## **Connected Devices**

# **Lab Module Assignment – Project Proposal**

### Name and Course

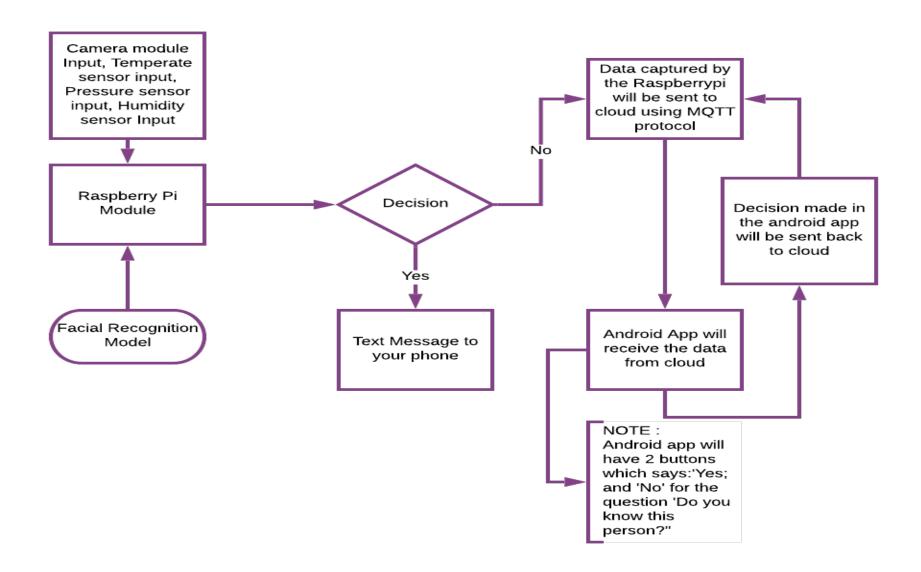
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• Semester and Year: Spring'19

### Description

• Description: An End-to-End Facial Recognition based Security System.

### System Design Block Diagram



#### **Problem Statement:**

Robery has become a common incident in many places around the world today. As IOT is trying to solve many problems that is present in the society, my idea is to implement a IOT based security door which will be able to capture pictures of people who stand outside the door and send a warm welcome message to the owner if the person ouside is the owner or else, it will notify the owner that there is a intruder and ask if it should provide access or not.

#### Protocols That will be used:

1. Mqtt

#### Sensors that will be made use of:

- 1. Raspberry pi camera module/sensor
- 2. Humidity Sensor
- 3. Temperature Sensor
- 4. Presssure Sensor

#### **Cloud Services:**

- 1. Google Cloud Platform
- 2. IBM Watson

### **Problem Output:**

If everything works properly, the output that I will be able to show is a functioning application built on android and also text message sent on the owner's phone along with some log files which will hold data of cloud services that I have used. The output from the android app which goes to the

cloud will be displayed on Raspberry pi console(actuator part).