Final Year Project Dissertation

Title: *MathWhiz: A Mobile Learning App for Primary School Children to Improve Math Skills*

Abstract

Mathematics serves as a cornerstone in a child's early education, influencing cognitive development and shaping analytical skills. However, despite its importance, a significant number of primary school children struggle to engage with traditional math instruction. In the digital age, educational technology offers new pathways for engagement, comprehension, and retention. This project presents the design, development, and evaluation of *MathWhiz*, a mobile educational application designed to support primary school students (ages 6 to 11) in learning key math concepts. Leveraging gamification, interactive lessons, and curriculum-aligned content, MathWhiz aims to provide an engaging and personalized learning experience. This dissertation covers the complete lifecycle of the project, from requirement gathering and literature review to design, development, testing, and evaluation. The outcomes of this study show the positive impact educational applications can have on improving motivation and performance in young learners. Ethical considerations and accessibility features were also prioritized to ensure inclusivity. The study concludes with reflections on the effectiveness of the app, suggestions for future improvements, and its broader implications in the educational technology landscape.