Installation and User Guide for Emotion Aware AI Agent

# Part One: Installation

Step 1: Install Python

* Python and a code editor is required. You can download and install the as follows:
  + Python –
    - https://www.python.org/downloads/ or
    - https://www.anaconda.com/products/distribution

Step 2: Download or Clone the code from

* <https://github.com/atsui888/Pattern-Recognition-Systems/tree/main/Code>

Step 3: Install the Python Package Requirements

(suggest creating a virtual environment to install in.)

* bentoml==1.1.6
* boto3==1.28.62
* huggingface-hub==0.17.3
* joblib==1.3.2
* langchain==0.0.320
* matplotlib==3.8.0
* openai==0.28.1
* pandas==2.1.1
* requests==2.31.0
* scikit-learn==1.3.1
* seaborn==0.13.0
* streamlit==1.27.2
* torch==2.1.0
* transformers==4.34.1

Step 4: Install Docker Desktop

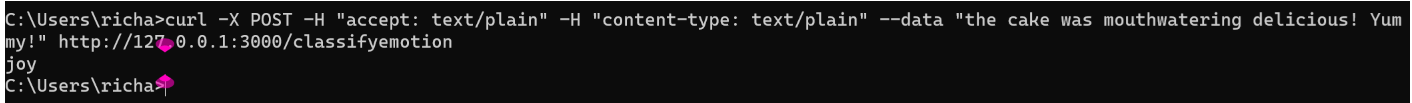
* <https://www.docker.com/products/docker-desktop/>

Step 5: Set up and Run Emotion Classifier (Logistic Regression) end point

* Pull Docker Image from Docker Hub and use it to classify emotions
  + $> docker login
    - A black background with white text

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  + $> docker image pull rchai/text-emotion- detection:trained\_on\_dair-ai\_emotion
    - A screen shot of a computer

      Description automatically generated
  + $> docker run --rm -p 3000:3000 rchai/text-emotion-detection:trained\_on\_dair-ai\_emotion
  + Test with curl command:
    - curl -X POST -H "accept: text/plain" -H "content-type: text/plain" --data "the cake was mouthwatering delicious! Yummy!" <http://127.0.0.1:3000/classifyemotion>



* + - You should see the response: ‘joy’

Step 6: Run Streamlit App

* $> streamlit run app.py

# Part Two: User Guide

If you have installed the app successfully and run ‘streamlit run app.py, you should see the following screen in your default web browser.

A screenshot of a computer

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1. Enter your OpenAI API Key and press “Enter”.
2. Select the method of Emotion Classification you wish to use.
3. Chat with the Agent in the message box.
4. When you wish to receive a question, ask the Agent to give you a question.
5. If you wish the Agent to generate a question from custom content, click the “Browse Files” button to upload your content. I suggest not uploading files that are too large as this proof-of-concept is not optimise to handle it.
6. If you did not upload any custom content, the Agent will randomly select a topic to generate a question for you to answer.
7. Note that the agent has not be programmed to be precise in handling your answers to the question you were asked, as the intent for this practice module (due to time constraints) is to showcase ability of the Agent to react according to user’s emotion. This aspect will be addressed in future Practice Modules until the full vision of the original proposal is realised.