#team: gaks

**Problem Statement**

Create a smart application which can seamlessly integrate a shipper’s inventory and order management system with warehouse and transportation management systems. The app should be secure, system vendor agnostic and have a user friendly interface.
System Design

Client 1
Client 2
Client 3
Client 4

BlackBox
(Microsoft Chatbot LUIS)

Warehouse
(MySQL Database)

UI for users to check order status
UI for manager to check warehouse status
Warehouse

- We have published a MySQL database on Microsoft Azure platform to store information for the warehouse.
Problem ??

• Different customers different data format.

• Applications and databases are almost always customized to the needs of each and every business. How to do a proper mapping from one side to other?
Data Inconsistencies

Client Side
- Shopper ID
- Buyer ID
- Purchaser ID
- MM-DD-YY
- DD-MM-YYYY
- MM/DD/YY
- YY

WMS
- Customer ID
- MMDDYYYY
LUIS enables you to integrate language understanding into your application, without having to worry about complex machine learning models.
Different names for the same product

Kirkland **Purified** water bottle

Kirkland **Signature** water

Clear Kirkland water cold

Picking up common attributes
Additional Features

Order > Stock

Resolve the issue!!
User Interface

• **Secure** and **accessible** website hosted on Azure’s cloud services
• **Easy to use** design
• **Real-time** data tracking for no delays
• Designed for **collaboration** between warehouses and clients
• Potential for **complex data analytics**
Clients can resolve Not Approved products by notifying the shipper in real time.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Name</th>
<th>User No.</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KirklandWater</td>
<td>12</td>
<td>Approved</td>
</tr>
<tr>
<td>2</td>
<td>smartwater</td>
<td>11</td>
<td>Approved</td>
</tr>
<tr>
<td>3</td>
<td>ChipsAhoy</td>
<td>10</td>
<td>Approved</td>
</tr>
<tr>
<td>1</td>
<td>KirklandWater</td>
<td>12</td>
<td>Approved</td>
</tr>
<tr>
<td>4</td>
<td>saltines</td>
<td>11</td>
<td>Approved</td>
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</table>

Not Approved: Items that are out of stock or otherwise unavailable.

Status: Can be determined by system of Warehouse manager and client.
Further Capabilities

- We can train the system to recognize tables that would allow for integration of more warehouses easily without any human intervention.

More training = More accuracy
Thank You