Insight ML Code Review check list:

REPO STYLE / STRUCTURE:

☐ README is written and formatted using Markdown.

☐ README contains an introduction to the project along with setup and installation instructions.

☐ README has usage instructions with example inputs and outputs included so users can test their installation.

☐ Code is easily installed from the command line and has a simple example that runs.

☐ Repo follows the style structure from the Insight Project Framework.

☐ The use of third-party GitHubs and libraries are well documented.

☐ Each feature lives on a separate appropriately named branch in the format 'dev-feature_name-date_of_creation', i.e. dev-readme_requisites-20180905.

☐ All feature branches are separate from Master and are regularly merged back.

SOURCE CODE DOCUMENTATION:

☐ The code runs successfully and correctly outputs what it intended to output.

☐ Code looks appealing and formatting is uniform and consistent (spacing, line breaks, indentation, brackets, braces, etc…)

☐ TODOs are removed from src code (they may be in a separate TODO list).

☐ The same code is not repeated elsewhere in the script and there are no redundant nor duplicate functions.

☐ Code is self-explanatory without any unnecessary complexity.

☐ All advanced functions are commented informatively and concisely.

☐ No dead code is committed and unnecessary logging or debugging code has been removed. (May have a file that will not be committed using .gitignore)

☐ All existing comments describe the intent of the code, and include any hacks, workaround and temporary fixes.

☐ There are no one-letter variables (except for counter variables) and global variables be replaced.

☐ Variables, functions and classes have meaningful names that are not misleading.

☐ Dependencies are justified and there aren't any unnecessary dependencies.

☐ Loops have a set length and correct termination conditions.

☐ At lease one unit test is used to isolate a function from the rest of the codebase.

☐ Standard functions are used as much as possible (instead of creating them from scratch).

☐ Employees at company demos could easily follow along with this GitHub code.

Sources:
Insight Data Science
https://nyu-cds.github.io/effective-code-reviews/03-checklist/
https://blog.goyello.com/2013/01/21/top-9-principles-clean-code/