

AUTONOMOUS E-RATIONING SYSTEM

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Autonomous e-rationing system involves distribution of essential commodities to the citizens of nation and it also gives an identity for being a citizen. There are various types of ration card available to buy materials like rice, sugar, oil, kerosene, etc. It involves two major issues which are error in human calculation and stealing of commodities without the knowledge of customer and government officials. To overcome these issues, in this project the total system is automated which can provide essential commodities to the public without the help of third party. We designed it for the ease of users in such a way that the product name will be displayed along with its pictorial representation. It will help illiterates to use this system more effectively. RFID tag is provided to each family which can be read through RFID reader. It communicates with the microcontroller through the PC and it provides the details completely based on the card type. A load cell, DC motor, solenoid valve is used in which each one is controlled by the microcontroller. A load cell is used instead of weighing scale to measure the quantity being supplied to the customer. A DC motor arrangement helps to pour the quantity that is measured. A solenoid valve arrangement is done to supply the kerosene in required level. In this project the entire setup is controlled through IoT. The ultimate aim of our project is to supply the commodities to the customer in packed manner.