

ENVIRONMENTAL FRIENDLY SOLAR CAR

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## **ABSTRACT**

The planning about solar car based on the research and it is compatible for the transport. Solar power energy is not just for the car but it can be used to all kind of machine. Our main purpose is to add some feature by using microcontroller to make it advance and to control the position of the solar panel. Studying about solar car as it is good and environmental friendly. It doesn't bring harmful emission such as carbon monoxide that can create pollution to the world. The type of solar panel is also important in order to obtain good energy to produce energy for the car. Second, after the research we started to implement the prototype to make it as an example to show the goodness of solar energy in powering machine. The result is depends on how the energy and the time taken for the solar car to operate. Choosing the cheap and reasonable component for the prototype is important. The main component are DC Motor, Solar Panel, Arduino Microcontroller and Battery as a backup and store the energy. The time taken development of the project is estimated about 2 or 3 months because of the coding and the effectiveness of solar panel. The result is tested by using multimeter to show the amount of voltage produced by the solar panel. The design of the solar panel to the microcontroller is showed by using the Fritzing and for the microcontroller. As it implemented the car is in good condition and the solar panel moved to its position based on the coding inside the microcontroller and the DC motor is operate smoothly. It showed that solar energy is good and one of the alternative way to produce energy rather than using fuel that are expensive and high cost.

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