# Contents

## Building a bot with BotLibre https://fightingstuff.blog/2017/03/21/building-a-bot-with-botlibre/

As part of some testing and preparation for a literature course, I have been looking at different chatbot options. There is an extensive list of chatbots and options at ChatterBot Collection.

I tried a few e.g. the Professor
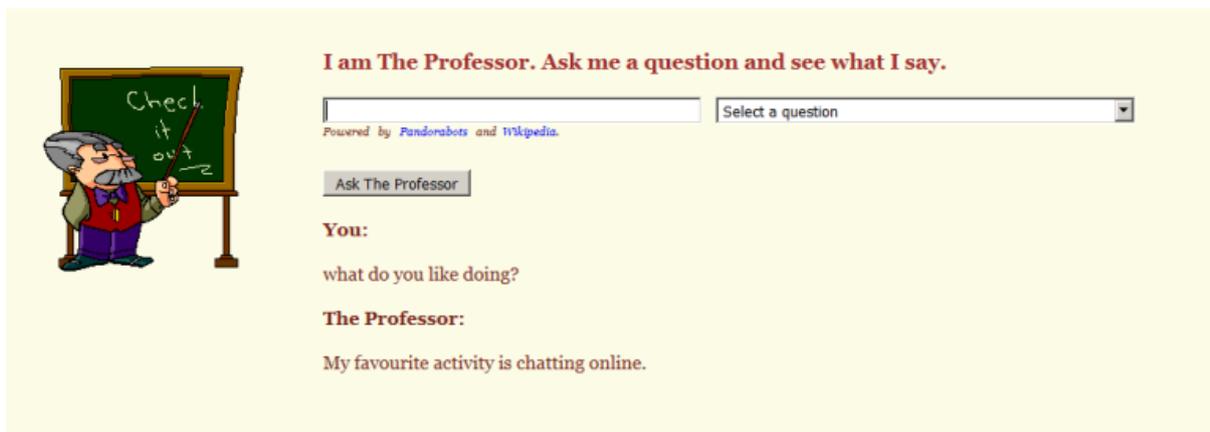


I then managed to create an avatar with Botlibre in a couple of minutes and now need to add some language (coding not required)
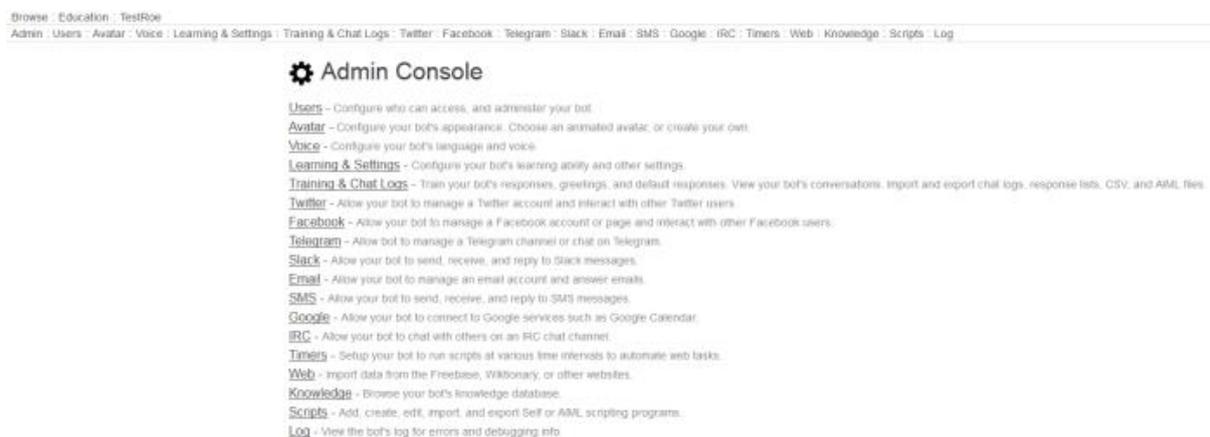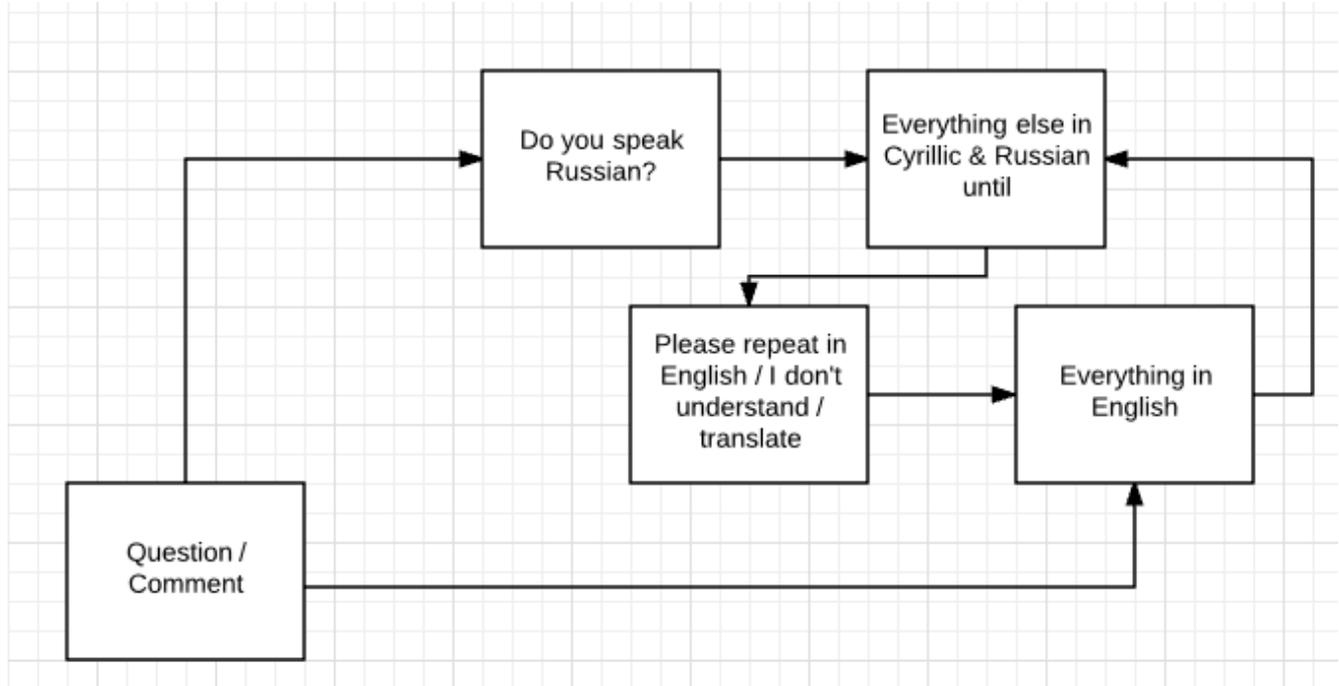


Will post once TestRoe has something interesting to say !

Beginning conversation with AIML or Chatscript
https://fightingstuff.blog/2017/04/20/beginning-conversation-with-aiml-or-chatscript/

Not at a point yet when I could write enough script so that Roe could follow something like this, need to work out more of the flow



Original AIML – this is a useful parser with a link to intro for how it works – type in a couple of sentences and the script will make sense

https://www.pandorabots.com/botmaster/en/~1d5a207a429bffda367f636e~/aiml-converter.html

- <aiml>: the tag that begins and ends an AIML document
- <category>: the tag that marks a "unit of knowledge" in an Alicebot's knowledge base
- <pattern>: used to contain a simple pattern that matches what a user may say or type to an Alicebot
- <template>: contains the response to a user input[1]

A link to a conversation about trying to implement chatscript in another language

https://www.chatbots.org/ai_zone/viewthread/1964/

Wordnet

1. Available at http://www.alicebot.org/aiml.html , http://alicebot.wikidot.com/learn-aiml

Conversational UI elements https://fightingstuff.blog/2017/06/19/conversational-ui-elements/

This is preparation for a module at Roehampton which will probably be in spring 2018. As referenced previously Conversational UI project and the case study. These both show the steps in how a conversation evolves with a chatbot by looking at the communication rules, building the conversation frame, use of syntax and messaging formats. They came up with conversational UI definition

An interface based on a holistic system of functional, adaptive and meaningful messages exchange, in which both sides of the conversation use and interpret the language codes, maintaining and complying with the constitutive and normative rules in a friendly, informal way [1]

An interesting [overview](#) of the programming elements in a conversational UI explains the developments of chatbots from performing tasks to more advanced forms of conversation using AI processing and scripts built using [Chatskills](#) (based around Amazon Alexa which could retrieve photos as well as respond to queries). This is designed for using applications on computer or phone rather than e.g. a chatbot service for ordering taxis etc

There is a breakdown of a query into namespaces which mean that words for the chat or content are separated from the same word for processing or script e.g. [XML namespaces example.](#)

In the article, it describes namespaces

Namespaces allow us to separate logic and tasks, which might re-use similar conversational text keywords. By namespacing services, we can allow other services to use the same keywords, while still identifying which service we're currently working in. A bot might have many different namespaces. In addition to the epix service, perhaps it may also have a photos service, a users service, and an orders service. [2]

This could be applied to different contexts where a service could be users (students) but another alternative service to – show a photo of…, for  our students, it could be asking it for an explanation of a concept based on pre-built libraries that the conversational bot can search and retrieve an answer. If there is interaction with students, another Kory Becker [primary objects article](#) looks at emotion and AI using sentiment analysis. This has got a lot more sophisticated since I explored it a little in 2008 when looking at media and the financial crisis. The code and any computers & applications involved in the processing isn't actually showing empathy, it's retrieving words that have been described as a suitable human response. [Shrinkwrapped](#) has a psychoanalytic look at empathy and AI and what different fields are doing to try and ensure that future computers and their processing are friendly in their interactions with humans and this universe.

I have always been and remain opposed to covert & non-consented experimentation of computing and human interaction but students will be creating future worlds not me, so who knows.

1. 2016, Zawadski L, Conversational UI Principles — Complete Process of Designing a Website Chatbot, available at Medium: [https://medium.com/swlh/conversational-ui-principles-complete-process-of-designing-a-website-chatbot-d0c2a5fee376](https://medium.com/swlh/conversational-ui-principles-complete-process-of-designing-a-website-chatbot-d0c2a5fee376)
2. 2016, Becker K, An Overview of Conversational UI, available at Primary Objects: [http://www.primaryobjects.com/2016/04/12/an-overview-of-conversational-ui/](http://www.primaryobjects.com/2016/04/12/an-overview-of-conversational-ui/)

AI 'student' components [https://fightingstuff.blog/2018/01/24/ai-student-components/](https://fightingstuff.blog/2018/01/24/ai-student-components/)

This was part of previous work for an unsuccessful bid (we went with a completely different bid based on chatbot design only).

However this outline was based on initial review of AI in Education journal (below) for a literature module that focused on human interaction with technology in literature (including AI).

This is because writing capabilities for a bot are still mostly extremely limited. I wrote them as potentially independent components because away from the AI hype of some kind of  'thinking' humanoid student that could take a BA 2nd year English literature module, the components would not have to be linked to each other for the purposes of a small research project i.e. the coding produced for a chatbot and any interactions of the chatbot with real students would not necessarily link to any potential writing capabilities or written interaction with a tutor. And a robotic ability to e.g. hold a smartphone camera and take a picture would also be independent.

**Interactions with digital / technologies with AI student components**

**Possible pre assessment (for 'AI student components' only)**

- IELTS test for language practice and analysis [https://www.ielts.org/about-the-test/sample-test-questions](https://www.ielts.org/about-the-test/sample-test-questions) , [https://www.ielts-exam.net/practice_tests/45/](https://www.ielts-exam.net/practice_tests/45/)

- Task – Write a short reflection on Never let me go? feedback provided by tutor
- Use Introduction to Literary Studies Week 10, Kazuo Ishiguro, Never Let me Go and review Never Let me Go slides
- Optional – watch video clips and read critical article on 'Never Let me go' as a speculative memoir.

**Module requirements**

**AI overt student set of 4-5 potentially linked components that can interact with BA English Literature 2nd year students and academic / department staff:**

- An ability to take part in weekly class discussions synchronous or asynchronous (approx £x) see seminar questions in appendix for examples
- An ability to read articles or books and post blog entries, demonstrating evidence of comprehension (£x) Marking criteria for a top scoring blog:
  - Demonstrate continuous reading and development of subject knowledge;
  - Show familiarity with the set texts, and especially your independent research and reading beyond those texts;
  - Demonstrate critical reflection not just class summaries
  - Demonstrate evidence of thoughtful engagement with the material studied, and with ideas presented through seminars and by your peers.
  - Optional use of other media inserted into blog entries including e.g. Instagram, YouTube
  - Be clear, confident, well expressed and impeccably presented, as appropriate to undergraduate-level study, and will be consistently referenced in accordance with MLA style;
  - Demonstrate academic presentation and referencing skills including a full bibliography of the material you have read during the module.
- An ability to read articles or books and submit an essay see essay questions (£ unknown, yet to be discussed). Marking criteria is in the appendix but 80 and above (argues its case exceptionally clearly and rationally with sustained originality and independent thought; elegant expression, authoritative and persuasive; brilliantly demonstrates breadth and depth of knowledge and understanding of primary texts/ relevant issues; highly informed engagement with secondary material; uses extremely well-chosen quotations, integrated successfully into its argument; shows outstanding independent critical analysis; no errors in presentation and referencing)
- An ability to send messages to an online tutor and personal tutor to ask questions about the module, indicate emotion to express satisfaction or concerns with their learning experience (£x)
- An ability to use motor movement to take photos which can be used in an 'aurasma' AR group project or other contribution (£x)

Chatbots update [https://fightingstuff.blog/2017/04/07/chatbots-update/](https://fightingstuff.blog/2017/04/07/chatbots-update/)

A million miles away from bigAI, machine learning and technology giants. Due to time I have a mix of some Botlibre sentences I have written and some imported chatscripts.

Some other links and interesting videos will be working through:

[Chatbots and conversational UI scripts](#)

[Chatscript for beginners](#)

[AIML and Rivescript comparison](#)

Unsupervised learning and AIML:

>   [https://youtu.be/EHArY2LN1m4](https://youtu.be/EHArY2LN1m4)

>   [https://youtu.be/SbB-qCVwLcc](https://youtu.be/SbB-qCVwLcc)

Chatbot update [https://fightingstuff.blog/2017/04/13/chatbot-update/](https://fightingstuff.blog/2017/04/13/chatbot-update/)

Posted on April 13, 2017 by [nicolaavery](#)

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I deleted the scripts that I added and decided to start from scratch. Partly as I have no capacity to learn another language at the moment (e.g. Chatscript AIML) and in the interests of world peace, I have decided that a bot (Roe) and I will learn Russian together. After all kids pick up two languages easily so 'Roe' will probably learn quicker than me !

I haven't made it public yet but this is an example:



Roe

Hello.
Hello
Hi there!
Do you speak Russian?
да, я говорю по русски

>    I don't know if this is correct and haven't tested but in AIML it might be along the lines of

```
<?xml version = "1.0" encoding = "UTF-8"?>
<aiml version = "1.0.1" encoding ="UTF-8"?>
  <category>
    <pattern>HI</pattern&
      <template>
    <random>
      <li> Hello! </li>
      <li> Hi there ! </li>
    </random>
    </template>
```

```
<pattern>HI Russian</pattern>
     <template>
   <random>
     <li> Do you speak Russian?  </li>
     <li> да, я говорю по рчсски  </li>
   </random>
 </template><category> </aiml></xml>
```

## LMS / VLE student experience chatbot https://fightingstuff.blog/2018/02/13/lms-vle-student-experience-chatbot/

Posted on February 13, 2018 by nicolaavery

Whilst doing other chatbot stuff,  am in the process of analysing some of the queries that come into our team – we operate a learning management system / virtual learning environment helpdesk for students. They can already submit tickets so we are using an export of those initially for reference. There is a huge amount of duplication across teams in resolving queries so this will provide students with another option available when they need it. Don't know if we will have it available for next academic year yet due to existing projects. Some interesting ideas in https://chatbotsmagazine.com/chatbot-for-college-students-4-chatbots-tips-perfect-for-college-students-98bf96839913

There is a case study by Farhan Karmali building with Dialogflow https://assets.moodlemoot.org/sites/44/20180103073353/Creating-a-chatbot-in-Moodle-presented-by-Mr.-Farhan-Kamali.pdf

Also Matt Porritt using Amazon https://ilite.wordpress.com/2017/10/18/the-first-moodle-chatbot-at-last-moodlemoot-australia-2017/

What would be better are open source options with either using BotLibre and creating a bot or writing your own chatscript.

Very early thoughts on how a student might use, based on reading about conversation frameworks and previously elements, studentexperience-chatbot0.1