### Clean code

### Code is read much more often than it is written

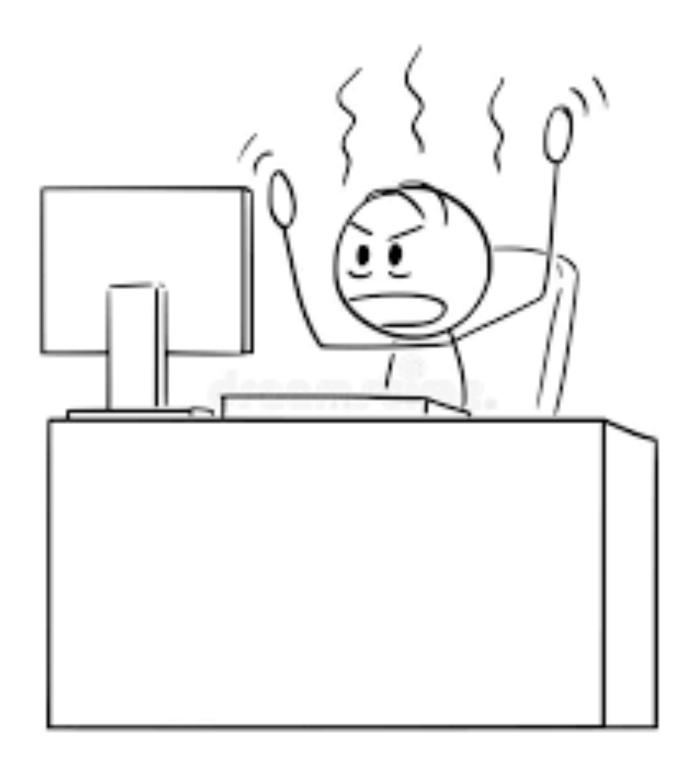
## Code writing starts fast... then it gets slow

# Code writing starts fast... then it gets slow

In the beginning:



After a year:



#### What is a clean code?

Clean code always looks like it was written by someone who cares.



Michael C. Feathers

(Expert at revitalising legacy code)

You know you are working on clean code when each routine you read turns out to be pretty much what you expect...



Ward Cunningham (Inventor of the wiki)

#### Basics of code writing

- Use self-explanatory variable, function, and class names
- use consistent capitalisation
- Use a consistent coding style (PEP8)
- Keep functions short
- Comment if you chose to write a complicated algorithm
- Comments are dead

```
a = "membraneTest.txt"

def func1():
    pass
```

```
config_file_name = "membraneTest.txt"

def get_colour_index():
    pass
```

#### PEP8

#### Python Enhancement Proposal

- Modules, function, and instance variable names: all\_lower\_case\_separated\_by\_underscore
- Constants:

ALL\_CAPITAL

Class names:

CapWords

Global Variable:

Only used within one module

#### Go to pep8.org

Pip3 install pycodestyle

# Use 'black' <a href="https://pypi.org/project/black">https://pypi.org/project/black</a>

Pip3 install black

Python code formatter

#### PEP 8 Song

```
JJP EP850NG
while True is not bool(Fal
                            return r.text
 print("gotta make you, ur
MYlst ={ "never" : "gonna
                        def create_task
def getLogger( X,Y )→
                            """Wrapper
 str= input ( "We're no
                            task = asyn
 str = Z or X if X \neq
                            task.add_do
 print(str); print(str("a
                            return task
getLogger( "you",
   #ijustwann mat_user
while True is not booteray
                             ""Return
 print("gotta make you, ur
                            return
 MYlst ={ "never" : "gonna
```

### When should I clean my code?



You clean code as soon as it works!

#### How long will it take?

Almost the same time as you wrote it!

This is the big problem

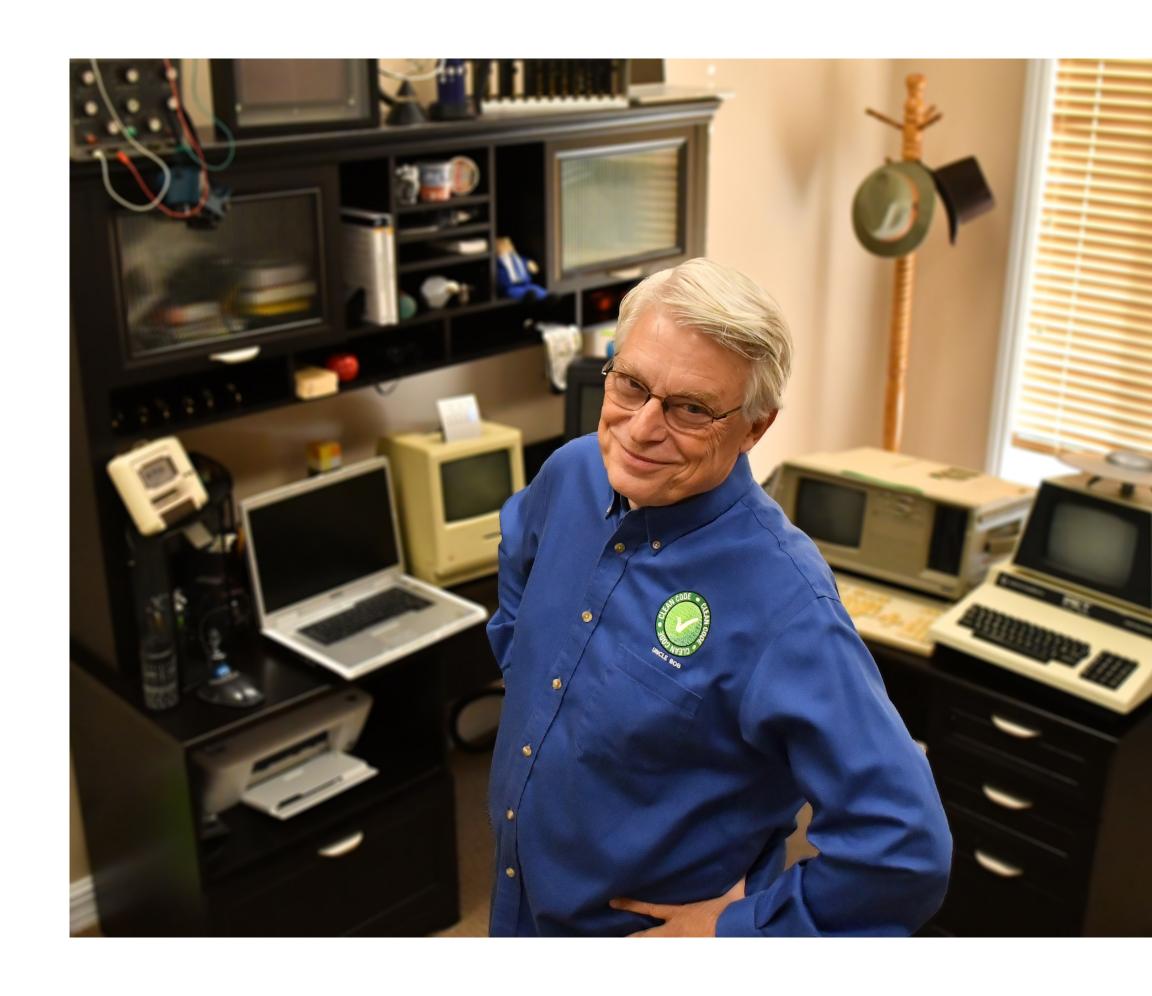


# You get fast by doing well

### You are writing code that other people need to maintain and use

### 'Clean code' by Robert C. Martin

Link to summary



"Always code as if the guy who ends up maintaining your code will be a violent psychopath who knows where you live"

**Martin Golding**