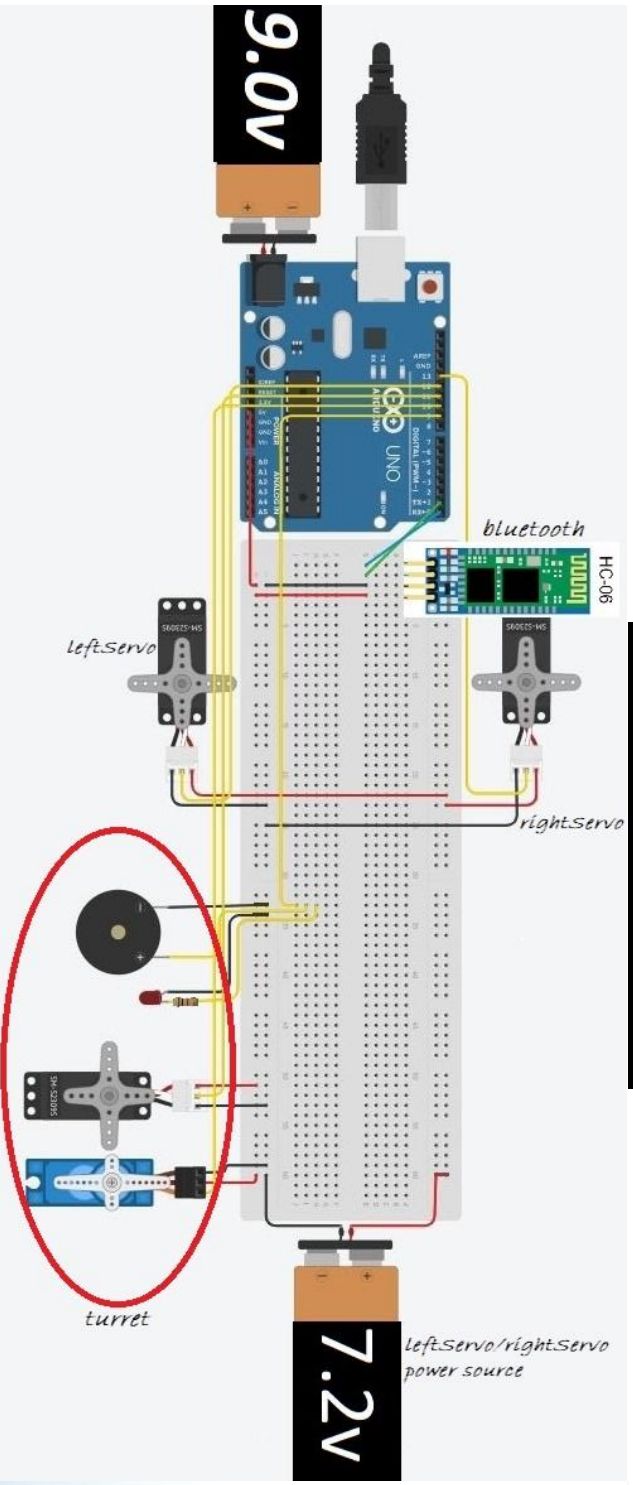


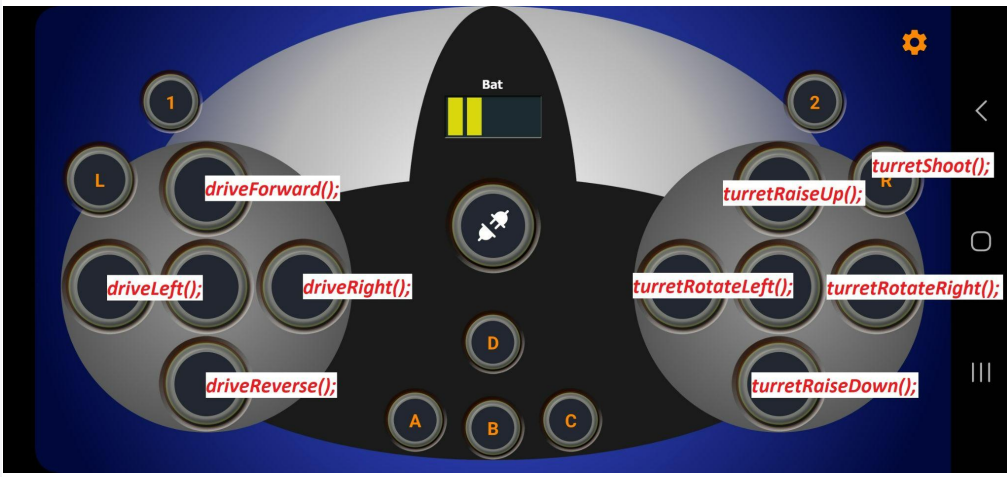
Bluetooth Controlled Tank:

-Libraries: <Servo.h>
-Phone App: USBRControl

```
void loop()
{
  while(Serial.available() > 0){
    data = Serial.read();
    Serial.print(data);
  }
```

-Concept: Phone will connect via bluetooth to the Arduino using an HC-06 bluetooth module. Using the phone app, two 7.2v servos will drive the tank (forward, reverse, left, right). “Shoot” button will make a sound and light an LED on the barrel. A third servo will rotate the turret, another will aim the barrel up and down.

-The tank will be made from wood and will be based off of the US M4A3E2 *“Jumbo”* Sherman.



Driving Example (driveForward()):

-Pressing the forward button on the phone app sends code “100” to the arduino. This then calls the “driveForward()” method which tells the rightServo to rotate clockwise full speed and leftServo to rotate counter-clockwise at full speed, hence driving forward.

```
//variables
int data;
Servo rightServo;
Servo leftServo;


//setup
void setup(){
  rightServo.attach(13);
  leftServo.attach(12);
```

```
//driving movement
if(data == 100){
  driveForward();
}

//driving methods
void driveForward()
{
  rightServo.write(180);
  leftServo.write(0);
}
```