# **COMP20180 – Intro to Operating Systems**

# Assignment 1 - 29/01/24

## **Elvin Jiby**

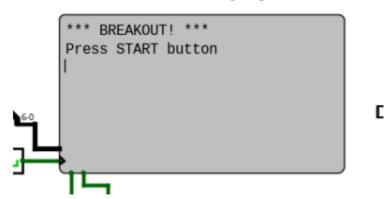
- This is a subsection of my assignment that involved programming Breakout into Logism through it's bitmap display and I/O devices
- A combination of C and Assembly was used

#### **Launch Instructions:**

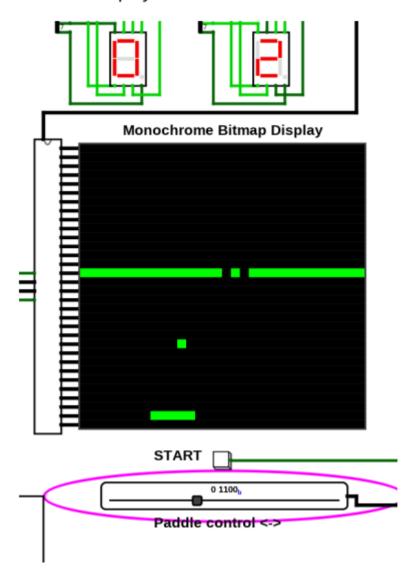
- Load the circuit into Logism and press the start button near the bitmap display
- There is a message box to the right of the display that indicates game statuses (i.e. start of game, end of game, etc.)
- Use the paddle under the display to control the ball

### 1. Start of the game

### **MMIO Display**

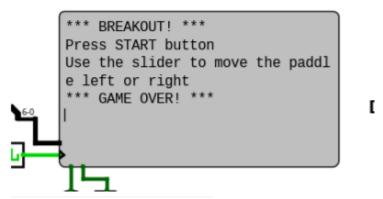


## 2. Game display and controls



## 3. Game over message

## **MMIO Display**



#### Notes:

- The game is **supposed** to be slow in Logism. A later question in my assignment solves this by using a better software, of which I don't think I'm allowed to distribute. Please keep this in mind when playing the game.
- The score board does not really work for scores above 9. I wasn't able to resolve this in time for my assignment so, please excuse the broken feature.
- Comments have been added in the code to understand what's going on