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6th International Innovation & Design in Library & Information Science Competition (InDeLib2023)



MAPPING THE LIBRARY OF TOMORROW THROUGH INNOVATION

Editors

Asmadi Mohammed Ghazali
Abd Latif Abdul Rahman
Zuraidah Arif
Zati Atiqah Mohamad Tanuri

Dewan Perdana,
UiTM Kedah

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PREFACE

The first International Innovation & Design in Library & Information Science Competition (InDeLib) was held in 2016 at the international level. InDeLiB became a brand name linked to the Faculty of Information Management, UiTM Kedah Branch, known to many local and international learning institutions. InDeLib is open to all organizations (libraries), librarians, professionals, researchers, academicians, teachers, and students from institutes of higher learning, college, secondary and primary schools. They share their ideas or methods throughout innovation and invention, particularly in library and information science. The 6th InDeLib 2023 is endorsed by the Librarians Association of Malaysia and the National Library of Malaysia.



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VRCT – VIRTUAL REALITY FOR CINEMATOGRAPHY TECHNIQUE

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Abstract

VRCT, or Virtual Reality for Cinematography Technique, is an immersive Virtual Reality (VR) technology for learning cinematography techniques mainly through its immersive learning environment provided in 360° settings. In this context, students will experience cinematography techniques such as camera shots, camera movements, and camera angles in a 360° environment. The production of VRCT involves (1) scriptwriting, (2) storyboarding, (3) video shooting, (4) audio recording, (5) video editing and (6) 360 video editing. Students can experience the content in panoramic images as if inside the environment using a computer, smartphone or VR headset. A user manual is also provided to guide users in exploring VRCT. The findings showed positive feedback on the use of 360° videos in facilitating immersive learning experiences.

Keywords

Virtual reality, 360° video, immersive learning, cinematography.

Product Description

VRCT, or Virtual Reality, was specially developed for the subject of cinematography for students with a Diploma in Video and Film Studies and a Diploma in Creative Technology Video Production. Students from community colleges or universities that offer creative multimedia programmes, individuals who are interested in cinematography techniques, and industry players in the film industry are also potential clients. Users can experience and explore cinematography techniques such as camera shots, camera angle and camera movement in virtual reality. In line with the era of the 4.0 revolution, this application can be used on various platforms such as computers, smartphones or VR headsets. The installation and user manual are also provided.



VRCT STORYBOARD

1) Enable video < Yes




2) Montage

POLYCC	Cinematography <small>VIDEO AND GRAPHIC PRODUCTION</small>
Digital Creative Technology <small>(Video Production)</small>	CAMERA SHOT
FULLSHOT	DOLLY


-1-

VRCT STORYBOARD


3) Home < Click < Begin to start the 360 journey (360 mode - user can drag around to feel the environment).



4) Main Menu < select < Introduction / Objective / Next / Walk-through / Home (360 mode - user can drag around to feel the environment).




5) Click < Introduction (Video mode).




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VRCT STORYBOARD


6) Click < Objective (Video mode).



7) Main Menu < Next (Go to next page - Camera Shot Page).



8) Main Menu < Walk-through (360 mode - user can drag around to feel the environment) (Go to next page - Camera Shot Page).



-3-

VRCT STORYBOARD

9) Click < Long Shot (Video mode).



10) Click < Full Shot (Video mode).




11) Click < Medium Shot (Video mode).




-4-

VRCT STORYBOARD


12) Click < Extreme Close Up Shot (Video mode).



13) Camera Shot < Next (Go to next page - Camera Movement Page).



14) Camera Shot < Walk-through (360 mode - user can drag around to feel the environment) (Go to next page - Camera Movement Page).



-5-

VRCT STORYBOARD

15) Camera Shot < Previous (Go to previous page - Main Menu Page).



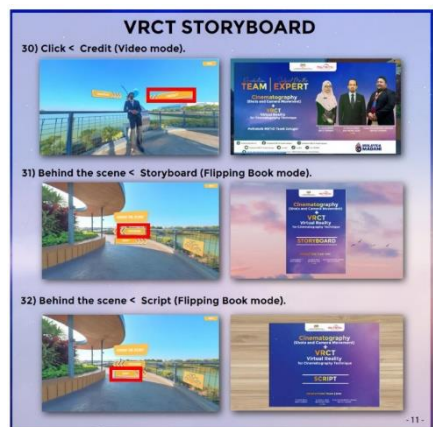
16) Click < Panning (Video mode).



17) Click < Tilting (Video mode).



-6-



Novelty & Uniqueness

The VRCT is one of the technologies that have the potential to be applied in the field of education and new instructional design in the Malaysian education system, especially in the Department of Polytechnics and Community College Education. VRCT provides students with fun learning in the classroom with an immersive learning environment. Students can explore the VRCT using multiple platforms such as a computer/laptop, smartphone or VR headset. In addition, to ensure that the content provided was accurate, all the videos in this VRCT were produced initially using the correct cinematography techniques. In addition, the latest equipment, such as drones and Multi-Camera Production (MCP) techniques, are also used in parallel with Industrial Revolution 4.0 technology. VRCT also has applied for copyright under the Intellectual Property Corporation of Malaysia (MyIPO) with registration number LY2023P03387.

Potential Commercialization

Potential clients can be expected from other polytechnics, community colleges, universities that offer creative multimedia programmes, individuals interested in cinematography techniques, and film industry players.

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All praises are to Allah S.W.T. and His Blessing for giving us the strength and ability to complete this product. The authors gratefully acknowledge the generous assistance and support from the students and Alumni from Diploma in Video and Films Studies who participated in answering the questionnaire, Setia Fontaines Heritage Park that permitted to shoot this video and Politeknik METrO Tasek Gelugor, Pulau Pinang and last but not least, thanks to the organizer of the International Innovation and Design in Library and Information Science Competition (InDelib) 2023 for this opportunity.

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