

Software Engineering Plan

Team Structure/Responsibilities

For our final project Gavin, Taylor, and Adam all teamed together for Defusal. As we have worked together in previous classes, we felt we all had a good idea of each other's strengths and weaknesses and are able to appropriately balance each other. We also have great comradery together and felt that our team would be successful because of this.

After finalizing our discussion on game objectives, design, and other aspects, we were each designated specific features of the game to work on. While we each helped each other in many ways, the following were our given responsibilities:

Gavin

- Programming functions to encrypt the message
- Programming functions that linked the decryption legend to the respective keys/wires
- Research Three.js library + provide reasoning for its utilization
- Create function for wires to appear in a wave design

Taylor

- Writing up documentation and keeping track of team discussions
- Creating new timer function to be displayed on the canvas and updated
- Providing needed Three.js documentation + source code
- Programming setup of the scene + initializing models

Adam

- Original design of bomb
- Programming the models of the bomb and number pad
- Creating functions to access timer and pair with button blinking
- Programming the models of the buttons

Timeline

Proposed

April 7th - Team meeting to discuss game objectives and design, draw out scenes and descriptions of beginning game to end game.

April 14th - Begin programming model of bomb and number pad

April 15th - Finish programming of models, begin encryption + decryption methods, start timer programming

April 19th - Finish timer programming, finish programming encryption + decryption methods

April 22nd - Display encryption + decryption messages on screen, display win/lose message on screen after respective outcome, create model of blinking buttons

April 25th - Finish last minutes updates, add red blinking to buttons

Actual

April 12th - Team meeting to discuss game objectives and design, go over team responsibilities, discuss what primary features would be and then secondary

April 15th - Start programming models of bomb, model of number pad, model of wires

April 22nd - Finish model programming, start programming decryption + encryption methods, start timer programming

April 24th - Finish decryption + encryption methods, show encryption + decryption messages on screen, show end game messages on screen, continue work on timer programming, add green/red button clicking

April 25th - Finish timer programming, display timer in red, add button models and red blinking according to timer, finish last minutes updates