Alpha Presentation
Faia: Fashion Artificial Intelligence Assistant
The Capstone Experience

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Project Overview

• Recommends clothing based on previous tastes
• User communicates with Faia directly through SMS
• Learns and improves clothing suggestions based on likes and dislikes
• Uses NLP for casual communication to ask for clothes and put them in Amazon cart
System Architecture

SMS
User Request
Response to User

Twilio
Query text
Response Text

Amazon Lex
Parsed User Input

AWS Lambda
Add to cart

Amazon Lex
Clothing Request

Faia Core
Amazon Product API

Recommend
Product Information

Amazon EC2
Initial Text
Web Form

Amazon Authentication
Login

MySQL
RDS
User Preference Selections
Web Form: Questionnaire (Women)
Web Form: Questionnaire (Men)
SMS Interaction

Mon, 10/09/2017

Hello Faia
4:27 PM

I would like to buy shoes.
4:27 PM

Is this what you're looking for?
4:27 PM MMS

What type of outfit do you want?

Casual

How much are you willing to spend?

Expensive

Is this Expensive shoes what you're looking for?
What’s left to do?

• Build recommender
• Choose questionnaire items to give good starting data for recommender
• Make Lex accept more complicated commands
• Get user feedback on feel of product
Recommender

• Items from the Products database have labels
• Assign numbers to those labels
• Assign weight to labels based on how much they contribute to the style decision
• Calculate scores using these numbers compared to user likes and dislikes
• Return highest scoring item
Chatbot

- Provide sample utterances to recognize user input
- Amazon Lex automatically uses deep learning to understand the input
- Amazon Lambda functions handle the responses to each intent recognized from the input
- Amazon Lex and Lambda communicate with JSON formatted data
Questions?