Keep Talking and Nobody's FPGA Explodes!!!

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6.111 Abstract

Keep Talking and Nobody Explodes is a bomb defusal game created by Steel Crate Games. Players are divided into two teams, a defusal team that is tasked with defusing the ticking time bomb and a consulting team that, based off of a descriptive manual, will instruct the defusal team on how to defuse that bomb. Levels are of varying difficulty in terms of time, number of modules, difficulty of modules, etc.

In our final project, we will implement this game using an FPGA's I/O pins, buttons, and switches for real time manipulation of the time bomb. In regards to gameplay, we plan on building modules that simulate the modules in game as well as our own unique modules. We will also interface the FPGA with more peripherals such as a keypad and a big red button that will help create the illusion of a bomb defusal environment. The bomb itself will be displayed on a computer monitor. The events that occur in real time in accordance to the user's input will then be processed by the system and updated on the monitor. If the teams defuse it in time, they beat the level. If they mess up or run out of time, the bomb explodes and we will send visual and audio cues to the FPGA to signal that the game is over.