* Bomb Manual for Jhits

## CSC102 Final Project.

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For our bomb you must defuse the bomb via solving multiple conundrums in the allotted time given (10 minutes) The timer starts counting down immediately. You can pause the timer via the GUI if you’re running in desktop mode (controlled by the Pause button) and close the game via the exit button.

1.)KeyPad

* Enter the correct passcode using the keypad If you type an incorrect sequence (that doesn’t match the beginning of the correct code), you get a strike if you exceed the maximum strikes allowed the bomb explodes.
* Correct input = phase is marked as DEFUSED.
* The coded word is in a Caesar cypher and each # is 1 letter left, with some letters thrown in between for spaces When deciphered it gives the hint for what needs to be typed into the keypad

2.) Jumper wires

* For the jumper wires there is a value given convert it into hexadecimal value then binary Ex.) b —> hexa(11) —-> binary(1011)
* The jumper wires function in binary code(16 8 4 2 1); the wires must be connected in the corresponding specific binary pattern.
* Once they match exactly, this phase is DEFUSED.

3.) Toggle switches

* For the toggle switches the previous jumper wires need to be completed correctly, to defuse this phase take the value of the previous jumper wires in this Ex (11)
* Use this equation, where 11 (in this example) = X and A = answer. ⌊(x/2)⌋ = A
* Value 11 divided by 2 ≈ 5.5 round down = 5 so in the Ex using 11 the correct answer would be 5, convert 5 to binary which would be 0101 toggle the corresponding switches (switches are also in binary code same as wires)
* Once your toggles match the expected value, it’s DEFUSED.

4.) Button Phase

* Press and release the big RGB push button only after the previous 3 phases (wires, toggles, keypad) are all DEFUSED.
* Note
  + If pressed too early, the bomb explodes immediately (timer.\_value = 0).
  + If pressed after the other three phases are defused, the bomb is DEFUSED, and you win.