# SMART AUTO TOILET SYSTEM

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## ABSTRACT

This Smart Auto Toilet System is a project that basically used switching concept by using water level detector circuit and infrared circuit to control the output of the on/off magnetic door circuitry. The aim of the project is to study the relationship between the automatic toilet door system and the water level in high or low condition. The project functionality had been optimized by using Proteus software as to visualize it to get the expected result before the hardware and design prototype of the project was fabricated. To get the output result, an electrical equipment such as multimeter was used to check the continuity of the circuit to ensure that the project can run smoothly as this project was mostly depend on the hardware functionality. The result for this project after hardware implementation is that the detection of human by using passive infrared sensor will energize the relay located on the infrared circuit. As the result, the infrared sensor will energized the on/off magnetic door circuit thus activate the electromagnetic door to be in lock state. To unlock the electromagnetic door, water detector circuit will be used to detect the water level of the project. The water detector functions when the water level is at low state. The relay for water detector will be energize as the water level is low thus dis-energized the on/off magnetic door relay and as the result, the electromagnetic door will be unlocked. It is observed that the project is suitable to be implemented on a public toilet as to increase the awareness of the public toward cleanliness and to be concern about safety matter.

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# CHAPTER 1

# INTRODUCTIONS

Chapter 1 is the introduction of the auto door lock system and problem issues become to create these project. The block diagram gave the general ideas on this project. In addition, objectives, problem statement of the project and the project scope are included as well.

## 1.1 Background of Study.

The study of automatic door lock, also known as electric door locks or central locking allow the driver or front passenger to simultaneously lock or unlock all the doors of an automobile or truck, by pressing a button or flipping a switch. Power door locks were introduced on the luxury Scripps-Booth in 1914, but were not common on luxury cars until Packard reintroduced them in 1956. Nearly every car model today offers this feature as at least optional equipment but in this project we want to use the concept of automatic door lock in the toilet. Door lock system been use effectively such as in car and also public toilet.