ENAE 380: Final Project Documentation

Due on December 16, 2024 at 11:59 PM

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1 Prerequesites

It is necessary to have the following:

- `rust`
- `libtorch`

These can be installed manually from rustup and pytorch. As well, you must set the `libtorch` path.
These steps can be achieved on macOS (using Homebrew) through the `./requirements-macos.sh` script. The script assumes your user shell is POSIX compliant (as is `bash`, the default on macOS). I have included a `./requirements-macos.fish` script for users who use the `fish` shell.
If you require a manual method (i.e. in the case you are not on macOS or do not have Homebrew), the following should suffice (filling in your machine's information where needed):

```
<your-package-manager> install rust pytorch
export LIBTORCH=/your/path/to/pytorch
export LD_LIBRARY_PATH=${LIBTORCH}/lib:$LD_LIBRARY_PATH
```

Likewise in fish:

```
<your-package-manager> install rust pytorch
set -x LIBTORCH /your/path/to/pytorch
set -x LD_LIBRARY_PATH $LIBTORCH/lib $LD_LIBRARY_PATH
```

2 Installation and Running

Now we simply need to download the repository and we can run the program!

```
git clone "github.com/vaisriv/nfl-rss-nlp" ./nfl-rss-nlp
cd ./nfl-rss-nlp
cargo run --release
```

Of note, on first run, you will likely need to download the `rust-bert` Question-Answering model. This can be quite large, and may take a while. Be patient! Your Super Bowl answers are near!
Details on how to run the program and its features are available within the manpage (accessed via `man ./nfl-rss-nlp.1`), or through the cli help menu (accessed via `cargo run --release -- --help`).
As `pytorch` is not compiled into the program, `nfl-rss-nlp` must be run through `cargo`. As such, necessary command line arguments can be passed through the following syntax:

```
cargo run --release -- [OPTIONS]
```

3 Acknowledgements

This project would not be possible without the following:

- rust-bert
- pytorch
- huggingface