

Insight ML Code Review checklist:

Example Insight Repos: [Project Orient](#)

Must Have: *If you have 5-10 minutes to review code*

REPO STYLE / STRUCTURE:

- ☐ README is written and formatted using Markdown.
- ☐ README contains an introduction to the project along with setup and installation instructions.

SOURCE CODE DOCUMENTATION:

- ☐ Variables, functions and classes have meaningful and accurate names.
- ☐ Code is easily installed from the command line and has a simple example that runs.
- ☐ Employees at company demos could easily follow along with this GitHub code.

Should Have: *If you have 10-20 minutes to review code*

REPO STYLE / STRUCTURE:

- ☐ README has usage instructions with example inputs and outputs included so users can test their installation.
- ☐ The use of third-party GitHubs and libraries are well documented.

SOURCE CODE DOCUMENTATION:

- ☐ Code formatting is uniform and consistent (spacing, line breaks, indentation, brackets, braces, etc...). See the Code Style section in the [Insight Code Guide](#).
- ☐ The same code is not repeated elsewhere in the script and there are no redundant or duplicate functions.
- ☐ Object oriented programming is used, i.e. the code is oriented with clear and modular functions.
- ☐ Code is self-explanatory without any unnecessary complexity nor dependencies.
- ☐ All existing comments describe the intent of the code, and include any hacks, workaround and temporary fixes.

Nice to Have: *If you have 20-30 minutes to review code*

SOURCE CODE DOCUMENTATION:

- ☐ 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)
- ☐ At least one unit test is used to isolate a function from the rest of the codebase.
- ☐ Loops have a set length and correct termination conditions.
- ☐ Standard functions are used as much as possible (instead of creating them from scratch).
- ☐ There are no one-letter variables (except for counter variables) and global variables be replaced.

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/>