As we develop our codebase within the NLP-TLP Group, it is important to maintain a high standard of code quality such that our source code is written with a consistent style and a high coding standard. This ensures that our code is maintainable, easily understood and interpreted for seamless collaboration with team members, as well as readily adopted by industry partners. This document outlines the recommended coding style and includes a link to a “linter” for each programming language.

**Python**

Recommended coding style for **Python** is based on the [Google Python Style Guide](https://google.github.io/styleguide/pyguide.html), derived from PEP-8. Available at:

<https://google.github.io/styleguide/pyguide.html>

Linting tool for **Python** is [pylint](https://pypi.org/project/pylint/). Available at:

<https://pypi.org/project/pylint/>

* To configure pylint to adhere to the Google Python Style Guide, download the pylintrc file from <https://google.github.io/styleguide/pylintrc>, and place it in the root directory of your project.

**JavaScript**

Recommended coding style for **JavaScript** is based on the [JavaScript Standard Style](https://standardjs.com/). Available at:

<https://standardjs.com/>

Linting tool for **JavaScript** is standard.

* Installation instructions: <https://standardjs.com/#install>
* Usage instructions: <https://standardjs.com/#usage>

**R**

Recommended coding style for **R** is based on the [Google’s R Style Guide](https://google.github.io/styleguide/Rguide.html). Available at:

<https://google.github.io/styleguide/Rguide.html>

Linting tool for **R** is [lintr](https://github.com/jimhester/lintr). Available at:

<https://github.com/jimhester/lintr>

**MATLAB**

Recommended coding style for **MATLAB** is based on the [MATLAB Style Guidelines 2.0](https://www.mathworks.com/matlabcentral/fileexchange/46056-matlab-style-guidelines-2-0). Available at:

<https://www.mathworks.com/matlabcentral/fileexchange/46056-matlab-style-guidelines-2-0>

Linter for **MATLAB** is [mlint](https://www.mathworks.com/help/matlab/ref/mlint.html). Available at:

<https://www.mathworks.com/help/matlab/ref/mlint.html>

**Julia**

Recommended coding style for **Julia** is based on the [Julia Style Guide](https://docs.julialang.org/en/v1/manual/style-guide/).

Available at: <https://docs.julialang.org/en/v1/manual/style-guide/>

Linter for **Julia** is <linter-julia>. Available at: <https://atom.io/packages/linter-julia>

**Summary**

The table below summarises the preferred coding style guides and linters for each language.

|  |  |  |
| --- | --- | --- |
| Language | Style Guide | Linter |
| Python | [Google Python Style Guide](https://google.github.io/styleguide/pyguide.html) | [pylint](https://pypi.org/project/pylint/) |
| JavaScript | [JavaScript Standard Style](https://standardjs.com/) | [standard](https://standardjs.com/) |
| R | [Google’s R Style Guide](https://google.github.io/styleguide/Rguide.html) | [lintr](https://github.com/jimhester/lintr) |
| MATLAB | [MATLAB Style Guidelines 2.0](https://www.mathworks.com/matlabcentral/fileexchange/46056-matlab-style-guidelines-2-0) | [mlint](https://www.mathworks.com/help/matlab/ref/mlint.html) |
| Julia | [Julia Style Guide](https://docs.julialang.org/en/v1/manual/style-guide/) | [linter-julia](https://atom.io/packages/linter-julia) |

If you have any difficulty using the linters mentioned above or are using a language that is not listed, please feel free to contact Michael Stewart ([michael.stewart@uwa.edu.au](mailto:michael.stewart@uwa.edu.au)).

The coding style guidelines in this document were adapted from those of the Centre for Transforming Maintenance through Data Science (CTMTDS).