In this part we are going to module the joystick controller and explain the code process in it. First we are going to use an Arduino Uno microcontroller to run the joy stick.

Bill of material :

1 x joystick for ardunio

1 x motor (LED in this prototype)

1 x Arduino microcontroller

In this prototype we are going to shoe trhe code that will start the joystick and motor .As it's show in the bill of material we have a joystick , Arduino and LED. The Led wil be substituted due to the shortance of time . The group used led's to show the code works

```
//capstone prototype

int joy_x=A0; // define as analog input

int joy_y=A1;// define and analog input

int LED_1= 1; // to show the LED works and later on its going to be the motor

int LED_2= 2;// to show the LED works and later on its going to be the motor

int reading_1 = LOW;

int reading_2 = LOW;

void setup() {
  // put your setup code here, to run once:
  pinMode(LED_1, OUTPUT);
  pinMode(LED_2, OUTPUT);
  pinMode(joy_y, INPUT);
  pinMode(joy_x, INPUT);

}

void loop() {
  // put your main code here, to run repeatedly:
```

```
reading_1 = digitalRead(joy_x);

reading_2 = digitalRead(joy_y);


if (reading_1 == HIGH || reading_2 == HIGH)

{ digitalWrite (LED_1, HIGH);

 digitalWrite (LED_2, HIGH);

 } else

{ digitalWrite (LED_1, LOW);

 digitalWrite (LED_2, LOW);



}}
```