**Lab 06: Pre-Lab**

Instructions: Print off this pre-lab form, complete and turn it in by the start of your lab section. If there is a demo associated with this lab, you can turn it when you do your demo.

**Part 1: Introduction to Bop-It!**

Start by reading through the entire lab document prior to coming to lab so you know are able to have a better idea of what we are doing this week. In addition to that, feel free to start on the lab or bring any questions that you may have so the TAs can go over them. Next, answer the questions below based on having read the lab document.

**Question 1:** Based on the description of how your code should run for this lab, should your game start when any button is pressed or wait until a specific button is pressed? Why or why not?

The program should start when any is pressed. It says it should output a line asking the user to press a button to start.

**Part 2: Timing is Everything**

Manipulating the time that you read in from the controller is an important skill to know how to do as it is used in multiple labs. This is a useful skill to know since it allows us to create essentially homemade and easy to use “timers” or implement an easy to use time delay in your code.

**Question 2:** What are the minimum number of variables that you would need in your program to implement a “timer” component? What will those variables be used for?

At least three. You would have one for having the time when the game started and the one keeping track of the last time. The last variable would be keeping track how much time has past since the last time marker.

**Question 3:** Let’s say that you have a set amount of time that you want your code to continuously run for- this amount of time is set in the code, not determined from the controller. However, within your code you chip away at the allotted time incrementally and use the time from the controller. Come up with a way, code, or mathematical expression to check to see if whether you should continue to run your code.

startTime = time(null)

endTime = startTime + endAmount

while()

timeSince = startTime + controllerTime

if (timeSince > endTime) {

end the program

}

**Question 4:** Come up with the actual or pseudo code (you can choose if you would like to write actual C code or not for the purposes of the prelab) to check if the user/player should continue onto the next round- that would be the third bullet point under the requirements section of the lab document.

startTime = time(null)

endTime = startTime + endAmount

while()

timeSince = startTime + controllerTime

if (timeSince > endTime) {

end the program

}

**TA Check Off:**

**Pre-lab and Attendance TA Signature:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Question 1:** | **/3** |
| **Question 2:** | **/4** |
| **Question 3:** | **/3** |
| **Question 4:** | **/5** |
| **Total:** | **/15** |