



How to write maintainable Code

(or how to stay sane working with code)



@rettetdendativ



calmandniceperson



Do I even know what I'm talking about?

I'll let *you* decide.

4 pillars of maintainable code

- Expressive comments
- Naming (self-documenting code)
- Readability > elegance
- Conventions

Software can be chaotic, but we make it work



Expert

Trying Stuff
Until it Works

O RLY?

The Practical Developer
@ThePracticalDev



4 pillars of maintainable code

- **Expressive comments**
- Naming (self-documenting code)
- Readability > elegance
- Conventions



Comments

```
if(mlevel=='a') // this is an if statement
```

```
{}
```

```
if(g<=5) // checks if g <= 5
```



Comments



Someone once said

88



- 1) Only write comments for code that's hard to understand.
- 2) Try not to write code that's hard to understand.

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answered [Oct 16 '08 at 16:16](#)

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4 pillars of maintainable code

- Expressive comments
- **Naming (self-documenting code)**
- Readability > elegance
- Conventions



Naming

```
float a = 5, b = 3;  
float c = a*b/2;  
printf("%f\n", c);
```




Naming

```
float base_length = 5, height = 3;  
float triangle_area = base_length * height / 2;  
printf("The triangle's area equals: %f\n", triangle_area);
```



Naming - Meaningful functions

```
#include <stdio.h>

float calculate_triangle_area(float base_length, float height)
{
    return base_length * height / 2;
}

int main(int argc, char **argv)
{
    float base_length = 5, height = 3;
    float triangle_area = calculate_triangle_area(base_length, height);
    printf("The triangle's area equals: %f\n", triangle_area);

    return 0;
}
```



4 pillars of maintainable code

- Expressive comments
- Variable naming (self-documenting code)
- **Readability > elegance**
- Conventions

Readability > Elegance

- Elegance...
 - hard to maintain
 - difficult to read
- Great examples:
 - Regex
 - One-liners
- Don't overdo it





Readability > Elegance

```
// The index is determined by adding the index of the very left starting point of the digit on  
// the current row to the difference in pixels between the center of the digit and the current row  
// Yep, I have no idea what I did there but it works, so don't touch it.  
data[baseStart+row*BMP_WIDTH+(row-DIGIT_HEIGHT/2)] = NUM_COLOR;
```



4 pillars of maintainable code

- Expressive comments
- Naming (self-documenting code)
- Readability > elegance
- **Conventions**

```
int getCount() {  
    return count;  
}
```



TL;DW / TL;DL

Bill Mitchell View profile More options Sep 26 1991, 1:57 am In article <5...@ksr.com>
j...@ksr.com (John F. Woods) writes:

[...] Always code as if the guy who ends up maintaining your code will be a violent psychopath who knows where you live. Code for readability.

Thank you!
