

F27SB Software Development 2

Lab sheet 1: ChatBots

Improve the Tech-Support System Chatterbot

1) Add more word/response mappings to your application. For example, add more “social skills” e.g. add a response to if the user greets the system.

(1M)

2) Ensure that the same default response is never repeated twice in a row.

Hint: You’ll have to create a member variable to be used in the method `pickDefaultResponse()` to remember the previous index.

(1M)

3) Sometimes two words (or variations of a word) are mapped to the same response, e.g. it should not make a difference if the user uses the singular “bug” or the plural “bugs” or whether they say “crash” or “crashes”.

Deal with this by mapping synonyms or related expressions to the same string ID so that you do not need multiple entries in the response map for the same response.

Hints:

- You will need to introduce a field **synonymMap** similar to **responseMap**.
- Make sure this new **HashMap** is initialized correctly in the constructor.
- Then change the **generateResponse()** method to also account for synonyms.

(2M)