# EMERGENCY BLACKOUT LAMP

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# ABSTRACT

Emergency blackout lamp is a type of lamp that is designed to help preparing for a situation of when a blackout occur. Blackout usually happen on the spot without notice and it is unpredictable. By developing this project, we will able to create a lamp that will operate and provide light surround area automatically once the blackout happen. This can be done by creating a circuit consists of components such as PIC, crystal, light dependent resistor (LDR), light emitting diode (LED) and many more constructed on a board and programmed to be able to produce light when the power source is cut off and surround area is in dark. Besides that, this project also able to overcome problem of limitation of covered area by existing emergency light. This project can be developed in smaller size and many LED can be construct on it, so the area of this lamp can cover is wider. Furthermore, this project can be put at any location of a house as long there is power source. For this project, computer software such as Proteus and Micro C programmer was used for PIC. Proteus is a software that were used to create a circuit while Micro C programmer for PIC is a software that is used to do the coding of the PIC. Both software is used to do the simulation of the circuit. The circuit is created to turn ON all the LEDs when the power supply is cut off and the LDR is unable to detect the presence of light in surround area. Therefore, the circuit was able to be operated as it is programmed to do and it resulted the project to be able to act as a blackout lamp.

# LIST OF FIGURES