ReflectionLog: Tug of War

Youdis

```
import com.phidget22.*;
public class TugOfWar {

    public static void main(String[] args) throws Exception
        //Creating objects from the imported classes
        DigitalInput greenButton = new DigitalInput();
        DigitalOutput greenLED = new DigitalOutput();
        DigitalInput redButton = new DigitalInput();
        DigitalOutput redLED = new DigitalOutput();

        //Assigning each object to the port address of it's
        greenButton.setHubPort(5);
        greenLED.setHubPort(4);
        greenButton.setIsHubPortDevice(true);
        greenLED.setIsHubPortDevice(true);
        redButton.setHubPort(0);
        redLED.setHubPort(1);
        redButton.setIsHubPortDevice(true);
        redLED.setIsHubPortDevice(true);

        //Opens connection between objects made from importe
        redButton.open(1000);
        redLED.open(1000);
        greenButton.open(1000);
        greenLED.open(1000);

        int greenCount = 0, redCount = 0;
```

Importing the phidget library then creating 4 objects 2 Digital Input objects and 2 DigitalOutput objects for the green and red, LEDs and buttons. Then assigning each of those objects a port that corresponds to the port their physical item is connected to on the phidget. Then opening the connection between each item and their physical item. Then creating 2 variables that track how many times their respective colour's button is pressed.

```
        while (greenCount < 10 && redCount <10) {
            if (greenButton.getState()) {
                greenCount++;
                Thread.sleep(150);
            } else if (redButton.getState()) {
                redCount++;
                Thread.sleep(150);
            }

        }
```

While both count variables, initialized beforehand, are under 10 then this loop will repeatedly be reiterated. In the loop there are if statements that will check if the either button is being pressed if they are then each button will get one added to their counter. After one count reached 10 then the loop will stop.

```
    if (greenCount >= 10 || redCount >=10) {
        redLED.setState(true);
        greenLED.setState(true);
        Thread.sleep(400);
        redLED.setState(false);
        greenLED.setState(false);
        Thread.sleep(400);
    }
```

After the loop is broken it will check again to make sure that one count equals 10 or more then it blinks both LED's once.

```
        if (greenCount >= 10) {

            for (int i = 0; i < 5; i++) {
                greenLED.setState(true);
                Thread.sleep(300);
                greenLED.setState(false);
                Thread.sleep(300);
            }
        }

        if (redCount >= 10) {
            for (int i = 0; i < 5; i++) {
                redLED.setState(true);
                Thread.sleep(300);
                redLED.setState(false);
                Thread.sleep(300);
            }
        }

}
```

2 if statements to check which count was the one over 10 then after entering one of the if statements then a for loop will play where the colour of the count variables button will flash 5 times indicating the winner, then the program will end.