

ABSTRACT

Conventional methods of learning to read the Qur'an hold irreplaceable value. However, to enrich the learning experience for the digital generation, modern and interactive supplementary media are needed. This Final Project aims to design and build a web-based learning application that integrates gamification elements designed using the Octalysis Framework. Key features such as structured learning progress, an experience point (XP) system, and daily streaks are strategically implemented to enhance user motivation by targeting their core drives. The development process utilizes the System Development Life Cycle (SDLC) method, which includes the stages of requirements analysis, system design, implementation, and functional testing. The primary tools used are React and TypeScript for the clientside interface, along with Supabase as a Backend-as-a-Service (BaaS). The conclusion of this research is the successful creation of a functional web application prototype, validated through usability testing using the System Usability Scale (SUS) method. The application achieved an average score of 82.9 from 18 respondents, placing it in the "Excellent" category. This result proves that the prototype provides an effective and enjoyable supplementary learning experience and addresses the need for a modern complementary medium for Qur'anic learning.

Keywords: E-learning, Gamification, Qur'an Learning, Web Application, React, Supabase, Educational Technology, Octalysis.