Simon Marty

Bhargav Annigeri

Homework 1

This chatbot discusses video games and video game consoles. It uses a dataset of videogames to provide meaningful information about games to the user. The chatbot also presents its own preference for games and selects its favorite games for each console.

To design this chatbot, we first considered the longest possible chain of interactions a user could have with the system. After building this chain, we added derived interactions that branch off the main chain. This makes it easier to make sure every state is closed at some point (reaches a terminal state).

One long chain you can try out is:

*yes* -> *a wii* ­-> it is fast -> *wii fit* -> Action ->

Note that for the third step (*it is fast*), the system responds slightly differently if the user gives a positive or a negative response to the question (In short, feel free to use adjectives other than “fast”).

We found the NaTeX notation to be rather limiting (especially in that it lacks the ability to perform the OR operation, only XOR is defined as {}). For the final project, we look to move towards a more mature, more Pythonic and better developed framework. In conclusion, this project has put into perspective the difficulty of designing chatbots as finite state machines, and exacerbates the need for a better method of analyzing text and responding to users.

Below is a state diagram broadly outlining the possible conversations. This doesn’t explicitly correlate with the programmed state machine, but rather shows how different user transitions can effect different prompts from the system, and how the conversation will flow as such.

A close up of a map

Description automatically generated