Defuse the Bomb

A CSC 102 Project

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GitHub: https://github.com/loganpinel06/LMB-CSC102-Final

Team individualization

Our design for the bomb project that makes it unique is that it is now more of a trivia game than a bomb defusal. It still has bomb defusal properties, but with trivia about LeBron James alongside it. There are numerous unique edits we made to the base version of the bomb given to us. We developed 4 different phases that will boot up one after the other. Alongside this, we created a way to make the timer change values between these phases as well as the timer increasing or decreasing if you solve a function or fail a function respectively. We have also changed other functions such as making the button change colors and need to be released at a specific time in order to solve it.

Future development plans

If we were to continue working on this project, there are a couple of new implementations that could help increase the fluidity and comprehensiveness of the bomb. For instance, there are a lot of possibilities we could've explored with the audio features, such as looping audio throughout the entirety of the game, like a ticking bomb noise. Also, more time would have given us the ability to conduct deeper research on Lebron's statistics, where we could have asked more difficult questions. Building on the idea of the increased trivia difficulty, we could prompt the user to select their game mode difficulty, and direct questions and puzzles at them based off their answer. A final idea for development in the future could be a multiplayer mode, where you are timed and scored based off of your time. We could implement a leaderboard as well, keeping track of previous high scores of quickest times being placed at the peak of the chart.

Lessons learned

What did you learn by working on the project throughout the course?

Some things we learned by working on this project were patience, time-management, and collaboration. By working with GitHub, we learned how to assemble the project in a way where everybody has respective responsibilities, so we were able to get things done more punctually. Having each other as a team helped us assist each other when we had problems too. Patience was key for this project, as we came across an uncountable number of bugs and issues in our code that brought along a lot of frustration. We started working on the project on the first day it was assigned and spent some time each day and after class working on it, helping us reach

our final product without having to cram it before it’s due date. In our opinion, this project thoroughly relates to the curriculum, as we learned many new ways to code in Python and got to explore the inner workings of computers, more specifically with the Raspberry Pi. This experience was extremely beneficial to problem solving as it taught us many ways of how to assess and tackle frequent issues. By outlining what the problem is, creating an action plan, and splitting the work amongst us, we were able to overcome the many struggles we faced with ease. We look forward to bringing everything we learned to our future C.S. classes going forward.