A PROJECT REPORT ON

Automated Ration Distribution System using ARM-CM3 and IoT

SUBMITTED IN PARTIAL FULFILLMENT OF

DIPLOMA IN EMBEDDED SYSTEM DESIGN (PG-DESD)



 \mathbf{BY}

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CERTIFICATE

This is to certify that the project

Automated Ration Distribution System using ARM-CM3 and IoT

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In partial fulfillment of the requirement for the Course of **PG Diploma in Embedded System Design (PG-DESD AUG2019)** as prescribed by The **CDAC** ACTS, PUNE.

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Authorized Signature

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ABSTRACT

Presently, the ration distribution system is manually operated due to which it consumes a lot of time and many immoral activities are taking place in ration shop. Government of India provides various facilities for ration distribution towards the people below poverty line but end user is not able to utilize all these facilities due to forgery and corruption at each level of distribution system. In many forgery cases, shop keepers may sell the material to the end user with higher prices than recommended by government of India. Even shop keeper may sell the ration in open market to gain more profit. In order to overcome such problem, this work aims to propose. Automated Ration Distribution System using Radio Frequency Identification technology. This installed automated system at every ration shop will minimize the manual effort of distributing the ration to community. Thus, management of ration data will be made precise at each level of distribution system. This system will be very useful to prevent the ration forgery and it will help in increasing the transparency among user. In this project, we are replacing the manual work done in the distribution centers by automated electronic device with the help of ARM microcontroller(Cortex-M3) which takes user input about the quantity and type of goods and accurately updates it in data base periodically about the goods and information regarding the transactions done in a digitalized manner with the help of IoT.

Keywords: Database(MySQL), IoT, Microcontroller, Radio Frequency Identification(RFID), Ration Distribution System.

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