**Slide 1**

Hello everyone, this is team 25 and our project is “Sleep Quality Evaluation”. Just like the name, we are going to build a system that can gather information when user is sleeping and use them to evaluate user’s sleep quality, then shown the user if they have a good sleep or not.

**Slide 2**

Why we are going to build this, because everyone needs sleep and sleep do matter, our body needs rest to get recovered.

(Click 1, animation comes out)

But the problem is we do not know if we sleep well or bad specifically.

(Click 2, animation changed)

for example, we know we may sleep bad since we are lost sleep, but when we fall to sleep at last, we do not know how long we took to get into sleep because when we get into sleep, we will also be lost conscious suddenly.

**Slide 3**

But our system can help you because machine do not need to sleep. So, our system will record user’s sleep information and try to evaluate them to concern user’s sleep quality. Then give user a visualization of sleep quality with some useful processed information such as how long of this sleep, it is good or not? if is bad which time part is bad? User can get these information　and use as advices for their daily life.

**Slide 4**

Here is a working demonstration of our system. All you need to do is sleep. Our device will monitor your sleep and collect your sleep information and data by using various kinds of sensors, like light sensors, audio sensors as well as using a accelerometer to detect your movement during your bed time. Once the data has been sampled, they will be sent to a Raspberry PI through a certain protocol such as I2C, I2S and SPI. (Analog signals will firstly convert to digital signals by using ADC ). Then, the Raspberry pi will analyze data and evaluate the quality of your sleep. Meanwhile, it will also upload those information to a server. In the case of that, by downloading the information from the server users are able to check their sleeping environment and status in real time or check their evaluation report when they wake up.