DESIGN OF AUTOMATIC LAWN MOWER MACHINE DESIGN WITH BATTERY POWERED WITH SELF CHARGING

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ABSTRACT

The development of lawn mowers is commonplace among people who still use fuel oil (BBM) for their energy consumption. In the midst of fuel shortages due to significant increases in global oil prices, the government has appealed to the public to work together to overcome energy problems and replace and use alternative energy sources.
This planning also involves the development of complex software such as Arduino IDE to control robot behavior, as well as rigorous testing to ensure that the expected performance is achieved.
Scanning testing on automatic lawn mower robots based on time involves a series of steps to ensure that the robot is able to navigate and cut grass effectively in various environmental conditions within a certain period of time. Testing begins by preparing the area to be tested, which may include various obstacles and surface types to simulate real conditions in the field. Analysis of scanning testing on automatic lawn mower robots based on time evaluates the efficiency and effectiveness of the robot under various operational conditions. First, how quickly the robot can complete the cutting task in a certain area is calculated based on the time data collected during the test. In addition, the analysis includes assessing the accuracy of robot navigation using data from distance and angle sensors.

Keywords*: lawn mower robot, robot navigation*