

Universiti Teknologi MARA

**Mini Gamelan: Mobile Music Instrument
Application for Gamelan**

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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea 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

Gamelan is a set of musical instruments that existed in Malaysia, known as Gamelan Melayu. Gamelan Melayu instruments have been used until now which are Bonang, Gambang, Saron Peking, Saron Baron, Saron Demung, Kenong, Gong and Gendang. The aim of this research is to develop a mobile application for a gamelan music instrument for gamelan users without having to rely on a complete set of real instruments. This is due to gamelan instruments are made of metal are very large and heavy to carry to another place and valuable, expensive and need to keep well. The objectives of this research are to develop a Mini Gamelan for the gamelan instrument platform for gamelan users and also to evaluate the effectiveness of the usability of mobile music instrument applications to play gamelan. The methodology that was applied in this research is the ADDIE Model that consists of five phases which are analysis, design, development, implementation, and evaluation. The development of the mobile application is using multimedia principles and constructed using Unity. Then was evaluated using Expert Review and User Acceptance Test from forty students who took gamelan co-curricular for the effectiveness of this mobile application. The result from Expert Review shows that the Mini Gamelan application is practicable but still needs refinement and improvement and the results from the User Acceptance Test indicated that the mobile application is efficient and helpful. In conclusion, the Mini Gamelan application yields a positive impact as it is proven to be helpful for gamelan users in playing a gamelan music instrument without having to rely on a complete set of real instruments.

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