Drexel Chatbot Administrator's Guide

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1. Introduction

This document lists out steps necessary to run the API.

2. Dependencies

●   BeautifulSoup (installation cmd: pip install bs4),
●   Requests (installation cmd: pip install Requests),
●   SPARQLWrapper(installation cmd: pip install SPARQLWrapper),
●   NLTK(http://www.nltk.org/install.html),
●   Keras (https://keras.io/#installation)
●   Tensor Flow (https://www.tensorflow.org/install/install_linux)
●   Stardog (http://www.stardog.com/#download)

3. How to start GAC Python Server for GAC

Step 1: Navigate to chatbot directory.
Step 2: If restarting, make sure to kill the previous gacServer process. The process ID can be found using command "pgrep -af python".
Step 3: Run command "nohup python3 gacServer.py &".

4. How to start the database server

Step 1: Navigate to the stardog/bin directory.
Step 2: Run command "stardog-admin server stop" to be sure there isn't a server already running.
Step 3: Run command "stardog-admin server start --disable-security".

5. How to run the Spring Services (API, SMS interface, and Web interface)

Step 1: Navigate to the rest-service directory.
Step 2: Run command "mvn clean spring-boot:run".

6. How to retrain the neural network

Step 1: Navigate to the tools directory.
Step 2: Make sure the training data in gac_data_combined.csv is the data you want to train on.

Step 3: Run command "sudo python3 gac_training.py".
Step 4: Move the newly created "trained_model.m5" file to the chatbot directory.
Step 5: Restart the gac Python Server.

7. How to run the information extraction

Step 1: Navigate to the ie directory.
Step 2: If you want to gather all available information and regenerate all ttl files, run command "python3 iemain.py -t".
Step 3: If you want to recreate the database using the ttl files, run command "python3 iemain.py -d".
Step 4: If you want to do both 2. and 3., you can run command "python3 iemain.py".