

Universiti Teknologi MARA

**Producing Interactive Tawaf Simulation
Using 3D on Web Approach**

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DECLARATION

I certify that this thesis 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

In recent years, there are a few mediums that able to provide information on performing Hajj such as books, video, Internet, compact disk, Hajj courses and others. By using some of the mediums, some of the users are unable to visualize the exact way of performing Tawaf. This is because of there is no interaction and communication tools between user and the medium. Due to the research questions above, this project entitled “Producing Interactive Tawaf Simulation using 3D on Web Approach” is trying to exploit the technology of 3D in performing Tawaf. Therefore, the project will stress on the medium used in order to simulate and animate the operation in an attractive and interactive way. This project only contributes on the content part and the approaches that have been used to develop this project are simulation, animation and interactivity. To evaluate this prototype, 20 users were selected to test the prototype and the analysis has been divided into three main categories; the understanding of the Tawaf operation by using the prototype, the ease of use of the prototype and preferred medium. From the result of data analysis, 70% of the users prefer to use the 3D technology in order to get the correct visual of Tawaf operation in an interactive manner. As the conclusion, with the development of 3D interactive prototype, the user claimed that the prototype able to increase their level of knowledge in pilgrimage and have commercial potential in future. With advancement and innovation enhancement to this prototype, hopefully it will increase the level attraction of men’s in knowing and understanding other Hajj task such as Sa’ie, Jamrah or the whole Hajj event using 3D technology.