

- 1.) Long range sensor
 - M₁ Forward
 - M₂ backward
 - until target is spotted (stop)
 - ↳ Activate uServos 90° drop pan
 - M₁ & M₂ Forward at target

- 2.) Short range sensor (senses)
 - uServos initial position
 - M₁ & M₂ Forward still

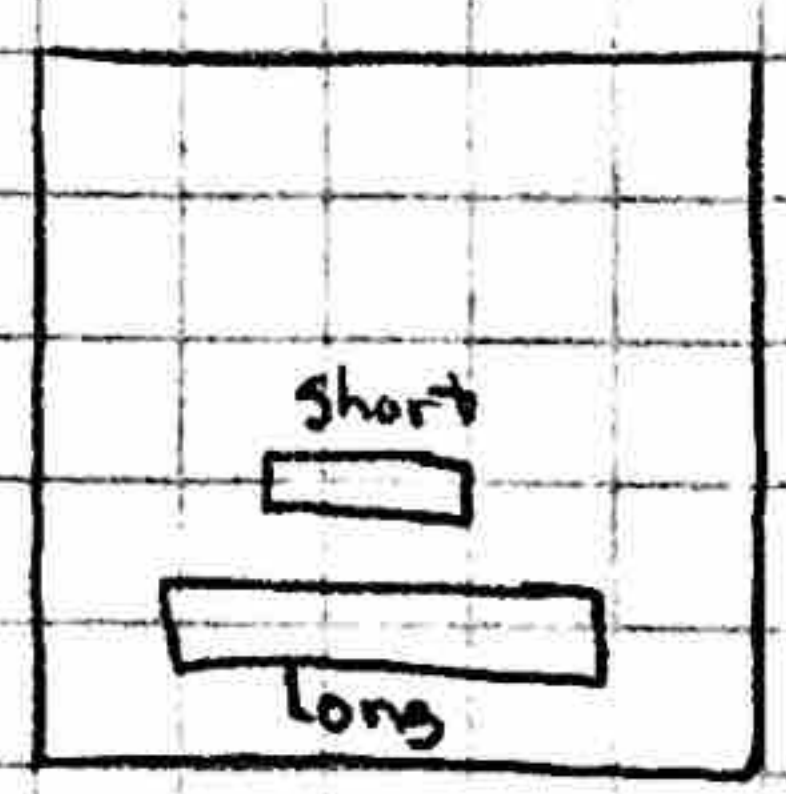
- 3.) Interrupts:
 - Line sensors
 - 1.) Front 1 M₁ & M₂ backward
 - 2.) Front 2 M₁ & M₂ backward
 - 3.) back 1 M₁ & M₂ forward
 - 4.) back 2 M₁ & M₂ forward

★ With Pins instead: ★

- 1.) Long range sensor:
 - M₁ Forward
 - M₂ backward
 - once target is found M₁ & M₂ forward at target

- 2.) Short Range to double check target position
 - make touches to this at the end

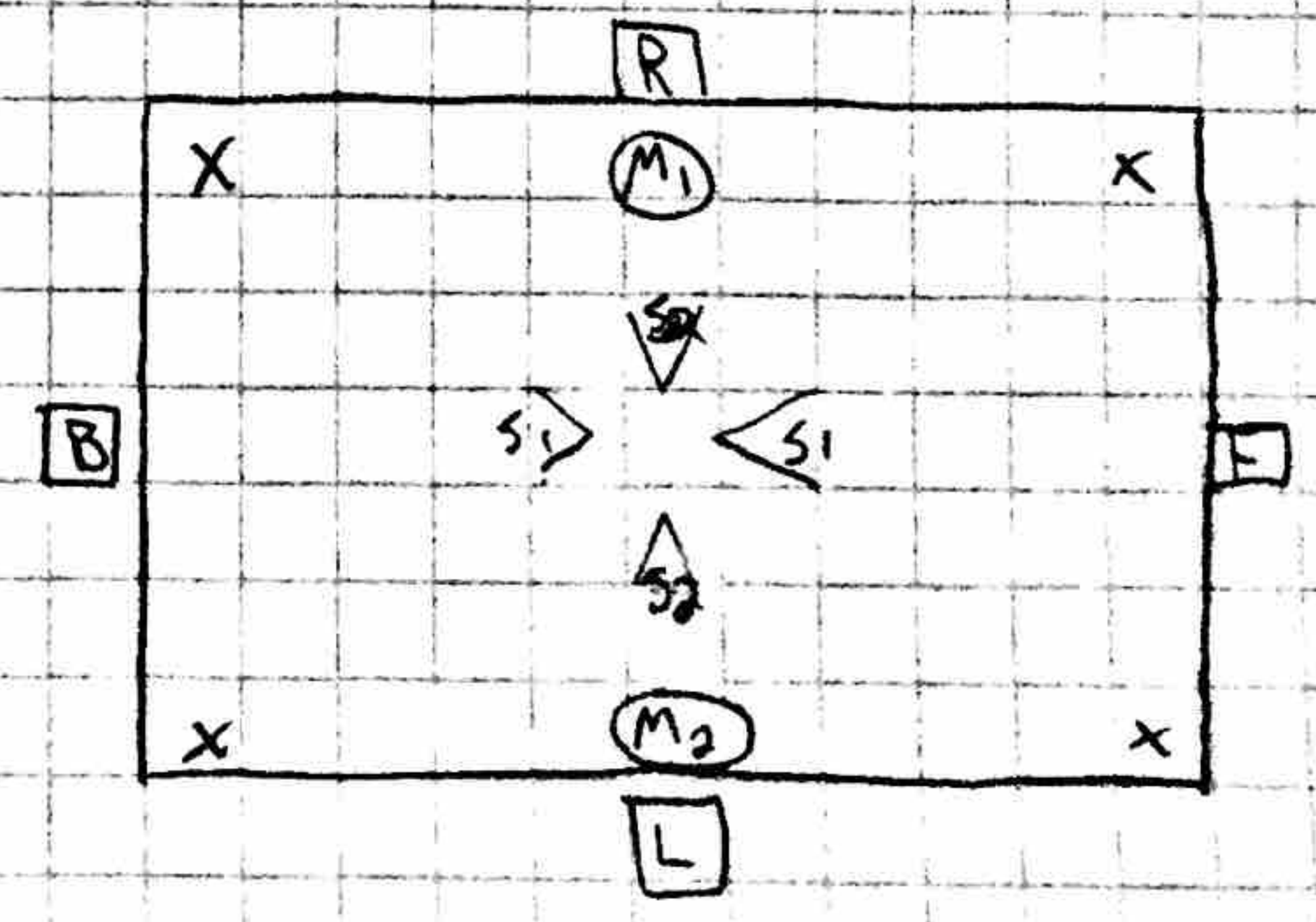
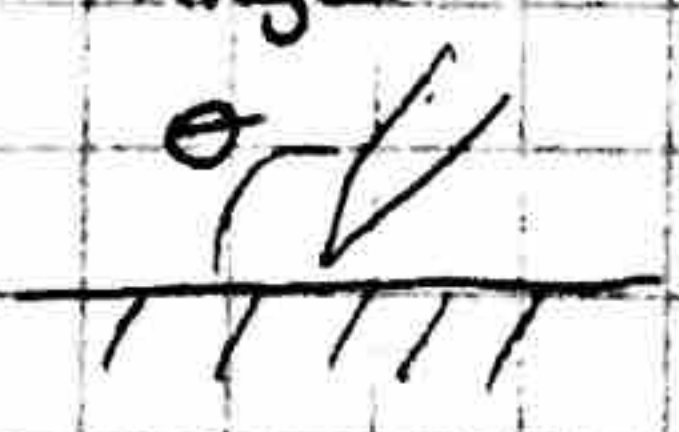
Front view



- 3.) Interrupts:
 - Line sensors
 - 1.) front 1 - M₁ & M₂ backward
 - 2.) front 2 - "
 - 3.) back 1 - M₁ & M₂ forward
 - 4.) back 2 - "

- Pressure sensor

| | | | |
|--------------------------------------|-----------------------|---|-----------------------|
| M ₁ & M ₂ for | 1) F - S ₁ | } | experiment with angle |
| M ₁ & M ₂ back | 2) B - S ₁ | | |
| M ₂ for | 3) R - S ₂ | | |
| M ₁ for | 4) L - S ₂ | | |



Got 10cm sensor working

Arduino Code:

```
int sensorPin = 0;
```

```
void setup() {  
  Serial.begin(9600);  
}
```

```
void loop() {  
  int val = analogRead(sensorPin);  
  Serial.println(val);  
  delay(100);  
}
```

9/22

- The parts arrived 9/21
- Chassis is constructed
- I am getting readings on the short & long range sensors
- I also got the servos running as well
- Next step is to completely construct the hardware for the Sumo Bot

Milestones:

| | | |
|--------------------------------|---------|---|
| 1.) Choice of Components | Sept 13 | ✓ |
| 2.) Sensors working | Sept 20 | ✓ |
| 3.) Movement obtained | Sept 23 | |
| 4.) Trial strategy implemented | Oct 5 | |
| 5.) Strategy Tested | Oct 14 | |

So far 2/5 milestones complete

- I am a few days behind schedule due to the long shipping time on the parts.

Goal for the weekend:

- 3D design the body

Goals for next week

- finish circuitry
- Get motors moving based off sensor readings