SMART MINI GREEN HOUSE

HIGHER DIPLOMA IN SOFTWARE ENGINEERING FINAL

PROJECT DOCUMANTATION

22.1F

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INTRODUCTION

Greenhouses are wonderful way to grow plants and produce while having greater control over the temperature and elements to prevent anything from getting in the way of their growth. If you have size limitation this is the best solution for it. The small & automatic Greenhouse. These are cost efficient and easier to build. It also can be defined as space saving way.

This research project is planning to design IOT base temperature controlling system and automated roof top. Also this project can monitor and control temperature and weather in real time with connected device and sensor.

OBJECTIVES

The following are the project's primary objectives:

- The main objective of this project is to build a smart mini green house using ESP 8266 Wi-Fi Module which can be used to control the appliances via internet.

- This can monitor temperature in mini green house and control suitable temperature to the plant.

- It also can identify rain and if it is rainy the roof top of mini green house will be closed automatically.

- Desing user friendly interface for user to access and control mini green house manually.

HARDWARE REQUIRED:

- Esp8266 Wi-Fi module
- Jumper wire
- Relay
- 12v power supply
- Bulb
- Fan
- Dht11 sensor
- Rain detector sensor
- Servo Motor

SOFTWARE REQUIRED:

- Arduino IDE
- Google Firebase