

Defuse the Bomb

A CSC 102 Project

Team: <The Bomb Squad>

Github: <https://github.com/Cmcfall04/Bomb_Project>

Team individualization

What did you tweak to the design provided by your instructor that makes it different from the other teams? In other words, what did you do to make your version of the “bomb” unique?

We mainly added two things to our bomb to make it unique. The first thing we added was a picture that displayed at the end of the bomb game depending on whether the user succeeded or failed at defusing the bomb. The second thing we added to make our bomb unique, was we changed the way the user solved the keypad. The keypad is now solved by answering a riddle that is provided by the bomb. If the user inputs the correct answer, the keypad phase will be successfully defused.

Future development plans

If you were to continue working on this project, what would you do? Where could you go from here to make it better, more interesting, more fun? What could be done to increase the project's broader impact (e.g., to make it marketable)?

There are a lot of things our group wanted to add to the bomb, but due to lack of time we were unable to do. The first thing is we would have added sounds to the bomb, as it would have simply made the game more fun. Some other features we would have liked to implement were achievements and a leader board as they would make the game a little more competitive. We also thought that adding levels to the game would be good as well, for example varying the difficulty of the riddles as the player completes the bomb more and more. One last main feature that we would have liked to implement is the idea of locking certain phases until another phase is complete. For example if the button is green, you have to solve the wires phase, before you can solve the keypad phase, etc.

Lessons learned

What did you learn by working on the project throughout the course? In your opinion, did it relate to *The Science of Computing* curriculum (and, if so, how)? How was the experience

beneficial to problem solving in general? What did you learn that will benefit you in future courses in the Computer Science curriculum?

As a group we have learned a lot through the process of working on this project. To start it was definitely a challenging project that required our group to put our heads together and think, but that is exactly what was so good about this project. Through putting our heads together and trying to solve the same problem, we learned a lot about working in groups in computer science, as it is something that we have never done before. We also learned a lot about programming from the difficulty of this project. There is still a lot of mystery behind the code used mainly in connecting all the components, but working through getting the phases to work and, making small changes here and there helped us learn about new coding techniques, and styles. As for problem solving, this project took a great deal of it, but after getting through it, we now know so much more, and have become better at working as a group. Lastly, there are a variety of things that will benefit us in the future courses in the computer science curriculum. The main thing as mentioned above, is working in groups on coding projects, as it is a area that a lot of people need some experience in. It also will help us in the future as it taught us how to take super complicated code(at least for us) and break it down into pieces, and start to understand it a little better. Doing this in future CSC courses will enable us to understand more complicated topics, quicker and better.