An Innovative Electronic Memory Aid Optimizing Fragmented Time for Enhanced Word Memorization

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In our daily learning life, there are many words that require memorization and recitation. How can we effectively use fragmented time to strengthen memory and improve learning efficiency? This led to the idea of creating an electronic memory note that can be posted anywhere, providing better assistance in memorization and enhancing learning efficiency. The device was developed entirely from scratch. In comparison to traditional sticky notes, the most significant difference lies in the use of an e-ink display. The e-ink screen's persistent display feature even after power-off contributes to energy efficiency, allowing for extended usage time. The device incorporates a wireless charging circuit, enabling charging through a mobile wireless charging pad. It includes a built-in offline word library for use in situations without internet access. Additionally, it can connect to a Wi-Fi router to access richer word definitions and examples by utilizing ChatGPT. The device can also utilize a self-established cloud service to provide word and example readings/recognition to assist users in memorizing word pronunciations. The device underwent testing in a relatively simple and practical manner: users only needed to use the device to aid in word memorization for a period, and after usage, their word memory strength was assessed. All these tests received positive feedback, demonstrating the device's potential in practical applications.

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