

IOT Hygienic Pani Puri Water Dispenser System

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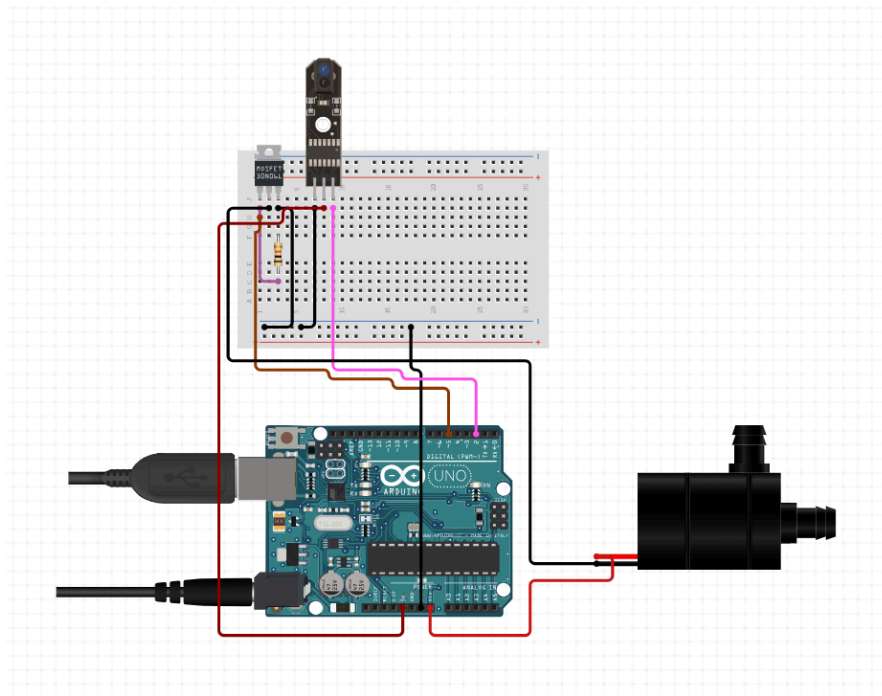
New Town

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Overview

The IoT Hygienic Pani Puri Water Dispenser System with an IR sensor offers a touchless and hygienic solution for dispensing water for pani puri. Users can simply approach the dispenser, and the IR sensor detects their presence, triggering water dispensing without any physical contact. This feature ensures precise activation, customizable settings, energy efficiency, and an enhanced user experience, all while maintaining hygiene standards.

Circuit Design



Goals

1. Ensure touchless operation for hygiene.
2. Provide precise and consistent water dispensing.
3. Offer customization options for user preferences.
4. Incorporate energy-saving features for efficiency.

Specifications

1. Adapt Flow Control: Ensure the 9V DC motor can regulate flow for the smaller pipe.
2. Adjust Piping: Modify the dispenser to accommodate the 2mm pipe size.
3. Connect to Arduino: Interface flow control and the IR sensor with Arduino for precise operation.
4. Test and Calibrate: Ensure accurate water dispensing and adjust as needed.
5. Integrate IoT Features: Enable remote monitoring and control with Arduino's IoT capabilities.
6. Ensure Compliance: Verify the system meets hygiene and safety standards.

Milestones

I. Conceptualization and Planning:

Outline goals and features for the demo to guide development. Future advancements for the IoT Hygienic Pani Puri Water Dispenser System may include integrating advanced sensors for improved touchless operation, expanding customization options, and utilizing machine learning algorithms for personalized experiences based on user data.

II. Prototype Development:

Construct a working prototype that demonstrates the key features of the Pani Puri Water Dispenser System.

III. Demo Setup and Configuration:

Prepare the hardware setup for presentation, ensuring all components are connected and functioning correctly. Present the hardware demo to stakeholders, highlighting its features and advantages.