

# SE Project-1 BONUS Report

Here's a short description of our pipeline:

- We've implemented a GitHub workflow that runs a CRON job every 24 hours. The YAML file for it can be found at `.github/workflows/design-smell-check.yml`
- Our current pipeline just uses the `scripts/scripts.py` as a monolithic codebase.
- The repository is cloned if not already done under which case it is pulled from GitHub.
- We checkout to the `Main` or `Master` branch.
- A new branch is created based on seconds passed since UTC.
- For every `.java` file in the repository,
  - We find the code smells using a curated prompt for GPT3.5 that has descriptions of code metrics
  - We find the design smells using the code smells again using a curated prompt for the current code
  - Finally, we get the refactored code using, *cue drumrolls*, a final prompt that returns only the code. We write this refactored code into original file.
- After all files have been refactored - in implementation we see only the first five files to limit our API usage - we create a pull request to the original repository.
- *Note:* Our workflow is currently failing as we've run out of free API usage :(

We tried using CheckStyle to detect code smells to pass to GPT but were unable to integrate it into GitHub workflow. The sample code for it can be found in

`scripts/get_code_smells.ipynb` under `utilities.run_checkstyle()`