

## Code Review Checklist

1. Code Formatting:
  - Alignments and white space rules have been followed
  - Proper naming conventions have been followed
  - Code fits standard 14" screen
  - Unnecessary commented code has been removed
2. Architecture:
  - Separation of concerns have been followed, with each separate module divided into its own file (i.e. camera.py, tracker.py, mirrorApp.py)
  - Code is in sync with existing code patterns/technologies
3. Coding Best Practices:
  - No hard coding has been used, all values have been declared as variables or constants
  - We have tried to avoid using if/else blocks when possible
4. Non-Functional Requirements:
  - Maintainability: We made sure to focus on readability by naming variables, functions and classes appropriately in a way that is easy to follow and descriptive. We also focused on testability of the code which is shown in the various unit tests for the code.
  - Reusability: Code follows DRY (Do not Repeat Yourself) principle and generic properties and variables are reused when possible
  - Extensibility: Parts of the code are easily extendable if mirror was to be enhanced
5. Object Oriented Design (OOTD) Principles
  - Single Responsibility Principle (SRS): For most of the code, we have stayed in line with the single responsibility principle, making sure to reduce the number of responsibilities for a single function or class

## Code Tool Review Software – PyLint Feedback

To code review our programs, we tested it using pylint. A sample of the results we got using it is below:

```
mirrorApp.py:300:4: R0915: Too many statements (103/50) (too-many-statements)
mirrorApp.py:413:4: C0116: Missing function or method docstring (missing-function-docstring)
mirrorApp.py:415:8: C0103: Constant name "gestures" doesn't conform to UPPER_CASE naming style (invalid-name)
mirrorApp.py:415:8: C0103: Constant name "alarmRun" doesn't conform to UPPER_CASE naming style (invalid-name)
mirrorApp.py:415:8: W0602: Using global for 'gestures' but no assignment is done (global-variable-not-assigned)
mirrorApp.py:415:8: W0602: Using global for 'alarmRun' but no assignment is done (global-variable-not-assigned)
mirrorApp.py:413:21: W0613: Unused argument 'delta' (unused-argument)
mirrorApp.py:430:4: C0103: Method name "gestureLogic" doesn't conform to snake_case naming style (invalid-name)
mirrorApp.py:430:4: C0116: Missing function or method docstring (missing-function-docstring)
mirrorApp.py:431:8: C0103: Constant name "alarmRun" doesn't conform to UPPER_CASE naming style (invalid-name)
mirrorApp.py:431:8: W0603: Using the global statement (global-statement)
mirrorApp.py:455:0: C0103: Class name "mirrorApp" doesn't conform to PascalCase naming style (invalid-name)
mirrorApp.py:455:0: C0115: Missing class docstring (missing-class-docstring)
mirrorApp.py:11:0: W0611: Unused ListProperty imported from kivy.properties (unused-import)
mirrorApp.py:17:0: W0611: Unused calendarScreen imported as calendar (unused-import)
mirrorApp.py:4:0: C0411: standard import "import json" should be placed before "import requests" (wrong-import-order)
```

As a response, we reviewed and optimized our code, taking into the feedback the pylint provided.