**Project**

**Conversational interaction with Amazon Alexa Skills Kit - Mary Ellen Foster**

Project may require participation from people other than the student and the supervisor as part of the evaluation.

**Description:**

The goal of this project is to develop a conversational dialogue system using the Amazon Alexa Skills Kit (https://developer.amazon.com/alexa-skills-kit). You will develop and test a new interface that supports conversational interaction. For development, you will mainly use the web-based tools provided with Alexa. However, for final demos and user evaluation, you will have the opportunity to use an Amazon Echo device.

The student should have a good background in python programming, ideally along with an interest in dialogue systems and natural language processing. They will also need to carry out a user study with human participants at the end of the project and to analyse the resulting data for the final report.

**Once I have been allocated my project**

* Establish your ideas: Think through your ideas for the project and write them down so you can discuss them with your supervisor. A mind map - [https://www.mindmapping.com](https://www.mindmapping.com/) or in an online editor - [https://app.mindmapmaker.org](https://app.mindmapmaker.org/). Use documentation strategies: minutes, questions, status, weekly plan, time log
* View previous projects and master folder
* Meet your supervisor - Discuss what you have done as background, what your plan is, and how meetings will run for the rest of the year.
* Make a whole year plan for the rest of your project: write a short, concise timeline of the rest of the project and discuss with your supervisor at the next meeting. This could be a week-by-week plan with rough milestones, for example
* Set up your environment:
* Download the template for Level 4 projects (see below)
* Create a version control repository for your project \*\*before\*\* beginning any work.
* Install and configure and software or tools you need to make progress.
* Consider whether you wish to set up tools like issue trackers to help you keep on top of things.
* Check any hardware you might be using is available and that you can set it up and operate it (e.g. if you are using Baxter or a VR headset)

**Meetings**

* Be prepared
* Have a goal for each meeting
* Reflect on your progress
* Pre meeting
* Status report
* Questions
* Post meeting
* Minutes – Record electronically – Github, Google Doc?
* Plan – Agree for next week, report and discuss next meeting

**Tools**

* Version control – Keep code and dissertation under control – Private GitHub
* Typesetting – LaTeX
* Reference management – Papis, Zotero, Mendeley
* Build Automation/CI Tools
* Keep project backed up on hard drive
* Draw.io for flowchart

**Miscellaneous**

* Record time you spend
* Aim to make steady progress and not rush at the end
* Be clear in where you are in your overall project plan, what remains to be done, how long is expected to take
* Be agile enough
* Prioritize plans
* Set out milestones/outline of timeline
* Trello to help manage tasks
* Plan for risk to the timeline
* Around 15 hours per week
* Project log to be kept under version control
* Update projects log every day
* Anonymized data where possible
* GDPR regulations must be adhered to