Natural Language Processing

Assignment 3

Due Wednesday, May 8 (by midnight); please discuss with Lucia if you’d like to have longer

**A3: Build your own Language App**

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***Submission.***  This is an individual assignment, though you are welcome to work in groups. Each individual should nevertheless submit their own assignment with:

1. Your code. This can be in .py files, a Jupyter notebook, Colab, or in a GitHub repo. All code should be well-documented.
2. A PDF write-up about how your app works with screenshots. Please also include information about whether you worked with other students and in what capacity.
3. A link to your working app if applicable.

***Grading****.*  This assignment is optional. Students can earn up to 1 additional point on their overall assignment grade. Grading will be based on (i) code correctness and difficulty; (ii) creativity of idea; (ii) your write-up with analysis of why your app is linguistically meaningful, including screenshots if applicable.

The goal for this assignment is to build your own web app using an NLP technology or language model of your choice. This can range from a basic app such as “Mad Libs” written from scratch in Python, to using a language model (LLM) and/or existing dataset to support you for e.g. building a chatbot about common Dutch sayings. We encourage you to be as creative as possible and challenge yourself to learn something new!

If you can’t think of anything, here are some possible ideas:

* Basic translations into a dialect or low-resource language, or help for language learning with this language or dialect.
* Recipe app to walk users through cooking steps (can be done for any instructional task), or e.g. adapt a recipe to certain dietary restrictions (e.g. vegetarian).
* Quiz app to review course materials in interactive ways.
* Naming newly discovered plants or animals, or create new comic characters, based on certain visual characteristics described through language.
* Lyric generator based on musical genre, artist, language, topic, etc.
* Word similarity game! Play here: <https://word-void.onrender.com/> (talk to our TA Yee Man about how she developed this).

Note: if you’d like to use a dataset, academic papers, shared tasks, and Google scholar searches can often point you in the right direction.

As usual, if you have questions about the structure of the assignment, where to find datasets, etc., please email us at the course email ([vu.nlp.2024@gmail.com](mailto:vu.nlp.2023@gmail.com)).

We look forward to seeing what you come up with!