

UNIVERSITI TEKNOLOGI MARA

**DENTAL TREATMENT
ORIENTATION FOR CHILDREN
USING ROLE PLAYING GAME**

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SUPERVISOR APPROVAL

GOING TO THE DENTIST: DENTAL TREATMENT ORIENTATION FOR CHILDREN USING ROLE PLAYING GAME

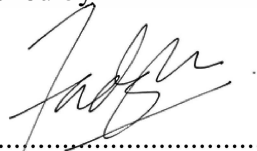
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This thesis was prepared under the supervision of the project's supervisor, Miss Fadzlin binti Ahmadon. It was submitted to the Faculty of Computer and Mathematical Science and was accepted in partial fulfillment of the requirements for the degree of Bachelor of Computer Science.

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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

Dentistry is the act of practicing the diagnosis, prevention, and treatment of diseases, injuries and disorders of the teeth and surrounding structures of the oral cavity. Dental need is connected to one's health so it is importance to take care of it. However, some children get too anxious at the mention of dental treatment making dental visits a hard work. Some also lack awareness about the importance of dental health and why they should visit the dentist. Therefore, the goal of the developed game is to help the children reduce their fear of going the dentist by demonstrating the procedures through an enjoyable orientation using Role Playing Game. Modified Waterfall Model has been chosen as the methodology for this project because whenever required, the phases in this model can be overlapped. Hence, the development for this project was flexible as few tasks were conducted concurrently. Game elements such as challenge, rule, reward, theme, and progress are employed in the game. The platform chosen for the game is a stand-alone on personal computer. The genre of the game is Role Playing Game where the player controls a character that has to accomplish few missions during their trip to the dentist. Usability testing for the developed game involves six participants. The result of the test shows a positive result as most of the participants enjoys the game. They were satisfied with the content of the game and state that this game managed to reduce their anxiety of going to the dentist. However, the majority of the respondents requested more missions and mentioned that the instruction in this game can be quite unclear. Further enhancements can be added to the game such as adding multiplayer function, character customization, and scoreboard features. To conclude, the game has been successfully designed, developed and tested therefore achieving all the objectives of this project.

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