

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Alpha Presentation

## Maestro

The Capstone Experience

Team Amazon

Mo Almoamen

Ruchika Gupta

Kasidet Meteeputthi

Scott Macpherson

Sawyer Ruben

Department of Computer Science and Engineering  
Michigan State University

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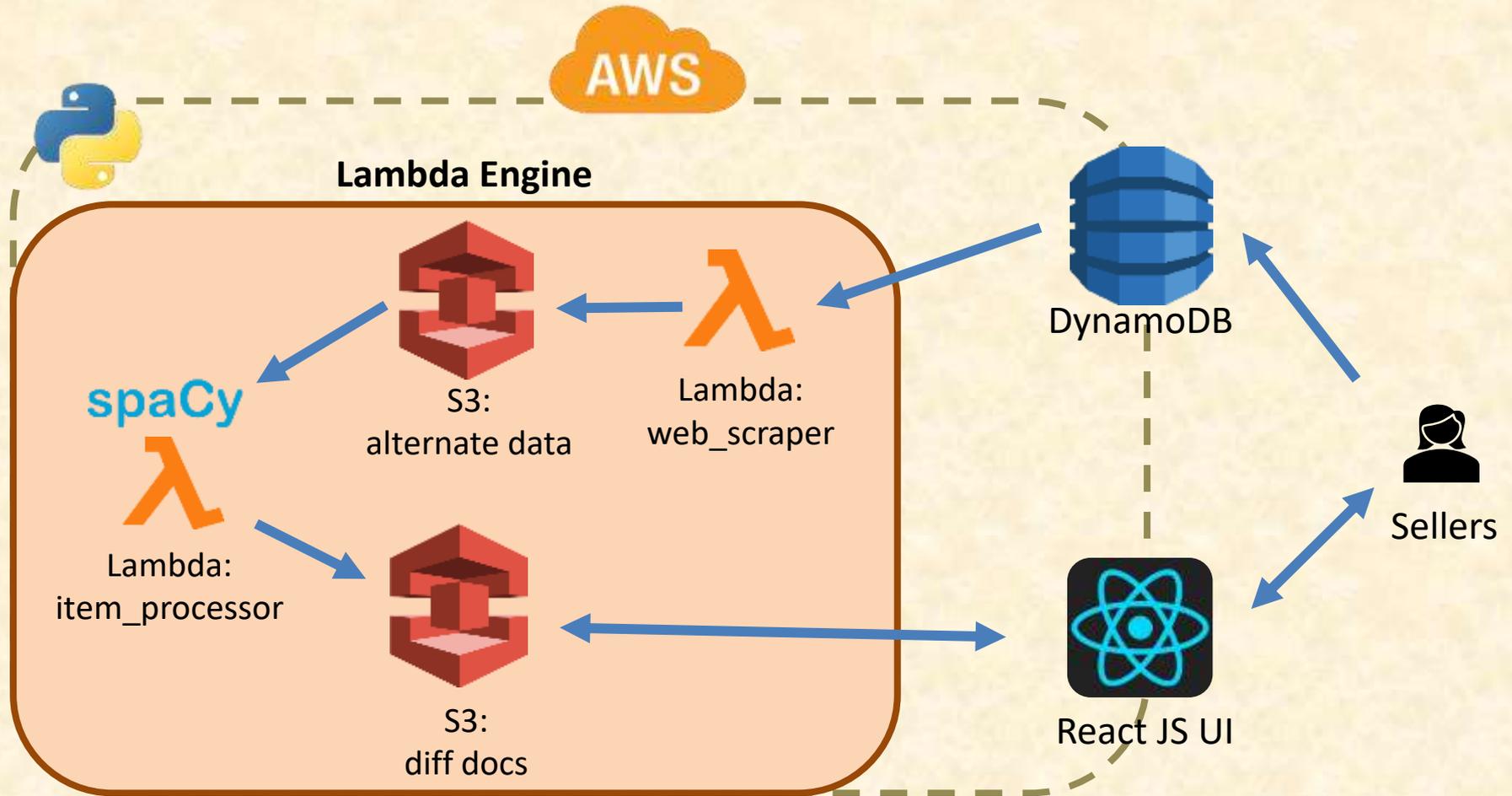
*From Students...  
...to Professionals*

# Project Overview

- Identify product description and product specification inaccuracies
- Crawl competitor websites for alternate descriptions
- Use natural language processing to generate suggested changes to current product listings
- Compare quotient to threshold to flag inaccurate descriptions
- Write a diff doc for items to hold suggested value changes
- Display diff doc to users



# System Architecture



# Alternate Listings File

```
{
  "Brown Faux Fur Leopard Pattern Crossbody Bag with Detachable Shoulder Strap Womens Handbag": {
    "Amazon": {
      "Marketplace": "US",
      "Product Type": "handbag",
      "ASIN": "B0883TY9DPK",
      "Title": "Brown Faux Fur Leopard Pattern Crossbody Bag with Detachable Shoulder Strap Womens Handbag",
      "Description": "Punctuate your attire for evening party or daytime lunch with this super stylish crossbody bag. The bag has ultra luxurious appearance",
      "Brand": "Shop LC Delivering Joy",
      "UPC": "686728885923"
    },
    "Alternative Sources": [{
      "URL": "https://www.walmart.com/ip/Brown-Faux-Fur-Leopard-Pattern-Crossbody-Bag-with-Detachable-Shoulder-Strap-Womens-Handbag/688651096",
      "Title": "Brown Faux Fur Leopard Pattern Crossbody Bag with Detachable Shoulder Strap Womens Handbag",
      "Price": "$14.24",
      "Description": "Brown Faux Fur Leopard Pattern Crossbody Bag with Detachable Shoulder Strap Womens HandbagPunctuate your attire for evening party",
      "Specification": {
        "Gender": "Female",
        "Brand": "Shop LC",
        "Color Category": "Brown",
        "Fabric Content": "Acrylic",
        "Color": "Brown",
        "Manufacturer": "Shop LC",
        "Occasion": "Christmas",
        "Pattern": "Leopard",
        "Manufacturer Part Number": "bd3515418"
      },
      "Category": "Food/Seasonal Grocery/Christmas Foods/Christmas Cooking/Christmas Desserts",
      "foundManufacture": false,
      "Images": {}
    }
  ]
}
```



# Diff Document

```
[
  {
    "ASIN": "B083TY9DPK",
    "Specification": {
      "closure": [],
      "item_dimensions": [],
      "strap_type": [],
      "material": [],
      "color": {
        {
          "URL": "https://www.walmart.com/ip/Brown-Faux-Fur-Leopard-Pattern-Crossbody-Bag-with-Detachable-Shoulder-Strap-Womens-Handbag/658651096",
          "SuggestedChange": "Brown",
          "Confidence": 0.75
        }
      },
      "brand": {
        {
          "URL": "https://www.walmart.com/ip/Brown-Faux-Fur-Leopard-Pattern-Crossbody-Bag-with-Detachable-Shoulder-Strap-Womens-Handbag/658651096",
          "SuggestedChange": "Shop LC",
          "Confidence": 0.75
        }
      },
      "lining_description": [],
      "style": [],
      "pocket_description": {
        {
          "URL": "https://www.walmart.com/ip/Brown-Faux-Fur-Leopard-Pattern-Crossbody-Bag-with-Detachable-Shoulder-Strap-Womens-Handbag/658651096",
          "SuggestedChange": "Christmas",
          "Confidence": 0.75
        }
      },
      "water_resistance_level": [],
      "capacity": [],
      "item_weight": [],
      "sole_material": [],
      "size": [],
      "number_of_components": [],
      "product_description": [],
      "lock_type": []
    }
  }
]
```



# Product Catalog Dashboard

The screenshot displays a web browser window with the Amazon logo at the top. Below the logo is a search bar containing the word "filter". Two product listings are shown below the search bar. Each listing includes a product image, an ASIN, a product title, brand name, number of suggestions, and a "View Product" button.

ASIN	Product Title	Brand Name	Number of Suggestions
B083TY9DPK	Brown Faux Fur Leopard Pattern Crossbody Bag with Detachable Shoulder Strap Womens Handbag	Shop LC Delivering Joy	2
B07JY9HLT6	Itzy Ritzy Mini Diaper Bag Backpack Chic Mini Diaper Bag Backpack with Vegan Leather Changing Pad, 8 Total Pockets (4 Internal and 4 External)	Itzy Ritzy	1



# Product Item Details

amazon

Brown Faux Fur Leopard Pattern Crossbody Bag - Detachable Shoulder Strap Womens Handbag

ASIN: B083TY9DPK

LEGEND

- Needs Attention
- Missing Original

brand	Shop LC Delivering Joy
capacity	
closure	
color	Navy blue
item_dimensions	15x7.55x5.5
item_weight	
line_size	
lining_description	
lock_type	
material	Leather
number_of_compartments	
number_of_wheels	
pocket_description	1 slip pocket
product_description	Punctuate your attire for evening party or daytime lunch with this super stylish crossbody bag



# What's left to do?

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- Collect more and higher quality data
- Connect backend to frontend
- Evaluate NLP algorithm accuracy
- Generalize web scraper to handle multiple website schemas
- Expand parser and algorithms to handle multiple product lines



# Questions?

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