



becoming a **Clean Coder**

What is
Code
Quality?



What is Code Quality?

- Code that does what the Story described
 - delivers value to the business
- Code that meets the acceptance criteria defined on the Story
 - is defect free
- Code that is maintainable and extensible
 - is Clean

What is
Clean
Code?



What is Clean Code?

- ... *reads like well-written prose*
- ... *can be read, and enhanced by a developer other than its original author*
- ... *does what you expected*
- ... *logic [that is] straightforward [making] it hard for bugs to hide*
- ... *[minimal & explicit] dependencies to ease maintenance*
- ... *has unit tests*

Maintainable Testable



Clean Code
A Handbook of Agile Software Craftsmanship

Consistent Readable

Why don't
we write
clean code?



What I thought my code looked like...



What my team thought ...



That's not how the force works

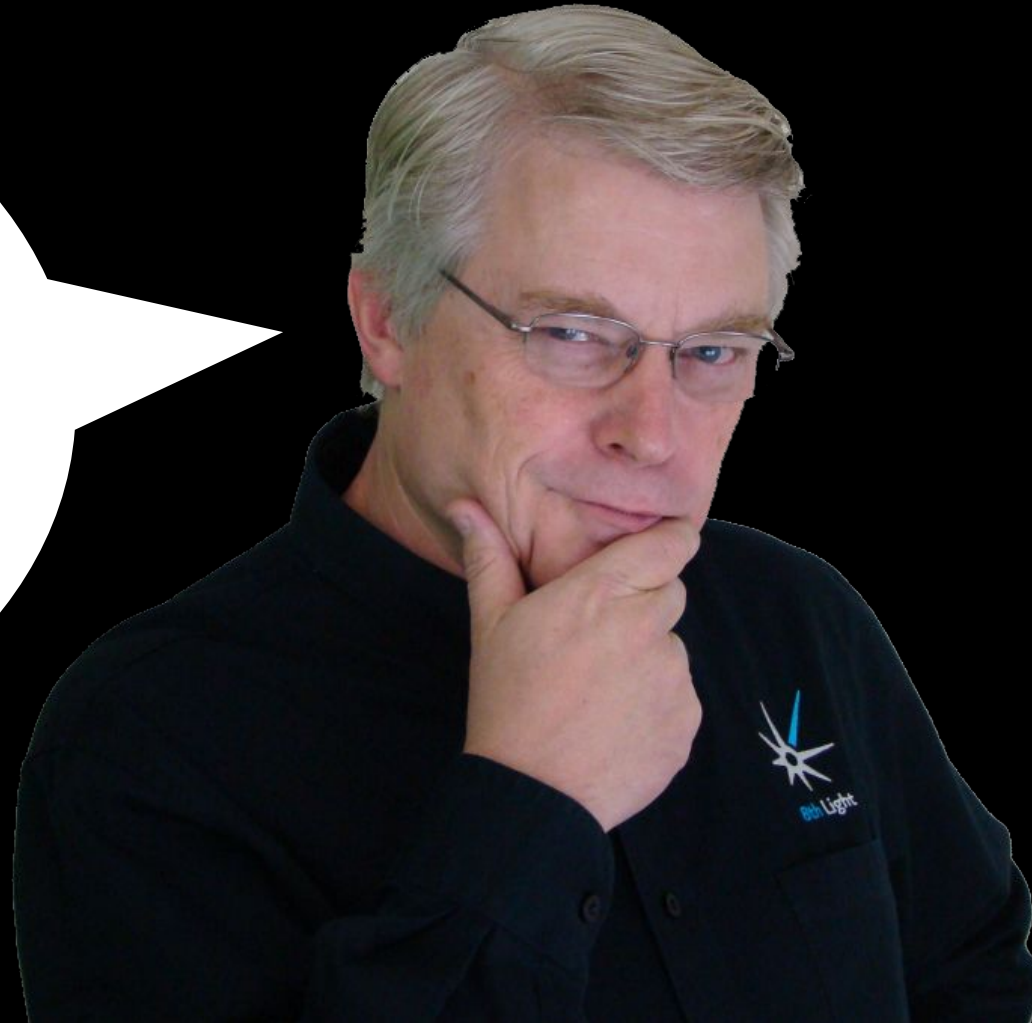


This may smell bad, kid,
but it'll WORK until I get TIME TO WRITE SOMETHING BETTER



The *only* way to make the deadline - the only way to go fast - is to keep the code as clean as possible at all times.

We are constantly reading old code as part of the effort to write new code. So if you want to go fast, if you want to get done quickly, if you want your code to be easy to write, make it easy to read.



The code you write today will be something you & your team-mates read tomorrow...

It's harder to read code than to write it.



Want to Play a Game

Tell me what
this does...



What does this do?

```
var m = function(p1) {  
  if (p1 > 0 || p1 < 0) {  
    return parseInt(("-" + p1).replace("--", ""));  
  } else { return p1; }  
};
```

How hard was it to read that code?

Wong-Baker FACES® Pain Rating Scale



0

No
Hurt



2

Hurts
Little Bit



4

Hurts
Little More



6

Hurts
Even More



8

Hurts
Whole Lot



10

Hurts
Worst

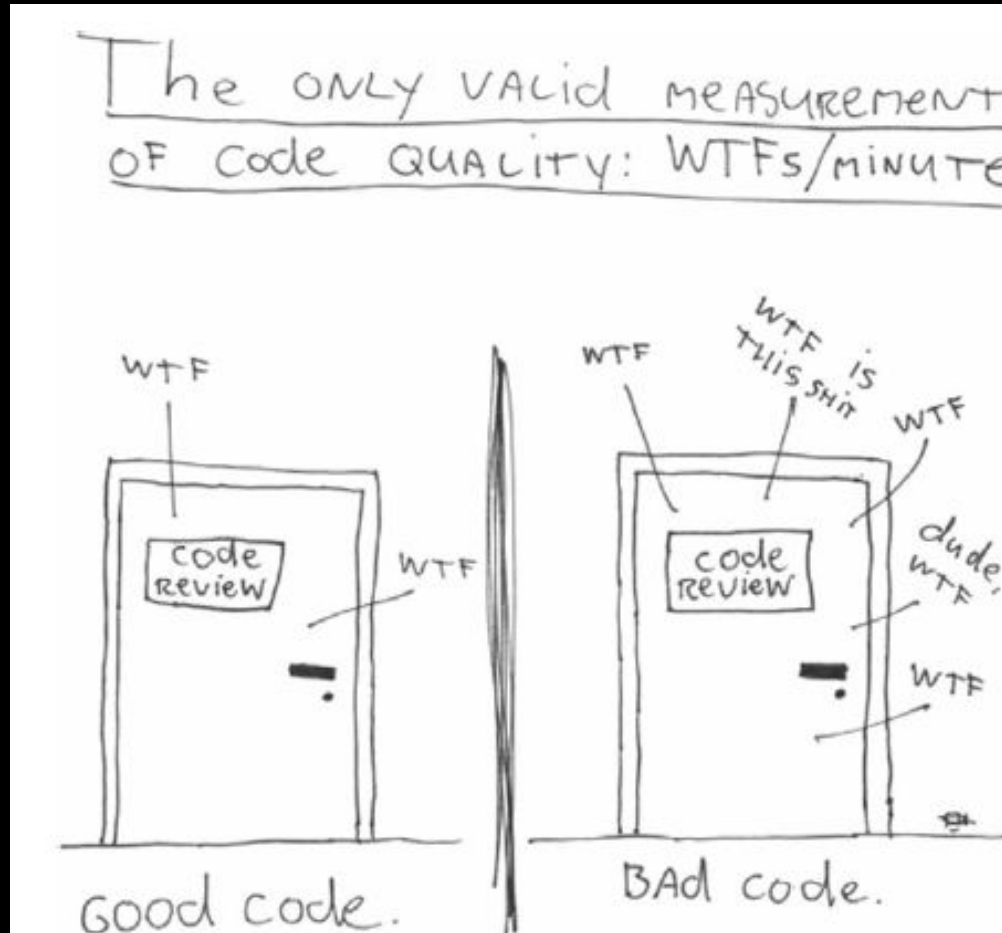
Isn't this better?

```
function makeNegative(num) {  
    return num > 0 ? (num * -1) : num;  
};
```


What does this do?

```
protected String parseStringData(String str) {  
    String frag[] = str.split("\\");  
    String result = "";  
    for (int k=0; k<frag.length;k++) {  
        result += frag[k];  
    }  
    return result;  
}
```

How hard was it to read that code?



Isn't this better?

```
protected String removeQuotes(String str) {  
    return str.replace("\"\\\"", "");  
}
```



CLEAN CODE

YOU ARE FREE TO USE ANY METHODS NECESSARY