NET-A-PORTER

NAP – UCL Project Team 28
Customer Service Chatbot

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Project Overview (13/10/2016 – 28/10/2016)

For the past two weeks, our team mainly focused on researching ChatBot implementation methods, the main differences between Bot platforms, product use cases and project website design. It is imperative that we choose our Bot platform wisely to avoid the situation where a limitation in platform features will cause requirements to be unfulfilled. Our team understands that this first part of the module was to consider a large number of possible approaches to develop our product. We looked up many different bot platforms on the market, evaluated their pros/cons, and determined the overall value that it could bring to our client project. For example, while Facebook Bot platform leverages the Messenger app to reach over 900 million users, it is not a viable choice for us as it only deploys to the messaging platform, whereas our client requires the product to be on the Net-A-Porter website and possibly mobile apps in the future. We also developed use cases to get our client and us in sync on what problems the customer service chatbot should/should not address. Lastly, we also did some work on the project website which we will be including our requirements, use cases, paper prototypes, personas, experiments, etc.

Meetings Summary

Attached are the minutes to all meetings we have had prior to this report.

Our team has met frequently throughout the two weeks to keep everyone updated on our research progress. We also took the time present our current research to one another for feedback and also to identify any gaps in our findings. We also discussed our project with our assigned TA, Olawole Oni, to get a different perspective on our research. The main discussion points were task assignment for upcoming milestones, areas to expand research, project website design and challenges that we faced in our current tasks.

We had our second client meeting on Friday, 28 October 2016, at the Net-A-Porter office. We met up with the project lead, Irina Tsyganok, to present our research that we have done over the past two weeks. From these discussion, we came up with actions items (things to be done) for both Irina and our team (see below).

Tasks Completed

- Second client meeting at Net-A-Porter office
- Presentation of research
- First draft of use cases, with client feedback
- Established means of consolidating and sharing documents - Dropbox

Problems to be Resolved Before Next Meeting

We have 3 problems to be resolved before the next meeting.

The first is to know the current integrated platform used in Net-A-Porter, especially within the conversation commerce API that Irina mentioned. This will be done when she confirms with the management. Irina wants us to align our choice of platform with the company.

As Irina mentioned that the company has a partnership with IBM Watson, it was strongly suggested that we use IBM Watson to develop our chatbot. Therefore, the second problem is that we need to know which exact product we can use within the IBM Watson suite (such as AlchemyAPI, text-to-speech, Conversation, etc.). We also need to find out if we are able to access IBM Watson through the company, as many of the products require a subscription.

The last problem to resolve is to get a list of API calls from our client, so that we know what kind of information we can pull from the Net-A-Porter database. This will be crucial in formulating our requirements.

Plan for Next Two Weeks

We have 3 action items to work on for the following two weeks.

Firstly, our team needs to research on IBM Watson's suite of products. We will research on how the different components can work together to produce our intended product. From our research, the implementation of chatbot logic differs from platform to platform. Therefore, it is important that we familiarise ourselves with the IBM Watson IDE and how they handle Natural Language Processing (NLP).

Secondly, we are researching further into our product's needs through information from Irina. For instance, Irina will be sending us some client personas to give us a clearer idea of the company's clientele and also a research case study on the effectiveness of the different types of queries for an e-commerce environment. Also, she suggested that we spend some time on all 3 product sites (net-a-porter.com, mrporter.com, yoox.com) to better understand the users' shopping experience and the type of queries that might arise.

Lastly, if we are able to get access to IBM Watson and are provided with the API calls that we can allowed to use, we can start formulating the first draft of requirements to be presented to our client.

Contributions

Wayne Tsui

I was in charge of researching the ChatBot implementation methods. I researched the wide range of Bot platforms available on the market. Some platforms include Microsoft Bot Platform, Facebook Bot, IBM Watson, PandoraBot, ChatScript, RiveScript, Robot.me, Gupshup, Meya, Imperson, etc. I also considered the use of standalone NLP APIs in case we require flexibility in user interface design. Prominent NLP APIs include API.AI (acquired by Google in September 2016), WIT.AI (underlying NLP framework for Facebook Bot) and LUIS.AI (integrated with Microsoft Bot Platform).

I took note of the various deployment channels that are enabled by the different Bot platforms. This was crucial as our client requires the ChatBot to be deployed on both web and mobile (but there is no need for deployment on messaging apps).

In addition, I researched on the categories of AI ChatBots. It is easier to develop a single command (rule-based) ChatBot versus a conversational (Intents, Entities and Dialogs) ChatBot. Furthermore, I came across the feature of incorporating pre-trained models into ChatBot workspace, and also the issue of selecting public or private Agents.

Aouss Sbai

For the past 2 weeks, I have been working on the gathering the requirements for the chatbot. One of the main tasks was to define the different core features of the bot and the way it should interact with the user. Therefore, I designed the different use cases to describe all the different situations in which the bot might be used and how it would respond to any query formulated by the customer. The use cases still need to be refined after feedback from our client. I have also been researching about the different APIs available that could suit our needs for the development of the bot, including the possibility of deploying the bot on different platforms, such as WhatsApp, SMS, Skype, Outlook, etc.

Jason In

I have been working on the paper prototype and the design of our chatbot and website. I did a rough paper sketch on how the AI chatbot would look like on the website and some possible interactions between the AI chatbot and the user.

We met our client, Irina, to discuss about the product. We showed her some of the platforms and frameworks we found such as Microsoft, IBM and Facebook bot, and she told us that NET-A-PORTER is currently working closely with IBM and they would prefer us to use IBM Watson framework.

We also discussed with Irina about the user experience part such as how the chatbot is going to respond to user's queries (Open a new tab? Redirect the user to a new webpage automatically? Ask user if she wants to go to the new page, if yes, redirect the user to the new webpage). Regarding the IBM API that NAP could provide us, Irina promised us that she would get back to us as soon as possible.