

# NET-A-PORTER

## NAP – UCL Project Team 28 Customer Service Chatbot

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Bi-Weekly Report #4  
10/3/2017

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### Project Overview (27/2/2017 – 10/3/2017)

For the past 2 weeks, we have made significant progress in our chatbot development. This includes all areas of front-end, Watson services and back-end. The front-end has implemented functionalities for users to have a conversation, and to call and receive API calls and work with the JSON response. We have set up a working REST API using AWS Gateway and Lambda to provide client-server communication. We also deployed an instance of Watson's Rank and Retrieve service to handle FAQs from users.

### Meetings Summary

We met during labs to review our work with our TA, Olawole Oni, and Dr Yun Fu to get feedback on our current progress. We held meet-ups in cafes to work out details that needed to be in sync for our individual components to work together. Also, we had worked together face-to-face in study spaces to accelerate development.

### Tasks Completed

- Set up REST API using AWS API Gateway and Lambda
- Tested API call from command line
- Populated FAQ intent in Watson Conversation
- Created knowledge base using NAP-website information through Watson's Document Conversion
- Created and trained Ranker in Watson's Rank and Retrieve
- Tested Rank and Retrieve service call from command line
- Front-end user interaction with API calls and displaying JSON response

# Problems to be Resolved Before Next Meeting

One of the key problems we have is to configure either the client application or the AWS API Gateway to allow the client application to make the API calls. Currently, we receive an error which is mostly likely due to misconfiguration.

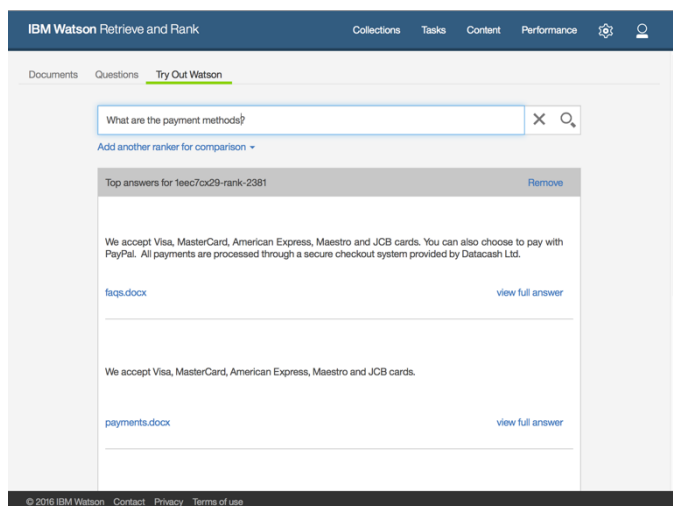
Also, we need to make progress on transforming information from the Watson product recommendation intent to make the correct NAP product API call.

## Plan for Next Two Weeks

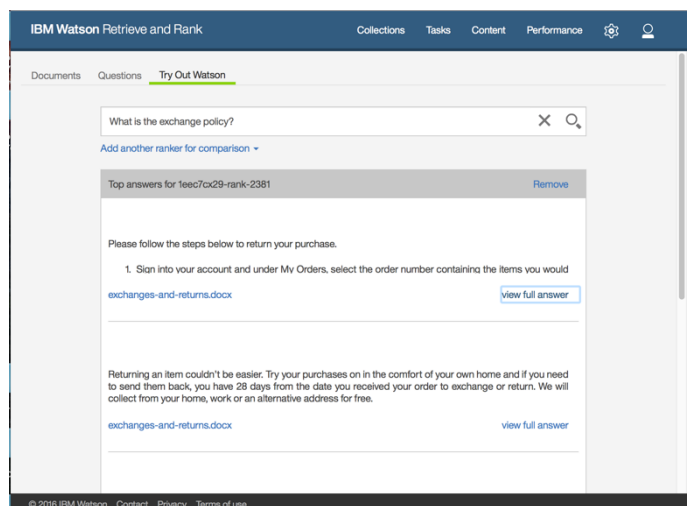
We will finish up our individual responsibilities and integrate our components together. We will also set up a meeting with our client latest by the end of these two weeks to showcase our prototype and get their feedback.

## Contributions

### Wayne Tsui



Retrieve and Rank. Example question: What are the payment methods?



Retrieve and Rank. Example question: What is the exchange policy?

I developed the REST API needed for client and server interaction. It is developed using AWS API Gateway and Lambda. The Lambda sets up the function needed to process the user query. The API Gateway hosts the Lambda and provides an endpoint for the client application. The front-end will just need to input the user message as a string as a parameter. The output will indicate the intent of the user and the appropriate response.

Also, as I am in charge of developing the Watson Conversation service, I worked on the FAQ intent. This intent handles user queries relating to the frequently asked questions about NET-A-PORTER, be it refund policies or size and fit information. I used the Watson's Rank and Retrieve service to pull the response for a FAQ query based on a trained ranker model.

## Aouss Sbai

I have been working on finalizing the product recommendation intent, which is the main one.

To do so, I had to recognize each entity (colour, brand category, size...), and for each of them, be able to return the ID of the entity (e.g. black colour ID is 2).

By doing so, I could build a url object by using those different parameters. This url was then used to make the API call and get back the list of product ids that matched the research of the customer.

I have also been working on formatting the output of the API call, giving for each product ID a full description of the product, including the image, advice on how to wear it. This is essential so that the front end part can properly display the results of the search.

The next step is working on the other intent, which bring some specificity to the chatbot. This intent is FAQ, which also includes fashion advice and return policy.

## Jason In

I have been working on HTML, CSS, JavaScript, JQuery and AJAX. I have also written our own CSS for the website. The front end is almost done at the moment. It is able to make a GET/POST request and display the response. The chatbot is able to display the messages nicely and it just look like the user having a conversation with someone (No other frameworks/library were used except JQuery and AJAX). Right now, I am working on the product recommendation part, which I will have to display the image, price and description of the product.