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INVENTION AND INNOVATION EXHIBITION

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INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIx) 2023

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SMARTER: Smart English Reader

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SMARTer: Smart English Reader is an innovation designed in a form of mobile application aimed to help school students in improving literacy skills as part of the solution for SDG 4: Quality Education. In Malaysia, low academic achievement in primary schoolers happened due to the lack of strong literacy skills. Data from Malaysia OECD assessment shows that 13% of children in late primary schools are not proficient in reading and 50% of 15-year-old Malaysians have a reading capability below their level. Research from Taylor's University School of Education showed that children who are unable to read according to their respective grade levels are more likely to drop out of school with low proficiency in reading as reading is a basic and fundamental skill learned in school. Having the same problem in our school inspired us to come up with this innovation to help our friends who are struggling with literacy skills to read and write. SMARTer aims to help school students with literacy skills through various features offered in this application. This application consists of 7 different features such as Smart Vocabulary, Smart Phrases, Smart Q&A, Smart Sentence Practice, Interactive Storybooks, My e-Storybook and Smart Digital Classroom. Offering features like games, quizzes, assessment, and digital books make this app suitable to be used by all students from primary and secondary schools. To identify the effectiveness of this application, we have tested this application in more than 20 classes in our school. Also, to identify students' interest in using it we have collaborated with a few schools in Putrajaya to get feedback from students and teachers who have used this application. We have received many positive feedback and responses from users who said that this application helps them in improving their reading and writing skills as well as invoke their interest to read more books. In the future, we plan to improve this application by publishing it in the app store so that everyone can use it. Besides, we also plan to add Augmented Reality functions to the storybook so that students can explore their surroundings. As for the result, SMARTer helps in transforming learning environments in our school and gives benefits to many students.

Keywords—Smarter, reading skills, literacy, mobile application



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