

ZOS C++ Programming Test 2.6.0

Overview

Minefield project is just a simple game logic implementation using C++.

Even though, there could be some better solutions to build this, I didn't changed project architecture.

I only updated code to fix bugs, prevent potential errors, crashes, improve performance a bit, make the code clearer and more efficient.

When I add or update some incorrect code lines, I set the comment in codebase. You could easily understand what I was thinking in those parts of code.

And also, as my name is Anthony, I implemented additional logic to add shield to mines.

I hope you would enjoy with my working, coding style and my thinking.

Project Architecture

As I really like to understand someone's point of view, coding style, I think, there's no need to change original architecture.

Minefield is used for manage input, output value, may be considered as an UI.

ObjectManager takes care of objects on a board, Object has child class Mine.

And also, using several threads, improve speed to find near target mines, etc.

I really like what you saw and thought and it was funny and interesting to solve the issues, guess your logic with bug code.

I only fixed bugs, potential crashes, improved performance a bit, added Shield Class to implement additional logic based on my name.

Shield is an object which could be installed for a mine, it has own health, regeneration amount per turn. When it's health is below 0, it's destroyed and can never regenerate mine health regarding your description.

And also, I rewrote code to completely separate header and body parts for future development even if it's unnecessary, it could be the best practice.

In the project, the most interesting part is to fix bugs in recursive explosion of mines.

I changed original code a bit and implemented what I was thinking and it's working very well.

Above descriptions are just kind of overview and I commented detailed explanation in codebase so that you can easily and perfectly understand my point of view and issues.

I look forward to hearing back from you asap! Thanks!