

## Clean code

**Clean code** refers to writing code that is easy to read, understand, and maintain. It is a coding style that prioritizes readability and simplicity, making it easier for other developers (including your future self) to work with the codebase. Clean code not only benefits the developer writing the code but also the entire development team and the software as a whole. Here are some key characteristics and principles of clean code:

### **Readability:**

Clean code is easy to read and comprehend. Variable names, function names, and comments should be meaningful and self-explanatory. It should feel like reading well-written prose.

### **Simplicity:**

Keep the code as simple as possible while achieving its intended functionality. Avoid unnecessary complexity, convoluted logic, or overengineering.

### **Consistency:**

Follow consistent naming conventions, formatting styles, and coding practices throughout the codebase. Consistency makes the code predictable and reduces cognitive load.

### **Modularity:**

Break the code into small, manageable modules or functions that have specific responsibilities. Each module should ideally focus on one task and do it well.

### **Minimal Dependencies:**

Minimize dependencies between different parts of the code to reduce coupling. This improves maintainability and makes it easier to change or update components without affecting other parts.