

# Real time License plate Recognizer using Raspberry pi. (PHASE 3)



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# MAPPING OF FUNCTIONALITY TO WORKING



- detecting a vehicle using IR sensor.

```
if GPIO.input(sensor):    print "running recognition code"
```

- Capturing image of the number plate. Using pi cam

```
camera.capture(rawCapture, format="bgr")  
image = rawCapture.array
```

- Validating the input using ml.
- Opening or closing the gate once validation is completes by rotating the motor.

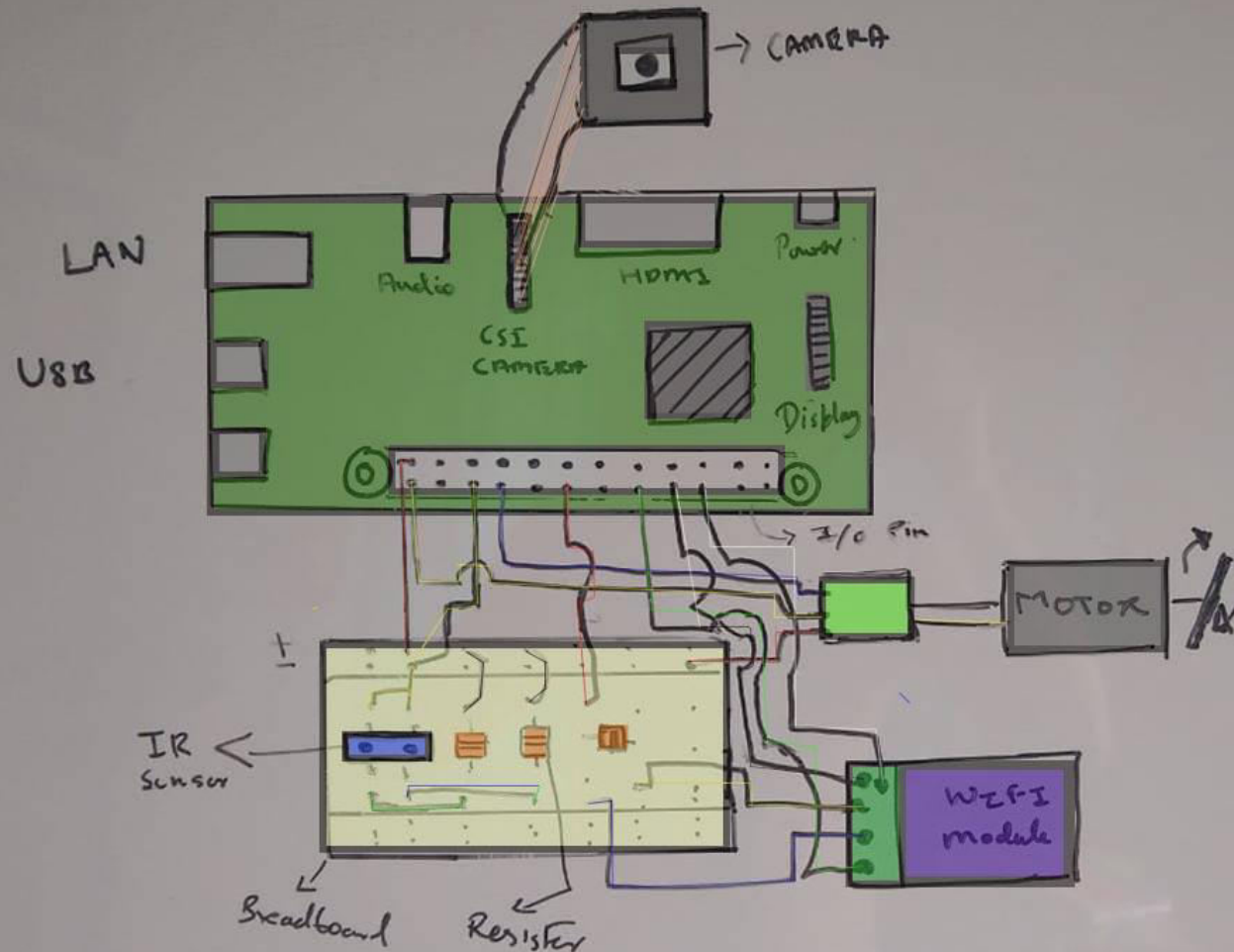
```
if (result = "open")  
{  
    GPIO.output(Motor1A,GPIO.HIGH);  
    time.sleep(20)  
}  
else  
{  
    //remain closed;  
}
```

# RESULTS EXPECTED FROM EACH MODULES



- **MODULE 1:** setting up system to detect vehicle using sensor and capturing of image ( number plate ) using picam.  
expected : true when vehicle is detected and capture an image
- **MODULE 2:** writing a program to validate the number on the number plate and store the data.  
expected: number plate details in text form.
- **MODULE 3:** programming the system to perform corresponding actions based on the results obtained by module 2.  
expected: the gates to open or remain closed.
- **MODULE 4 :** setting up a web application to access the stored data.  
expected: a web application to view the saved images.

# CIRCUIT DIAGRAM





**THANK YOU**