EFFECTIVE i-360 VIRTUAL MUSEUM TOUR: GUIDELINE FOR ELEMENTS OF MISE-EN-SCENE FROM VIDEO CONTENT

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ABSTRACT

The i360 Virtual Museum Tour was developed as a facilitator for Topic 5 Mise-en-Scene and Semiotic Elements in the module DVV3013 Film Studies at the Department of Design and Visual Communication, Tuanku Syed Sirajuddin Polytechnic, Perlis. In terms of location selection, costumes, makeup, lighting, and actor expression, these Mise-en-scene elements include the function of a scene in the film to explain something or give a dramatic effect to the audience. This application displays the Malaysian race through the iconography element Mise-en-scene of the background, costumes, and props highlighted as part of the Malay sultanate concept before. It was developed using a 360 camera as well as 3D vista software for editing purposes. Exploring this museum involves four main aspects, namely information related to learning at the Kedah State Museum and the Kedah Royal Museum and the quiz elements as an assessment. Design Thinking Process (Empathies, Define, Ideate, Prototype and Test) is used as a methodology for design and development process. Thirty-five diploma students (51.4% men, 48.6% of women) responded to the questionnaire. Based on analysis data shown this application is beneficial to know and recognize the elements of Mise-en-Scene the higher-level percentage of 93.0%.

Keywords: Virtual Reality, Virtual Museum, Interactive VR, Kedah State Museum, Immersive, Mise-en-Scene

RESEARCH HIGHLIGHTS

1. This research provides evidence of effectiveness that uses a virtual reality learning environment, where it offers unique interactivity and can be utilized in aspects of learning.

2. The i360 Elements of Mise-En-Scene (Virtual Museum Tour) application uses a virtual reality learning environment, to utilized in aspects of knowledge sharing the elements of the mise en scene in the film Malay sultanate see the turning angle of 360°.

3. The study highlights the art of creating a scene of location selection, costumes, makeup, lighting, and actor expression.

4. The results relate mainly to the study in order to support prospective educators who wish to make effective use of i360 for education.
**GRAPHICAL ABSTRACT**

![Fig. 1. Main interface of the i360 Elements of Mise-En-Scene (Virtual Museum Tour) application](image)

![Fig. 2. Quiz on the i360 Elements of Mise-En-Scene (Virtual Museum Tour) application](image)

![Fig. 3. Virtual Tour to background, costumes, and props highlighted.](image)

**Research Objectives**

**General Objectives**

The general objective of conducting this study is to expose the i360 virtual museum optimised e-learning functions: Quiz, Score and Gamification to enable students to use 360 virtual tours for more immersive, interactive and life-like activities.

**Specific Objectives**

1. To design the application displays the Malaysian race through the iconography element Mise-en-scene of the background, costumes, and props highlighted as part of the Malay sultanate concept.

2. To help develop creative thinking, improve understanding, and change the paradigm of a student’s learning methods.

The study contributed to Play and fun, and discovery-based learning. New capabilities in the interactive 360-degree video prove to be particularly effective in teaching and learning.
scenarios that require autonomous control of perspective direction, immersion, and presence (Feurstein, 2018).

**Methodology**

As a representative statistical sample in empirical research, data has created a demand for an effective method of determining sample size. Krejcie and Morgan designed a table to help them choose a limited overall sample size to fill in the gaps (McNaughton & Cowell, 2018). A three-item questionnaire, designed to obtain information regarding interpretation of the i360 Virtual Museum Tour, was answered to diploma students. Thirty-five students (51.4% men, 48.6% of women) responded to the questionnaire. Three questions from the questionnaire are underlined for evaluating student acceptance. More appreciation of the simulation of a real-world setting in learning, easier to remember theoretical understanding while using i-360 video, and finally, the i360 Aspects of Mise-en-Scene (Virtual Museum Tour) application is valuable knowledge and recognize the elements of Mise-en-Scene.

**Results**

The effectiveness of this study based on a result provided by a Continuous Quality Improvement (CQI) report of Course learning outcome (CLO) by semester in Diploma Film & Studies in Polytechnic and three crucial item questionnaire, designed to obtain information regarding interpretation of the application, was answered to students.

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<th>Table 1. Summary of Continuous Quality Improvement (CQI)</th>
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**Findings**

The nature of 360-degree interactive movies, their instructional usage, evidence of usefulness, and the design of interactive video apps were all explored in this study. Despite the lack of research, the evidence suggests that this strategy is quite effective and efficient (Smith, 1987). Follow the future systematic process to produce 360-degree interactive videos, and there is little discussion of design models for making high-quality content for students. The development was adaptation from Design Thinking Methodology, and further study on cost-effectiveness are suggested.
References

