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Braille E-Book Reader

Udaykumar Hiremath, Rahul Sahu, Deepika D Pai, Dr. Sunil H

Department of ECE Vemana Institue of Technology, Bengaluru, India udayhiremathfc07@gmail.com, rahulsahu3490@gmail.com deepikadpai@vemanait.edu.in, sunil.hosur@vemanait.edu.in

Abstract: This study aimed to implement a braille display prototype using low-cost materials and components. The Braille impaired individuals for reading 1 System is a widely used method by visually and writing, relying on raised dots arranged in a grid to represent characters. This project aims to develop an E-Book Braille effective communication. The system uses Optical system for more Character Recognition (OCR) technology to convert printed or handwritten text into digital format. The recognized text is then translated into Braille code. An ESP-32 controls a Braille display, which uses solenoids to create a tactile representation of the text dynamically. By integrating OCR technology and tactile feedback, this system offers an innovative approach to improving accessibility and communication for visually impaired individuals.

Keywords: Text to Braille, Braille Display, OCR



