SALVATORE:

Good morning everyone.

In this presentation we talk about how we managed the FEZ in the easiest and most understandable way possible.

Here is a brief introduction to what we will talk about.

We have our FEZ board with sensors that take measurements. The purpose is to bring these measures to the cloud. To do this we used an SD card in which there is a database and a WiFi module.

Finally, a user can view the measurements of each FEZ through a website.

The various components used in our project are listed below.

The broker will be explained later.

ANDREA:

in this slide is showed how the part of the fez are connected together.

In order to read temperature and humidity from the enviroment we use DHT11 sensor. This one has an incompatible comunication protocol, we solved this problem implementing a driver and connect the sensor to the fez using breakout, connected to socket fourtheen(14).

With this mudule(lightsense), insert into socket ten(10), we get intensity of light and with moisture the humidity of the soil.

We connect FEZ to the network using a wifi module, connect on socket six(6). In this way we eliminate every type of cable, this increase the portability of our board.

The last component is sdcard that contain database where we store data and configuaration json of fez

A record in the database contains the principal information of one measure as sensor name, sensor id, value, its timestamp and the sequence packet’s number to detect which one is sended correctly and delete it.

ANTONIO

SALVATORE:

The site was made with languages ​​like javascript and HTML. The site has a map where you can select FEZs and see where they have been positioned.

After selecting an FEZ on the left, we see a list of sensors. the selectable ones take data from the S3 bucket and form the graph