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Assignment 2

Coder and Tester refactoring

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Coder – Kieran Abelen

# Repository link:

Original: (Marcus)  
Branch repository: (Kieran)

# TIGr Solution

## Brief

There is a lot of duplicate code present since there are 3 parser subclasses and 3 drawer subclasses. Some of this duplicate code is also bad smells so eliminating the duplicate code could solve more than one bad smell.  
An example of a refactor would be 2 drawers were Extracted into one 1 drawer and this method also solved another bad smell Long method. 2 bad smells both used Extract Method.

Smell detection

### Duplication Code

#### Location

1. Of the three drawers DrawerKieran.py and DrawerJack.py are both Tkinter drawers with the exact same functions.
2. Three parsers are present, and all have the same functions. ParserTK.py, ParserJonathonV2.py, ParserJerry.py

Reason

1. Tkinter drawers have the same methods for drawing while the turtle drawer will use different methods. It would be better to have two drawers and not three if 2 are the same.
2. There are differences inside the functions, but they all do the same thing and ParserJonathonV2 has the best functionality.

#### Refactoring Strategies

* Both will use extraction method since a new class of all duplicated code would be the best.

Refactoring (5 \* N marks)

In order to remove the bad smells that you previously identified, you need to follow the refactoring process that we discussed in class sessions.

1. Identifying the worst smell and the reasons why it is the worst one (N marks)
2. Version control via an online repository (N marks)
3. Modification to remove the worst smell and PEP8 validation (2 \* N marks)
4. Testing and effectively evaluations on your refactored code in a concise fashion (N marks)

# References

Kieran. (n.d.). *mellyonz/Assignment\_2\_G2-\_Kieran-Tester.* Retrieved from github.com: https://github.com/mellyonz/Assignment\_2\_G2-\_Kieran-Tester

Marcus. (n.d.). *forestraindrip/PR301\_Assignment2: The source code for PR301 Assignment2.* Retrieved from github.com: https://github.com/forestraindrip/PR301\_Assignment2