**ACKNOWLEDGEMENT**

We would like to thank and appreciate everyone who contributed towards the success of this project.

First of all, we would like to express our sincere gratitude to Dr. Yan Aung Oo, Rector, Technological University (Mandalay), for his general guidelines and for his permission to do this project and encouragement of the completion of this project.

We are very grateful to Dr. Moe Moe Aye, Lecturer and Head of Department of Information Technology, for her boundless advice and kind permission to fulfill our attempt.

We specially thank our supervisor, U Ko Ko Aung, Lecturer of Department of Information Technology, gratitude to his encouragement, patience, as well as understanding, recommendations and suggestions.

We are also thankful to everyone at Department of Information Technology who granted us a lot of valuable advice and opinion to accomplish this project.

Finally, we are very indebted to our parents for their love and encouragement throughout our lives.

**ABSTRACT**

Today is the age of technology and we use modern electric devices to live conveniently and comfortably. As the technologies are developing rapidly and continuously, everyone becomes want to be more comfortable and smarter in their daily life. In the meantime, microcontrollers such as (Arduino, NodeMCU, Raspberry PI, etc.) will help to control electronic devices like when the day becomes too cloudy or when the sun is set, the microcontroller decide to turn ON/OFF by reading values from LDR (Light Dependence Resistor). Also, the earth become like a village. Electronic devices can be controlled over the internet and operate automatically using sensors. This project, Smart Home System, includes not only automation but also IOT (Internet of Things). This project will give you the following advantages.

* Having a smart convenient life.
* Make more secure.
* Save time.
* Save money.

Here, the project requires sensors to detect the conditions of the house inside and outside and the micro controllers decide when to do which processes.

To develop this project, the following languages are deployed.

* Arduino Programming language based on C / C++ programming languages.
* Web developments (Html, CSS, JavaScript, PHP)
* JSON (JavaScript Object Notation).