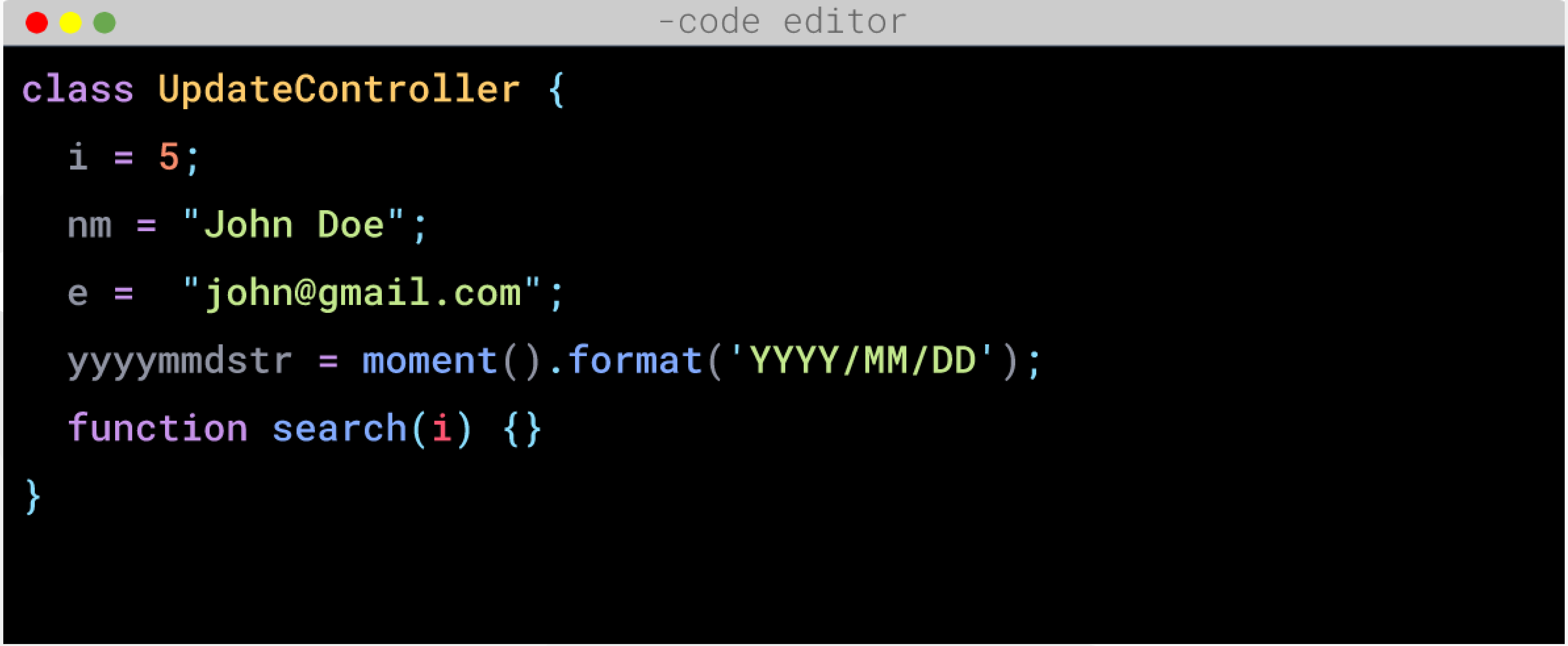
Clean Code

Rawlabs Academy



```
class UpdateController {
  i = 5;
  nm = "John Doe";
  e =  "john@gmail.com";
  yyyymmdstr = moment().format('YYYY/MM/DD');
  function search(i) {}
}
```

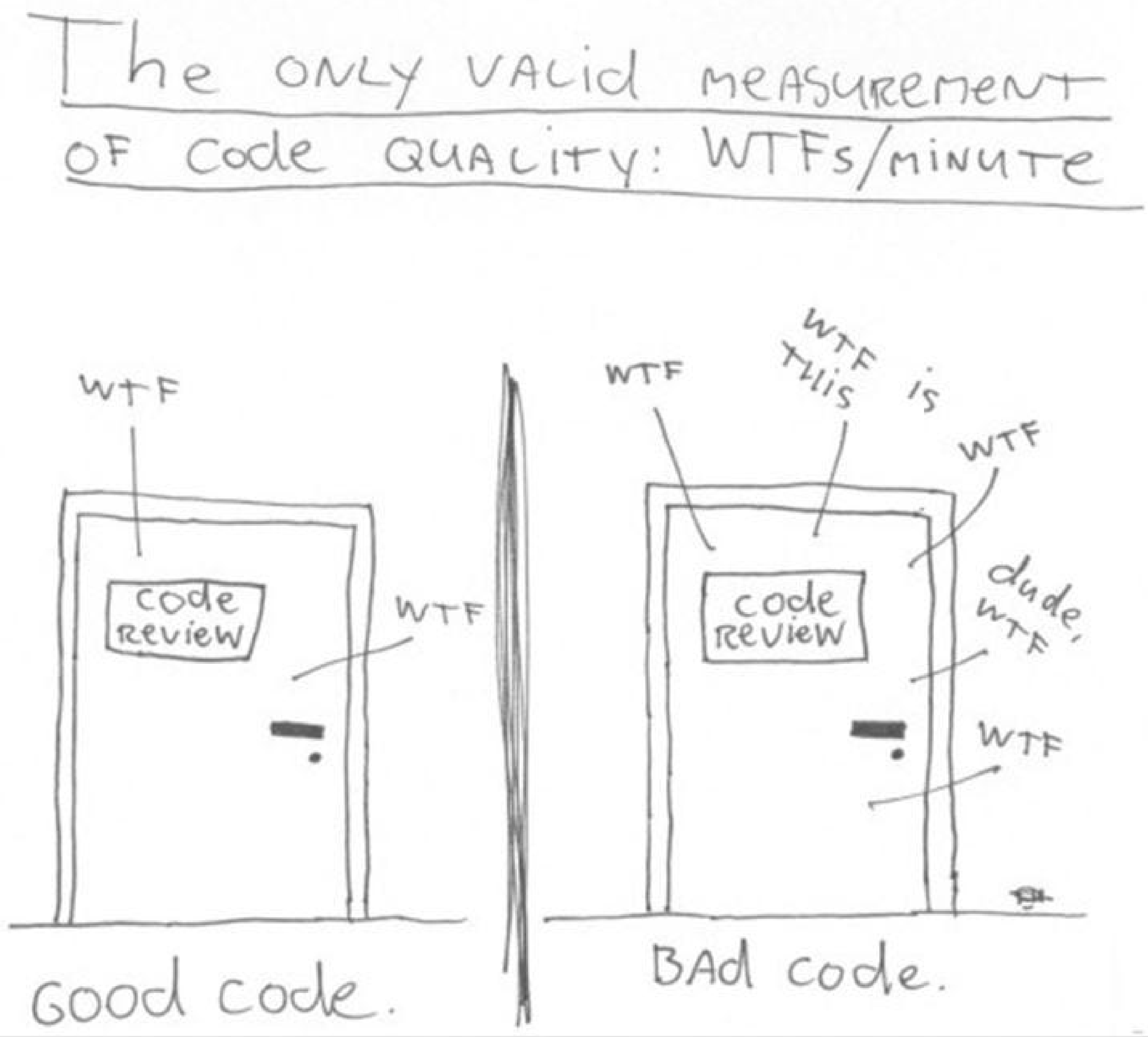
What do you think about the code ?

What is Clean Code

Clean Code is term for code that is 'readable', 'understood' and 'altered' by programmers

> “ Working code isn't necessary good code.Your code also need to be easy to read, understand, and modify
> ~ **Brandon Gregory** ”

> “ Any fool can write code that a computer can understand. Good programmers write code that humans can understand.
> ~ **Martin Flower** ”



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Why Clean Code?

Work Collaboration

Feature Development

Faster Development

Characteristic Clean Code?

1. Easy to understand
2. Easy to spell and search
3. Be brief but describe the context
4. Be consistent
5. Avoid adding unnecessary context
6. Comments
7. Good Function
8. Use Conventions
9. Formatting

Example Style Guide?

airbnb

Google

Airbnb Javascript Stryle Guide :

Google Python Style Guide :

Suggestion Formatting?

1. Line width code 80-120
2. One Class 300-500 lines
3. Lines of code that are related to each other
4. Keep the function close to its caller
5. Declaration of adjacent variables to their users
6. Pay attention to identation
7. Using **prettier** or **formatter**

Principle Clean Code

KISS

`Keep It So Simple`

Avoid creating functions created to perform A, while modifying B, checking C functions, etc.

Tips for always KISS

- Functions or classes should be small
- Functions created to perform a single task only
- Don't use too many arguments on functions
- Care must be taken to achieve a balanced, small and minimal number of conditions

Principle Clean Code

DRY

`Don't Repeat Yourself`

Code duplication occurs because of frequent copy and paste. To avoid duplication of code create functions that can be used repeatedly

Refactoring

Refactoring is the process of restructuring the code created, by changing the internal structure without changing the external behavior. The principle of KISS and DRY can be achieved by refactoring.

Technique Refactoring

- Creating an abstraction
- Breaking down code with functions/classes
- Fix code naming and location
- Detection of duplicated code