(/)

Curriculum
Short Specializations
Average: **97.3%**

Software Linter

Definition

A software linter also known as a “linter” is a tool used to identify and report potential issues (syntax errors, undeclared variables, etc.) in a program. It can even report convention or style inconsistencies. It does so by highlighting them so that the programmer is aware, so changes can be made. There are a wide variety of linters as well as lint rules for specific programming languages and even for software frameworks.

There are typically two ways to lint code:

- Actively
- Passively

Active

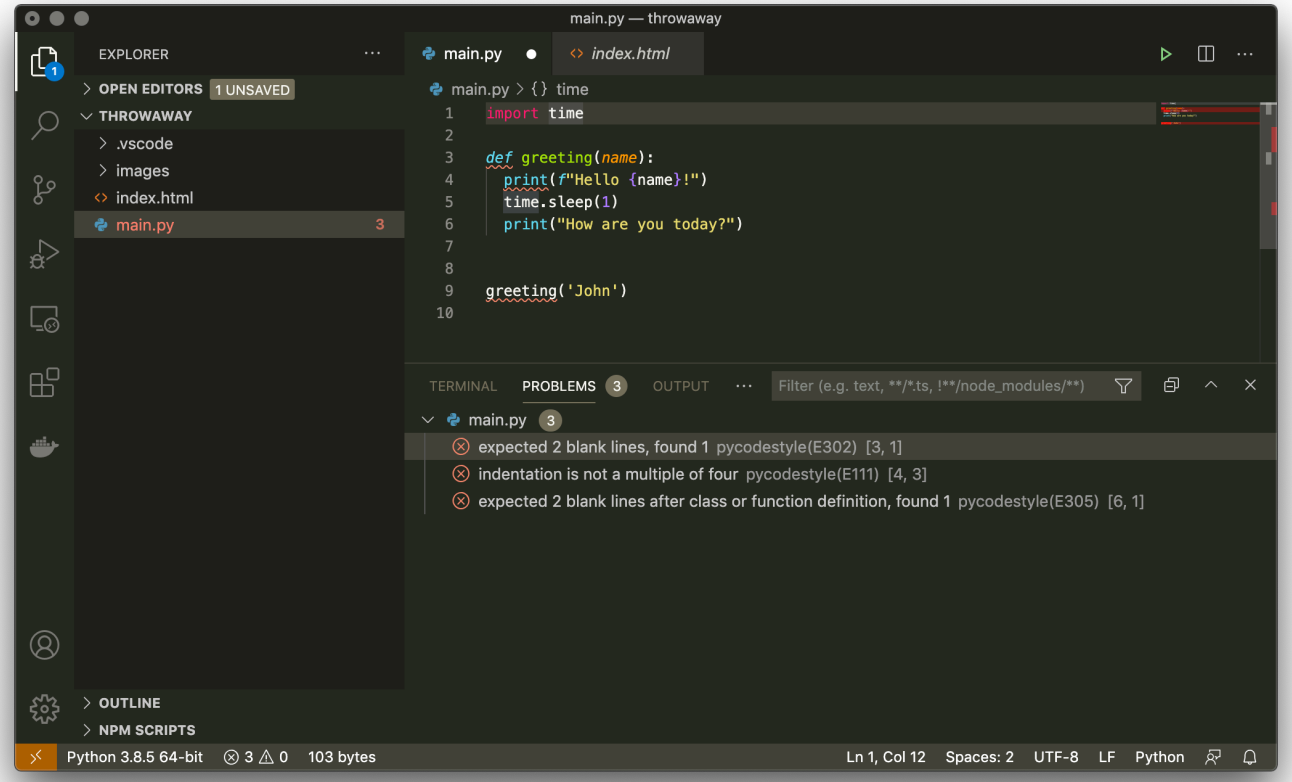
Active checking is typically achieved by running a monitor tool that is constantly checking the file that your working on in order to spot inconsistencies and possible errors (e.g., having a specific linter along with some lint rules installed as a plug-in in your Code Editor).

Passive

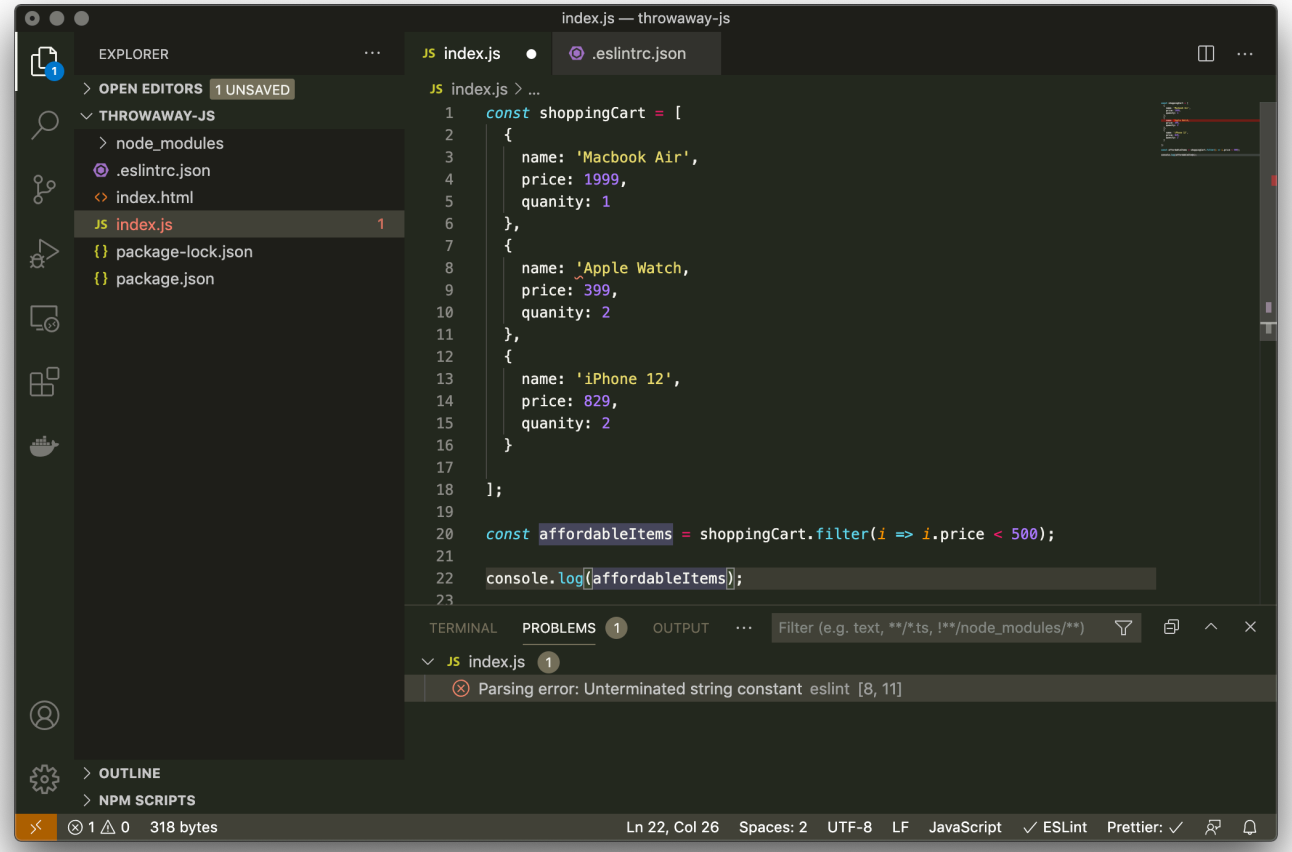
Passive checking is done by taking a piece of code, and manually running it through a tool to identify potential issues. For example, copying and pasting your code into a specific linter tool, or running the linter against a specific file using the command line. This tool can be installed locally or be available as a service (e.g., website on the Internet).

Examples

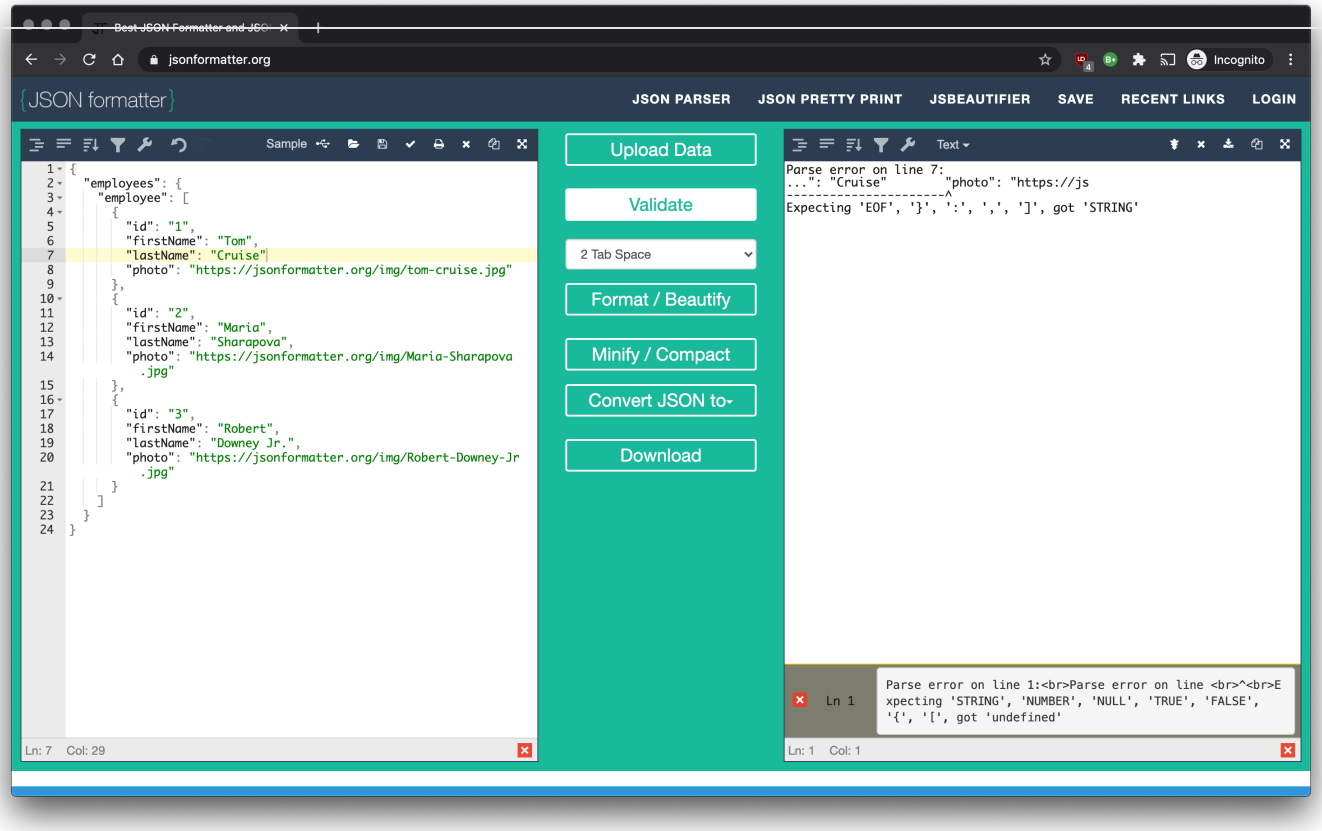
Screenshot of an active linter `pycodestyle` (Python) integrated into Visual Studio Code (/rltoken/p3Rsl0ymQdmS7j8GaoX-gQ)



Screenshot of an active linter `ESLint` (JavaScript) integrated into Visual Studio Code (/rltoken/p3Rsl0ymQdmS7j8GaoX-gQ)



Screenshot of a passive online linter service `JSON Formatter` to validate a JSON data structure (/)



Fun fact: The term “lint” was derived from the name of the tiny bits of fiber and fluff shed by clothing.

References

- lint (software) - Wikipedia (/rltoken/OcBbDM8QALAmJA4iwFjGBA)
- ESLint - Pluggable JavaScript linter (/rltoken/Or1sNv7iTj-qzebPqlT2Ig)
- pycodestyle - documentation (/rltoken/SwEhYt8xBLP0tYRzYrb6Rg)