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Clean Code:

A Handbook of

Agile Software Craftsmanship

Chapter 01: What Is Clean Code?

What is clean code?

Robert C. Martin states:

- Writing dirty code will lead to failure in our project.
- Writing clean code may look difficult and time consuming, but it actually speeds up the development and debugging.
- To clean a dirty code and rewrite it, requires additional effort, but it is worth it. Because it creates value.

What is clean code?

Spending time for cleaning the code is not only cost-effective, but also the condition of professional survival.

Disturbances quickly lead to slowness and deadline violations. The only way to move quickly and meet the deadline is to keep the code clean at its highest level and at all times. So the importance of clean code can not be denied.

In this document, we learn more about the concept of clean code and try to consider its several different definitions.

A graphic of a spiral-bound notebook with a white page and a black spiral binding at the top. The page has a wavy horizontal line and a purple rounded rectangle containing text. The background is orange.

Why should my code be clean?

Martin Fowler(British Software Engineer)

Any fool can write a code that a computer understands. Good programmers write a code that humans can understand.

So the code has to be clean in order to be easy-to-understand by a human.
Which can be the author of the code or someone else.

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Is it worth to consume time to keep my code clean?

%100

Considering the **time** and **energy** consumed for debugging a dirty code, we find it absolutely effective to clean our code.

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What happens if my code is not clean?

There is a state in software development where modifying the code leads to more dysfunctionality of the software. The code is so unrecognized that in some point it will be impossible to change it. This phase is called wading.

What do the pioneers of Software Industry say about Clean code?



Bjarne Stroustrup

I like my code to be **elegant** and **efficient**. The logic should be straightforward to make it hard for bugs to hide.



Grady Booch

Clean code is **simple** and **direct**. Clean code is read like a **well-written prose**. Clean code never obscures the **designer's intent** but rather is full of crisp abstractions and straightforward lines of control.

What do the pioneers of Software Industry say about Clean code?



Dove Thomas

Clean code can be **read**, and **enhanced** by a developer other than its original author. It has **unit** and **acceptance** tests. It has **meaningful names**. It provides **one way** rather than many ways for doing **one thing**. It has **minimal** dependencies, which are explicitly defined, and provides a clear and minimal API. Code should be **literate** since depending on the language, not all necessary information can be expressed clearly in code alone.



Michael Feathers

Clean code always looks like it was written by someone who **cares**. There is nothing obvious that you can do to make it better. All of those things were thought about by the code's author, and if you try to imagine improvements, you are led back to where you are, sitting in appreciation of the code someone left for you—code written by someone who **cared** deeply about the **craft**.

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In brief clean code has these features:

- It's minimal.
- It has comprehensive tests.
- It is efficient and easy to maintain.
- It can be read like a newspaper.
- Every module is made for one and only one purpose.