



**FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
PULAU PINANG**

**FINAL REPORT:
AUTOMATIC BATHROOM LIGHT AND EXHAUST FAN
CONTROL**

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ABSTRACTS

The project titled “Automatic Bathroom Switch Light and Exhaust Fan” has been choose as the Final Year Project. Lately, automatic control systems have become a necessary and a trend to make the lifestyles easier.

According to the project, it is beneficial to save electrical energy in the daily lives to reduce the electrical energy consumption that will prevent major financial loss. The Automatic Light Switch and Exhaust Fan also benefits in term of time management as the light and switch doesn’t need switch to light up.

The Automatic System uses Motion Sensor to replace the switch for the lights and fan. The system operates when the sensor detects the presence of motions in the bathroom. If there are motions in the bathroom, the Light and Fan will “ON” while if there is no motion detected, both will “OFF”.

In “ON” condition, the system work when Motion Sensor detect movement, it will send signal to the relay that act as a logic switch before transmit to the light and motor. After that, the timers will counter the time signal from the relay and provide the output which is the Light and Motor will “ON” but in “OFF” condition, the relay will be open circuit thus block the output result.

In conclusion, this system is ideal for modernize house, apartment or place with disable people. This system has a lot of benefits and will brings a bright future to the mankind in the future.

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