

ESE 3202

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November 21, 2024

Title

Smart Water Level Mangement System Using ESP32 Microcontroller

Objectives

Controlling water levels is a critical process in various industries. For instance, power plants must maintain precise water levels in boilers and feedwater tanks to ensure efficient and safe operations. Similarly, residential houses require water level control to fill overhead and underground tanks effectively. This task is a regular and essential activity. To simplify and automate this process, a microcontroller-based device can be employed. The goal of this project is to

1. design an efficient microcontroller-based (ESP32) control device
2. automate the water level control process
3. reduce manual intervention in water level management and thus reducing waste of water due to human error thus reducing electicity cost