Digital Soil Moisture Tester

Abstract:

- The Digital Soil Moisture Tester project focuses on the development of a portable device for accurately measuring soil moisture levels in agricultural and gardening applications.
- The project integrates sensor technology with microcontrollerbased electronics to provide users with real-time soil moisture data, enabling efficient irrigation management and optimal plant growth.
- The microcontroller processes the sensor data and displays the moisture level readings on the LCD screen in user-friendly formats, such as percentage values or graphical indicators.
- Additionally, the device can be programmed to trigger alerts or notifications based on predefined moisture thresholds, helping users optimize watering schedules and conserve water resources.
- By providing an accessible and cost-effective solution for soil moisture monitoring, the digital soil moisture tester contributes to sustainable agriculture practices and supports efficient water management strategies.

