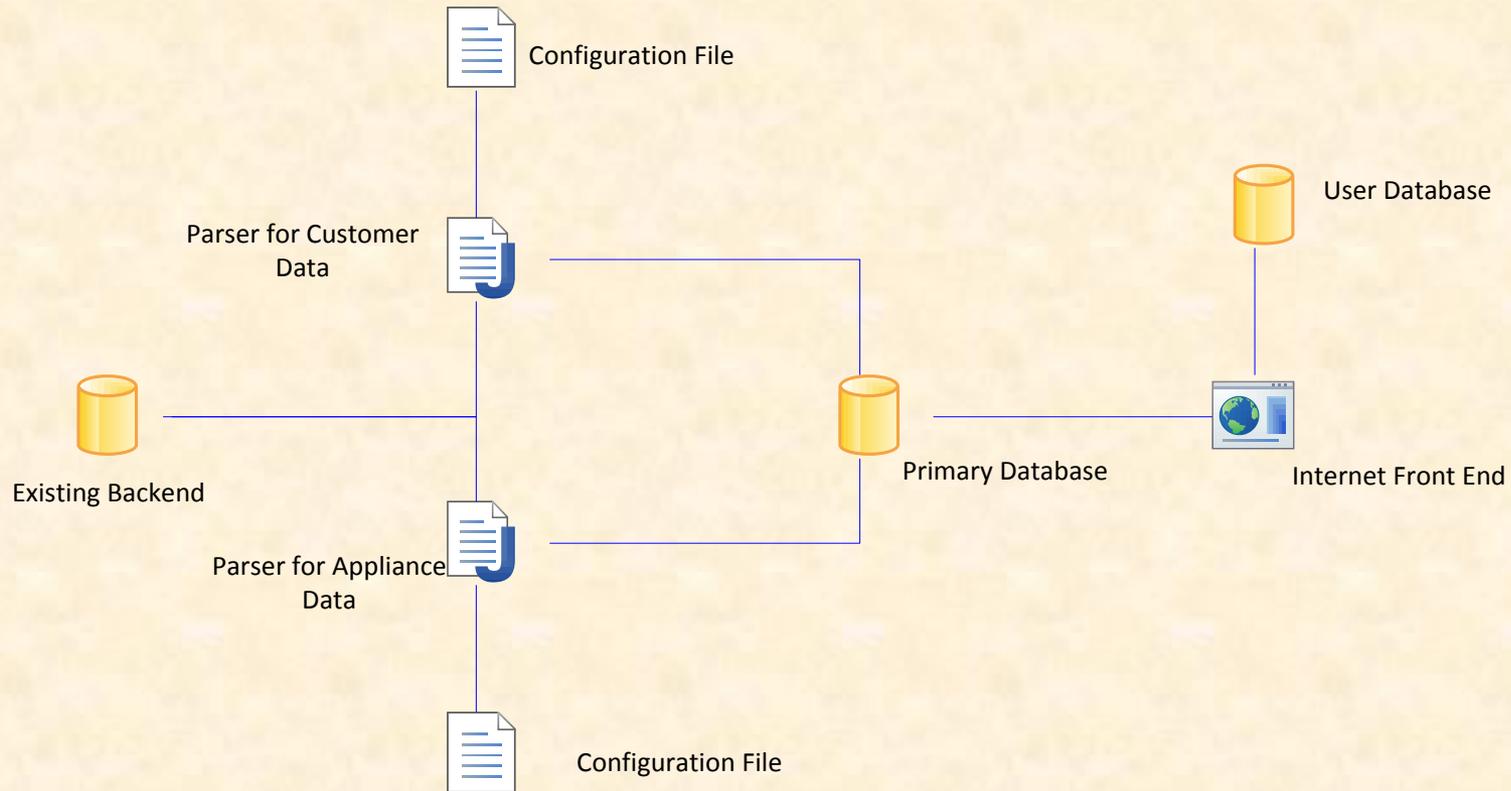
From Students...
...to Professionals

Project Overview

- Web-based Customer Service and Analytics System
 - Customer Lookup
 - Static Dashboards
 - Custom Analytics
 - Administrator Functions
- Two Sources of Information
 - Customer Information Daily
 - Appliance Information in Near-Real Time



System Architecture



Dryer Static Dashboard



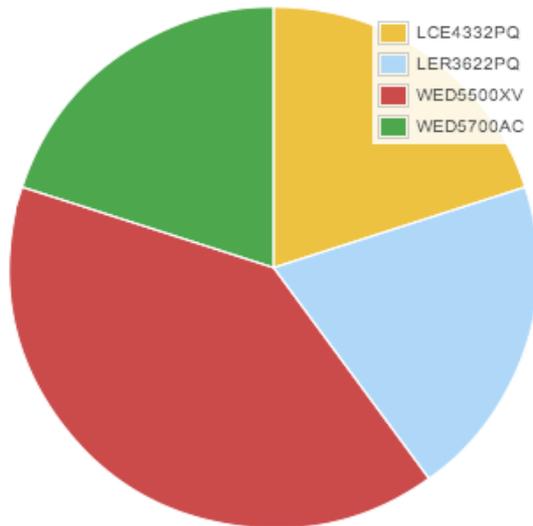
ADMIN
Account Management

CUSTOMER SERVICE
Account Lookup

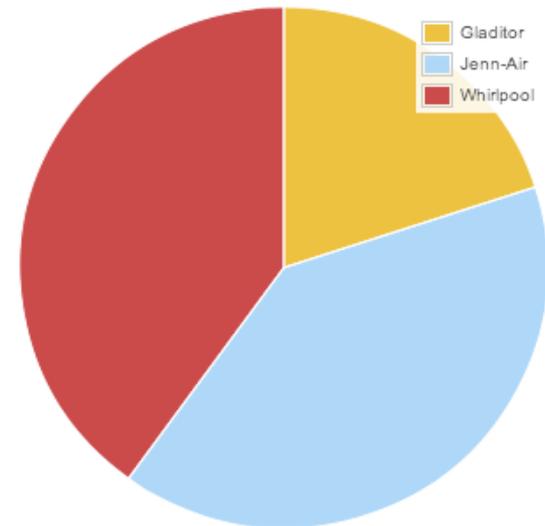
DATA ANALYSTS
Data

PROFILE

Dryer Models



Dryer Brands



Custom Report Generation



Connected Appliances Analytics Dashboard

ADMINISTRATOR
Account Management

CUSTOMER SERVICE
Account Lookup

DATA ANALYSTS
Dashboards & Custom Reporting

PROFILE
Edit Your Information

LOGOUT

<< Back

General Options

Model
Serial
In Service
SAID
Brand

Washer Options

Real Time Power Reading
Cycle Name
Cycle Name Code
End of Cycle
Estimated Time Remaining
Odometer
Percent Complete
Cycle Energy Consumption
Fan Fresh Status
Remote Control Status

Dryer Options:

Real Time Power Reading
Cycle Name
Cycle Name Code
End of Cycle
Estimated Time Remaining
Odometer
Percent Complete
Cycle Energy Consumption
Wrinkle Shield
Air Flow Status

Fridge Options:

Real Time Power Reading
Current Temperature Setting Freezer
Current Temperature Setting Refrigerator

Dishwasher Options:

Real Time Power Reading
Cycle Name
Cycle Name Code
End of Cycle
Estimated Time Remaining
Odometer
Percent Complete
Cycle Energy Consumption
Control Lock



Customer Lookup



ADMIN
Account Management

CUSTOMER SERVICE
Account Lookup

DATA ANALYSTS
Data

PROFILE

Customer Lookup

First Name:

Last Name:

Phone Number:

Email Address:

Address Line 1:

Address Line 2:

City:

State:

ZIP Code:

Device ID:

Submit



What's left to do?

- PGP Encryption to Receive Production Customer Data
- Static Dashboards
 - Enhance Dryer Dashboard
 - Build Dashboards for Washer, Dishwasher, and Refrigerator
- Add Search Fields in Custom Reporting
- Improve Look & Feel

