DEVELOPMENT OF ARDUINO-UNO BASED AUTOMATION OF WATERING AND LIGHTING FOR TOMATO PLANTS USING SOLAAR PANELS

Choirul huda, S.Kom., M.Kom as chief counselor and Prof. Kinn Abass Bakon as a member counselor

Siska Nur Cahyani Imamah Study Program of Informatics Engineering International Class Majoring in Information Technology

ABSTRACT

The project "Development of Arduino-Uno Based Automation of Watering and Lighting for Tomato Plants Using Solar Panels" aims to revolutionize the cultivation process of tomato plants by incorporating advanced automation technology. By leveraging Arduino-Uno technology and solar panels, the project seeks to automate the watering and lighting systems for tomato plants, ensuring optimal growth conditions. This innovative approach not only streamlines the cultivation process but also promotes sustainability through the use of solar energy. The project addresses the challenges of manual plant care and environmental impact, offering a sustainable and efficient solution for tomato plant cultivation. Through this development, the project contributes to the advancement of agricultural automation and sustainable practices in plant cultivation.

Keywords: Arduino-Uno, Automation, Watering, Lighting, Tomato Plants, Solar Pamels, Cultivation, Agriculture, Automation