

UNIVERSITI TEKNOLOGI MARA

**GAMIFICATION:
ENHANCING SPELLING SKILLS FOR
SECONDARY STUDENTS VIA GAME-BASED
LEARNING**

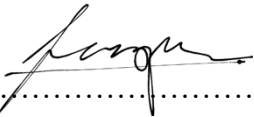
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JULY 2021

DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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Abstract

Malaysia's high school students are currently studying in the era of Online Distance Learning. This new era has been proven to be more difficult for the students to understand the teachings of their educators due to limitations of online classes. As English classes are moved to online the spelling skills of students in this language has been effected as it is not taught as frequent as opposed to during face to face classes. Hence, the proposed project of a game-based learning application was made in order to act as a solution or alternative for educators or students to use to enhance their English spelling skills. The MDA framework is studied during the literature review of the topic of the proposed project. Gamification elements were studied and implemented in the game-based learning application. Existing applications with similar objectives were analysed and certain aspects of said applications were used as inspiration. The Operational Framework was used to design and develop the game-based learning application. This framework includes the phases planning, design, implementation, testing and documentation. The design of the application is documented. The system architecture, navigation flow, storyboard and user interface is created. The application has a few levels the users can interact with. These levels create a scenario where the user is to spell a certain word with repetition. It implement health points and a countdown timer to create a sense of urgency and but not overwhelming pressure. Data collection strategy is to question 20 users before and after usage of the game-based learning application. The answers gotten from the users were tabulated and displayed in graphs. The results show that there is an increase in English spelling skills through the usage of the English Spelling Game application. The average of correct answers increased from 11.65 points to 14.45 points. Certain questions were improved as high as 80% for correct answers after use of the application. These finding indicate that the English Spelling Game is capable of enhancing the English spelling skills of secondary school students.

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