

**UNIVERSITI TEKNOLOGI MARA**

**CLASSROOM AUTOMATION USING BLUETOOTH  
MODULE**

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## **ABSTACT**

Most classes in colleges or universities prefer to use their electrical equipment such as lighting and fans in the conventional switch-on or switch-off. This would make the recipient, whether the lecturer or the students, uncomfortable since they need to manually check for the switches that can often be found in various areas of the classroom. Other than that, it is often very impossible to keep track of running appliances and to track their efficiency. Often, when the professor wants to use the LCD display in the lesson, as the screen illumination in the classroom, the student is told to switch off the light, but often they are seated very far from the switch. In addition, when they are in a rush to go to another class, students often fail to switch off the electrical devices in the classroom. This causes electrical waste to arise because, in an empty class, the electrical appliance is left open. The main goal of this project is to automate the laborious process of switching on and off classroom equipment. The use of literature analysis in this project is essential to obtain information relevant to the project based on journal and paper research readings. The feedback for this device is where the Bluetooth link is attached to the Bluetooth module. Meanwhile, the performance of this system may be evaluated by sending a message to the user's mobile phone using the GSM module. This device would be very useful for students in the classroom to monitor appliances.

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# CHAPTER 1

## INTRODUCTION

This chapter will give reader a fundamental introduction of how the idea of the project will be generated. In this chapter will show the introduction of project, objectives project, problem statement, scopes, and limitations project, significant of study and simple brief for summary.

### 1.1 Background of Study

We know that no one in the class, whether a student or a lecturer, is concerned about switching off the energy supply, such as the lights, fan and air conditioner after the lecture session has ended. According to Mallikarjun Anandhalli (2017), automation that switches on and off is nothing new to us. The present systems are handled manually, and switching on or off the light, fan, or air conditioning every time pupils enter or leave the classroom is a tiresome task. When students and lecturers in the classroom want to use the LCD projector and need manually switch on and off the light every time when they need to use it, it will be inconvenient. Occasionally, students forget to switch off electrical appliances such as fans, lights, and air conditioners, and they are kept open until the staff closes after the working hours have entirely ended.

Most universities and colleges still utilize the old technique to switch on and off the electricity. Someone needed to go to main power and open the power supply, as well as check that fully the building's equipment was operational. The present university power supply system has issues such as wasted electricity due to individuals leaving electrical gadgets in classrooms open. Aside from that, the issue is an electric short circuit that happened since the appliance was left open all day during working hours. As a result, this project is being suggested to ensure that the circumstance that we do not want to occur does not occur, as well as to decrease the amount of money and electricity squandered.