

Institute Of Computer Engineering Technology

iCET Certified Master

Object Oriented Programming Course Work

Project Name	Smart Home System
Project Number	-
Assigning Date	10 th July 2023
Batch	iCM102 / iCM103



1.0 Requirement

- You are supposed to create a Java application to control Smart Home System. In the application, you need to implement the following requirements.
- When you run the application, you should come up with something similar to the following windows.

The main window is the Control Switch Window, where the user can ON or OFF the Smart Home System. This will be the Control Switch Window of the application that you will be developing.

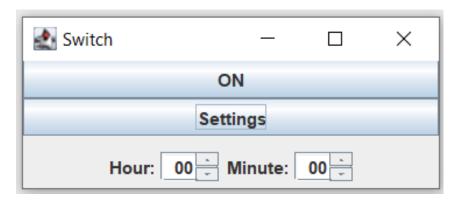


Figure 1 - Main Control Window

Users can set the timer to OFF the smart home system automatically. After the time is over, the whole system will automatically be OFF. Specially remember, The system will turn ON only after clicking the ON button and the user can OFF the system by clicking the OFF button at any time.

By clicking the setting button in the main window, the User can go to the Controller window, and that Control window can control items of Smart Home.



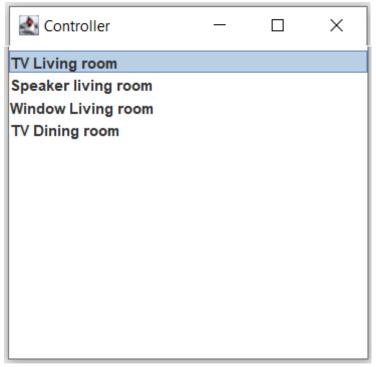


Figure 2 - Controller Window

As an example, When the user clicks TV Living Room in the Controller window, the user can go to TV Living Room Controller and the user can set the start time and end time to the ON/OFF automatically.

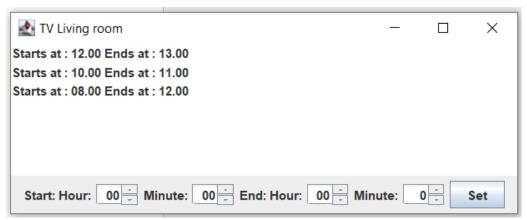


Figure 3 - Controller Window



A window should pop up related to all the devices on the Smart Home and it should display whether the devices are in ON status or OFF status at that moment.

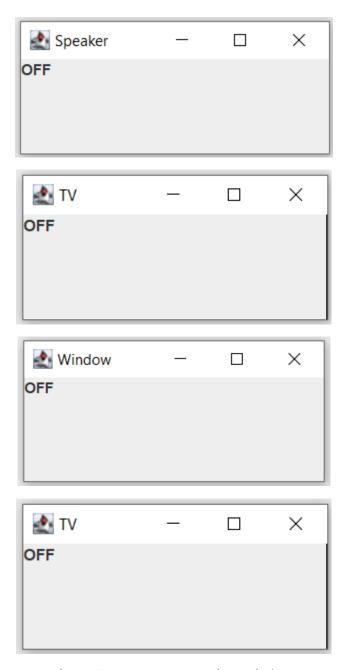


Figure 4 – Smart Home Devices Window



2.0 Coursework Instructions

- ❖You have to focus on how to implement this system using your knowledge of Object Oriented Programming.
- ❖You must create the application in this coursework as a GUI (Graphical User Interface) software.
- You are required to successfully attempt all the parts and face the viva at the end of this coursework.
- Apart from explaining the code you have written, you should be able to explain the theory concepts tested in this coursework.

3.0 Submission

Your work is to be made into a .zip file with the file name format,

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and submit your deliverables and application code to Google Classroom on or **before 15th of July, 2023.**