**Lab 2: Game Control with Joy Stick, Gyro and Accelerometer**

**EECE. 4520 Micro­­­­processor II and Embedded System Design**

**0. General Information**

Student Name:

Student ID Number:

Team Name/Number: Team SJK

Team member names: Sua Jung, Julie Dawley, Kyle Purcell

Date of completion: March 7, 2021

Demonstration method: recorded video

**1. Design**

**1.1 Hardware Design**

photo:

circuit diagram:

explanation:

**1.2 Software Design**

**GitHub URL:**

The GitHub URL contains a public repository that holds the most up to date folder of Lab2 that includes the .ino file, snake.py and an image of the circuit.

**Pin Assignments:**

* The start button is assigned to digital pin 6.
* The green LED is assigned to digital pin 2.
* the yellow LED is assigned to digital pin 3.
* the red LED is assigned to digital pin 4.
* the buzzer is assigned to digital pin 5.

explanation:

**Flow Diagram:**

**1.3 Results**

brief explanation:

video link: <https://youtu.be/JSkLd0VgPec>

**2. Problem Encountered and Solved**

**3. Personal Contribution to the Lab**

Sua Jung

: wrote the initial snake.py code, debugged the final code, constructed the circuit

Julie Dawley

: debugged the final code, constructed the circuit.

Kyle Purcell

: wrote the Arduino code, constructed flow diagram, recorded the photo and video.

**4. Lessons Learnt**