

This is the user manual for the (CodeBERT) bug report classification tool.

Overview:

This tool uses CodeBERT, a transformer based model fine tuned for software engineering tasks, to classify bug reports as either performance related or not.

Prerequisites:

- Python 3.11
- GPU recommended for efficient training

Files:

- src/br_classifier_code_bert.py (main script)
- datasets/ (directory containing the bug report datasets)

Firstly, in a command line, navigate to the project's root directory.

Then, set up a virtual environment for the python version and dependencies. Feel free to use any environment management tool of your choosing, but I will be explaining how to set it up with a standard virtual environment. You can do so with this command:

```
python3 -m venv venv
```

Now, activate the environment:

On Linux/MacOS:

```
source venv/bin/activate
```

On Windows (cmd):

```
venv\Scripts\activate
```

Then, install the dependencies listed in Requirements.pdf as instructed. Finally, execute the command:

```
python3 src/br_classifier_code_bert.py
```

Once execution completes, the metrics will be printed to the command line interface.