

Good afternoon every body,

My name is syarif, and this is Simon.

We are going to introduce our project idea for this lecture.

In the previous Semester we built a multiplayer game using the server socket architecture.

We had a lot of fun there.

Since I Still impressed by the possibility offered by this technology,

We are going to build a project for this lecture using the same technology.

Let me introduce you to, SMART LOCK SYSTEM

We are not sure if it the right name for this system but. Yeah it sounds fancy.... So we take it.

It is basically a home automation system that focus on handling situation at the front door of your house or apartment.

The story behind this project is actually my own experience with the post man in Switzerland.

As you know, in Switzerland, we have something called "Milch kasten" or "milch box"

A small box where the postman can put your package when you're not at home.

The thing is, every one can access this box.

It works only because Swiss people are very trustful

I used to order a smart phone on the internet,
And yeah you guess it.

I was at the university and..

The package was small enough to be put in the milchkasten.

Fortunately It was not stolen.

The system works like this.

someone walks near to the front door, the motion detector is triggered, and the camera turns on.

Using open cv face recognition, it will then figure out if the face is known to the system.

If not, The system will send a notification to your android device. With an image of the person.

IDEALLY the system will make a phone call and you can talk to the person directly.

And you can decide to let this person in or not. Remotely using your smartphone.

For this system we are going to setup a remote server, Arduino client to open the door,

Raspberry pi client to detect face and sending a notification with an image or like I just said, a phone call

And a very very simple android app to let you open the door by pressing a button. For sure we can use a browser but.. its not very practical.

And there are tons of tutorial how to make an android app. So we guess we'll manage to built it.

The system is extendable you can turn on the light, open the garage, turn on the heater etc.