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Smart Shaded Plant House

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ABSTRACT

A Smart Shaded Plant House is a building made of glass or plastic that allow planting to be protected and controlled. The main reason for greenhouse cultivation for a tomato plant is because the agricultural is minimal, and the process is difficult to control because tomato requires low temperatures such as it is located at Cameron Highland to allow for high quality and fast growth. Today's rapid technological development can help to solve the problems facing the agriculture sector. So, as a greenhouse with the latest technologies such as temperature sensors, soil moisture sensors, and ultraviolet sensors, the project's monitoring and controlling the temperature and humidity in the greenhouse can be realized. Besides, this project also can control the soil moisture level and also protect the tomato plant from exposure to excessive ultraviolet radiation. With the existence of this project, the farmers able to produce high-quality tomato and planting activities of the tomato can be planted in the high-temperature area.

Keywords: *Smart Shaded Plant House; IoT; Embedded Controller*