NANYANG POLYTECHNIC

**School of Engineering**

**PROJECT PROPOSAL FORM**

**For**

**Smart Connected System Project**

**Group Name: to Pass, too Curious (NYP Drift)**

**Project Team Members:**

**1. Muhammad Hanafi Bin Mokhri**

**2. Nasruddin Islam Bin Ramli**

# **(1) Title of Project**

**Smart home for the lazy man.**

**(2) Objective(s)**

|  |
| --- |
| **To create a smart home that simplifies tasks faced by the lazy man.** |

## **(3) Description (Attach a separate sheet if necessary)**

**An automatic window that opens or closes itself, depending on whether**

**or not it rains or controlled by voice recognition.**

**The GSR sensor allows user to examine sleeping patterns, as well as working**

**reading during waking up to the alarm. The reading could be exploited to**

**achieve the best pattern to wake up, according to the frequency of alarm.**

**Pressure sensor on the bed that will trigger an alarm at a certain time unless**

**the person gets off the bed. This same pressure sensor will turn on the lights**

**when the person gets off and if it’s dark.**

**The door lock is controlled by the phone through wifi, once the owner’s phone**

**is connected to the home wifi within a certain radius of the house.**

**The door is controlled by waspmote app and closes after the person gets in**

**and steps on the pressure sensor, the door, can also be controlled to open,**

**and close on voice commands.**

**PIR sensor senses burglars and suspicious individuals lurking outside your home**

**and if it detects someone and the wifi is not connected it will sound the alarm and**

**alert the owner via thingspeak.**

**(4) Material required**

**Sensors:**

**-Voice recognizer (Grove - Speech Recognizer). x1**

**-Water level sensor. x1**

**-Pressure sensor (force-sensitive resistor). x3**

**-Luminosity sensor. x1**

**-PIR sensor. x1**

**-Grove GSR sensor. x1**

**Boards:**

**-Arduino uno. x1**

**-Waspmote. x2**

**Actuators:**

**-DC motor/Servo motors for the doors, locks, and windows x3**

**-Miniature Vibrator. x1**

**-LEDs. x1**

**-Buzzer x2**

**Misc:**

**-Samsung galaxy s3 x1**

**-PC x1**

**(5) System Architecture**

