

Hello Sergey,

So you want to talk about your coding style? Ok let's start:

1. First of all. Never use "using namespace Upp" in your header file. Instead of this use `NAMESPACE_UPP` & `END_UPP_NAMESPACE` macro.

using namespace Upp;

```
class QrEncode {  
// ...  
};
```

Should be:

`NAMESPACE_UPP`

```
class QrEncode {  
// ...  
};
```

`END_UPP_NAMESPACE`

2. Next simply thing you do in your code regularly is (:

```
for(int i = 0; i < qrcode->width; i++){
```

Giv it a space before bracket:

```
for(int i = 0; i < qrcode->width; i++) {
```

3. The ternary operator (?:) should be written like this - more spaces:

```
int cs = casesensitive ? 1 : 0;
```

4. Decide where you put brackets in your if statement:

```
if ( qrcode == NULL ) {
```

It should be

```
if(qrcode == NULL) {
```

5. The valid way to represent if/else if/else block is:

```
if(...) {  
    // ...  
}  
else  
if(...) {  
    // ...  
}  
else {  
    // ...  
}
```

You made small mistake here (never use this)

```
} else {
```

6. Method/Function arguments is not perfect:

```
is = Size(20+border*2,20+border*2);
```

It should be (a lot more spaces - remember to put space after comma, and after/before math operator like "-" or "+"):

```
is = Size(20 + border * 2, 20 + border * 2);
```

7. Operator "<<" should have spaces too:

```
uint8_t m = 1 << (layer);
```

8. Method/function opening bracket starts always in new line:

```
Image QrEncode::QrEncode_To_Image(String s1){
```

Should be

```
Image QrEncode::QrEncode_To_Image(String s1)
{
```

9. You have got several tabulation/space problems - you can detect this by showing whitespace in your code or use feature show mismatch witespace in newer ide versions.

10. In class constructor QrEncode you have too many enters at the end.

P.S.

All things wrote in this post base on Ultimate++ code. Please notice that there is not official Ultimate++ coding standard. But I strongly believe that all things I proposed will increase your code read ability.

[EDIT - There is more!]

11. "public/private/protected" goes in the same line as class statment:

```
class QrEncoder {
    typedef QrEncode CLASSNAME;
    public:
        QrEncoder();
    // ...
```

It should be

```
class QrEncoder {
    typedef QrEncode CLASSNAME;
public:
    QrEncoder();
    // ...
```

Sincerely,
Klugier
