

ABSTRACT

Access to essential goods is critical for ensuring the well-being of individuals in all communities. However, many unlettered individuals—those who can speak but cannot read or write—face significant barriers when accessing ration services, which traditionally rely on written communication. This project aims to develop an AI-powered Voice-Based Ration Ordering System that enables users to place orders for daily necessities using simple voice calls in their native languages.

By leveraging multilingual speech-to-text technology and Natural Language Processing (NLP), the system processes verbal inputs to extract key order details such as item names, quantities, and delivery preferences. It then confirms the interpreted order with the user before finalizing and forwarding it for processing and doorstep delivery. The system is designed to function effectively across multiple regional languages, ensuring inclusivity and ease of use for people with varying linguistic backgrounds.

Users can interact with the system through a basic mobile phone, without the need for internet access or reading skills. This voice-driven approach removes the need for intermediaries, empowers users to order independently, and improves access to essential goods in underserved areas.

With this voice-based solution, the project seeks to bridge the digital and literacy divide, promote digital empowerment, and ensure that no one is left behind in the delivery of basic services.