VOICE BASED WATER DISPENSER SYSTEM

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ABSTRACT:

this is about voice based water dispenser system at present scenario we face problems in public systems clean and Sometimes also differently able people find few systems difficult to access due to dualityThe objective of this research article is that the system is fully based on voice, This water dispenser system also uses IR sensor, Bluetooth module, Ac motors. In this work, the voice is detected by the Bluetooth Module, then it sends the respective information to the microcontroller, to understand whether the water required by the person should be hot or cold.

PROBLEM STATEMENT:

- We face problem in keeping few public systems clean and thus find it difficult to use.
- During this pandemic scenario we need to avoid much physical contact with any system to avoid the spread of Covid-19
- Sometimes also differently abled people find few systems difficult to access due to diability.

EXISTING SOLUTION:

- Water dispensers play a vital role in workplaces, restaurants, hospitals and public places for drinking water.
- And also another drawback of the conventional water dispenser system is the disease-causing microorganisms like corona virus., pass from the infected person to the healthy person via direct physical contact when a person directly touches the water tap

PROPOSED SOLUTION:

- The proposed voice based water dispenser system replaces the tap with voice command.
- Based on the voice command, the system will dispense hot water or normal water.
- Thus the physical contact with the system is avoided and spreading of contagious diseases can be prevented

FUNCTIONALITY:

- Here we used arduino UNO controller for the control purpose.
- The mic is used to receive the command from consumer.
- The mic is connected to the voice recognition module from which it is connected to arduino.
- The dispenser system will deliver both the hot water & normal water.
- The temperature of the hot water can be set using the button and temperature of the wateris continuously displayed on the LCD. The heater is used to maintain the temperature of water.
- The relays are used to switch on & switch off the motor pumps.
- Once the command is received, the controller will send the signal to the relay based on the command.
- The motor pump will be in ON state until the filling of glass with water. Once the water reaches certain level in the glass, the motor pump is switched off

MERITS:

- While using buttons or taps for operation, there is a high chance for spread of contagious disease like corona virus, if we go for voice command instead of taps, it can be prevented.
- Also we have uses the automatic system that stops the pump motor once the cup of water is filled to a particular level. This will prevent the wastage of water & consumption efficiently.
- Also we are in process of adding additional value of measuring impurity level in the water to be consumed

SHOW STOPPERS:

- If there is a water cut, one cannot use this water dispensor. If there is a power cut, mains operated sensor system will not work.
- Sometimes there will be a problem in sensor so it may cause some problem in dispenser for releasing water

APPLICATIONS:

- The idea is developed to be used in public places like bus stands, restaurants, shopping malls, functions, schools, colleges, companies, etc.
- This will prevent the spreading of contagious diseases in public places as it avoids physical contact with the water dispenser system.
- This also can be used to avoid the wastage of drinking water through overflowing of water while consuming.

THANK YOU