Internet Based In Out Login Using With Mobile Eye

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Abstract- Internet plays a very important role in today's world. This paper proposed new method of internet based in out login with mobile eye. In this work Raspberry Pi ARM 11 is used to access the live video streaming on web page.

The proposed system has been successfully tested on public sets from internet we can watch live video streaming with attendance log on to webpage. By typing the IP address authorized person can access this video from anywhere he place. Motor can be monitored and controlled from remote place using Raspberry Pi module which is connected to internet

Keywords - Raspberry pi ARM 11 Board, RFID tag, Max 232, Web camera, DC Motor.

I. INTRODUCTION:

Design and implementation of this project using ARM 11 Raspberry Pi microcontroller board for live video streaming application.

We send audio and video signals through the internet that called as live video streaming. Because of live video streaming we connecting with friends very easily and also chat with them. By using this application we can conduct business online face to face. Today, live video streaming technologies are commonly used in broadcasting news. The system will consist of ARM 11 board, camera, dc motor driver, dc motor, RFID interface etc. Embedded system reduces cost as well as complexity. By using web server we monitoring and controlling applications in real time over a long distance. This whole system controlled by the Raspberry Pi unit which is low cost on board minicomputer.

This system may have to record that is present or not in a company or home. It is usually placed at the front entrance so anyone can see who is in or out.This project is based on Raspberry Pi, so that it makes a really good lower power choice of computer to drive this application [2].

There is much dissemination to this basic intractable, because of the Pi, which run like a web server to show that who is in and out via a web page. The next work is to capture and send live images using internet at a rate adequate to make them seem like a live video to the human eye. This was previously implemented using LAN before goes to internet. [5].

When we send low revolution compressed image we achieves result. If there is not higher uploading speed that would not affected on transmission. Pages are Designed as per user requirement so that this pages avoids unnecessary complexities of clients. HTML language is used to written and design the web pages. When user wants to access this web page then user should enter the IP address of web page and to login this web page user must have to enter user name and password. After entering the password user got access of web page within a seconds. This process is performed using Raspberry Pi that is Raspberry Pi plays important role [5]. User enter the IP address on address bar to access the data which is collected. Raspberry is just like small computer it gives direct access to internet. Web page gives all information to the user as per requirement.

The Raspberry Pi is very small board just like credit card. It is also known as minicomputer. Raspberry Pi based on Debian. Raspberry Pi uses python programming language. Raspberry pi has many operating systems just like Linux, Ubantu, Rasbian, Red hat etc [4].

II. ACTUAL WORK:

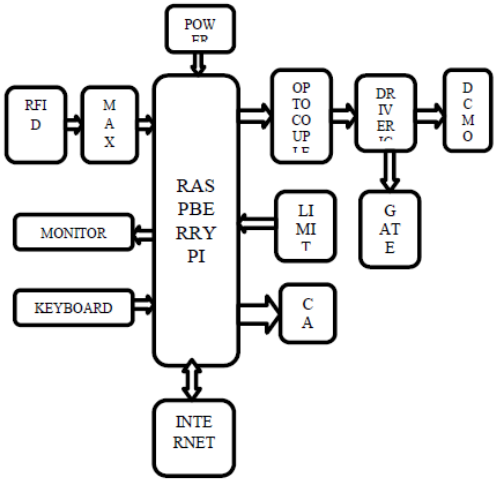
When person want to access the data from server, He should enter the IP address on address bar. Then web page will open after that user should enter the valid name and password. If User name and password is valid then and then only user can access the web page.

When RFID tag is swipe on RFID module, all over information of that person will save on web page. If tag

is not valid person can't come inside because gate will not opened for that invalid person.

User can get all over information saved on web page either he placed anywhere in the word only entering IP address.

III. BLOCK DIAGRAM:



I. Block Diagram Description:

We use Radio Frequency Identification(RFID) module to detect the valid peoples. When a person want to entering from entrance, he must swipe RFID card, this RFID card read by RFID module. When card is valid then and then only he allows to enter. To connecting RFID module to Raspberry pi we use MAX 232 driver for converting voltage level of RFID module in compatible voltage level for Raspberry pi. Output of RFID module connected to Raspberry Pi. After swapping of RFID card all information of card send to the Raspberry pi.

Raspberry pi having direct access to the internet. So that all information saved on server. This information we can seen on monitor.

We use Optocoupler for isolation purpose. It gives isolation between DC motor and Raspberry pi. DC motor is used for to open and close the gate. When RFID detects valid person then gate is open through the DC motor and card detects person is invalid then gate remains closed. Driver IC is used for drive the motor. Driver has overall control of DC motor.

We use camera to capture the images or live video and send this images or videos to web page through Raspberry pi on internet. Overall process is controlled by limit switches. Here we use keyboard for giving inputs. Here we use 5V supply for motor and 3.3V supply for Raspberry pi.

IV. MERITS:

1. It is automation technology based on Real time application.

2. Raspberry pi is used so we access internet and we can connect camera, DC motor at its output port.

3. Live video streaming is performed.

4. It process fast and provide high accuracy.

V. APPLICATIONS:

1. It used in small scale offices.

2. It used for conducting business face to face.

3. It used in school collages.

VI. CONCLUSION:

We enter IP address to access the web page. We can access all information of person who enters inside by the gate . By using camera we can access live video. We know that industrial area developed rapidly it demands more and more advance technologies. This system playas important role in this rapidly developing word, It cutting the cost which is most important factor and also required area. The system can operate even power interruption.

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