

# Microsoft Spot Market Team 1 – Team 5

Maya Afshar, Raymond Tan, Alex Hale

24<sup>th</sup> March 2017

## Past Weeks

Over the course of last two weeks, we managed to finish all the required and vital functionalities on the API side, as well as comparing few LUIS models with each other and choosing and training the best model, which will be compatible with the spot market engine in terms of entities. We also connected the chat-bot to the API and can now allow the user to register, login and search for places. We have managed to achieve a working proof of concept; however, we will now start to apply the extra features such as user feedbacks, social media connections and NLP collisions. We also had a meeting with our client, and got a positive feedback on our progress so far. We have decided to hand over the final code on 21<sup>st</sup> of April.

## Meetings

### *Team Meetings*

- 14<sup>th</sup> March – *All Team members present*  
Discussed the achievement of weekly goals with each team member. Focused on planning the following week to achieve the goals for the semi-final client meeting and delivering the working proof of concept for in a week. Discussed the current API abilities and its improvement goals.
- 17<sup>th</sup> March – *All Team members present*  
Discussed the LUIS models and improvements, and the final choice out of the current models. Discussed the final project website content and implementation, and the improvements needed to be applied to the current version.
- 21<sup>th</sup> March – *All Team members present*  
Discussed the project website further, in terms of design and implementation of manuals. Discussing the chat-bot and API connections and the key functions to be implemented, also discussion on client meeting agenda and our questions and demo of the chat-bot.

### *Client Meetings*

- 24<sup>th</sup> March – *All Team members present*  
In this meeting, we showed Tim and Bianca from Microsoft our progress with the chat-bot. We demonstrated the bot through a web interface as well as through the Telegram messaging app to demonstrate user-

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location handling. The client was happy with the bot and noted that the bot worked well.

We have arranged a tentative code hand-over date of 21 April where the final code, along with any documentation, would be uploaded to the Visual Studio Team Services repository.

## Tasks Completed

- Finishing the core functionalities of the API
- Connecting the current functionalities of the API to the chat-bot
- Finalising LUIS Model training
- Starting the development of final project website
- Planning for the Final iteration of the project and required video, poster and presentation for the final handover
- Having semi-final meeting with client with a working PoC and getting feedback

## Problems

One of the problems we have recently faced is that LUIS does not allow us to add more than 10 entities to our model. Also, there is a 10 sub-entity restriction for each entity that is hierarchal and has sub-entities. The IAB item categories include 26 entities, therefore we had to choose the top ten relevant categories in the list for spot market engine, and for each divide the sub entities into “items” and “places”. This was our final structure of entities after trying different trained models with other structures.

## Estimations

Based on our timeline and meeting with our client, we are on track for delivering the final PoC alongside our video, poster, final website and presenting our project in the beginning of term 3. We don't seem to be facing any issue yet and are planning to deliver everything on time.

## Plan for Next Weeks

We will be working on the extra features of the chat-bot now, and also work on the project website, creating documentations and manuals and moving towards completing the project. We are planning to get most of the work done in the following weeks, to stay ahead of our timeline.

## Individual Paragraphs

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## *Maya Afshar*

I have been managing the team's workflow, checking with team members in the meetings and making sure nobody is facing any problems, planning tasks and sprints on VSTS and controlling the product. I have also liaised with our client in regards to current proof of concept and their feedback on the upcoming extra features.

On the development side, I have been mostly focusing on the LUIS model and developed three different models using the IAB categories and trained and tested them to see which structure would fit our purpose the most. I have also helped with chat-bot and API connection, and also helped with the structure of the new product project website.

## *Raymond Tan*

Since the previous report, I have worked on linking up the chatbot with our recommendation API. The bot is now able to dynamically retrieve recommendations from an external server. I have also implemented login and registration dialog branches for the bot to allow for users to register an account with the recommendation engine so as to be able to receive more relevant and personalised recommendations. I will next be working on adding a user-feedback system to allow for user preferences to be fed back into the engine to better refine recommendations.

## *Alex Hale*

Over the last two weeks I have continued implementing the dummy api and now have most of the core functionality available, satisfying the needs of the existing bot implementation. I have also worked on updating the website, that documents the project. Over the next two weeks I will finish implementing the api, and document the api we have implemented and how it differs from the original Spot Market Engine, as well as well as a deployment guide. In order to document the project as a whole I will also work on updating the project site and creating user and system guides.