

Extended Abstract**Experiencing Court Room Structure (ARCoS) Using Augmented Reality (AR) Application****Nurulhuda Ahmad Razali***, Maizatul Akmar Mohd Rasli, Fadhilah Abdul Ghani

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| Keyword | ABSTRACT |
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| Augmented Reality ARCoS Courtroom Structure | This project is about developing an application using Augmented Reality (AR) to experience courtroom structure i.e. known as "ARCoS". This project was developed due to the difficulty of educators were experiencing in bringing students to the court for academic visits during the pandemic COVID-19. Besides, this project will help the educators reduce expenses and time spent on bringing the students to the court. This ARCoS is a novel application to teaching and learning law subject, and it has the potential to benefit i) educators, ii) students, and iii) higher education institutions. The goals of this project are as follows: i) to provide students with a new teaching and learning method without requiring them to attend court; ii) to provide educators and students with a new teaching and learning method iii) to cut the cost and time it takes to bring students to the court for academic visits. |
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*Corresponding Author. Email address: huda@uniten.edu.my**INTRODUCTION**

Nowadays, technology has been incorporated into education, and the findings show that this has a positive effect on both teaching and learning methods (Saidin 2015). One of the technologies that has been increasingly receiving attention is known as Augmented Reality (AR) (Chen et al., 2016). The term "Augmented Reality" (AR) refers to a new technology that allows for the real-time blending of digital information processed by a computer with information from the real world via appropriate computer interfaces. AR uses computer-aided graphics to add an extra layer of information to aid understanding and/or interaction with the physical world around us (Amin & Govilkar, 2015). For example, HoloLens allows medical students to manipulate and visualise the human body with unprecedented accuracy, and AR applications in the cultural field allow tourists or museum visitors to discover the history of places or works by simply pointing their smartphone's camera in their direction (Elmqaddeem, 2019).

AR has numerous educational advantages. Courses are said to be fun, to reduce cognitive load, to increase motivation and interest in the course, to increase the opportunity to ask questions, to increase interaction between students, to create new opportunities for individual learning, to concretize abstract concepts, and to increase success. For teachers, these advantages include contributing to the development of creativity in students, ensuring effective student participation in

the course, and allowing students to complete the course at their own pace (Kurubacak & Altinpulluk, 2017).

PROBLEMS

Students enrolled in a law course (whether law students or non-law students) need to have a firm grasp of how courts operate or a solid understanding regarding the courtroom structure. In order to ensure student comprehension, educators typically plan an academic visit and accompany the students to court. Academic visits will unfortunately require some expense and time, despite the fact that they are unquestionably excellent for students. Additionally, during the COVID-19 pandemic, all teaching and learning activities must be done online (Mohd Salleh, 2020; Tan, 2021). As a result, educators are no longer able to bring students to the court.

Due to the aforementioned issue, researchers in this project chose to use Augmented Reality (AR) to develop an application that educators can use to teach student about the structure of the courtroom without having to physically take them there for an educational visit. Students will have access to a virtualized representation of a real-world courtroom through this application. The ability to virtualize and experiment with students' knowledge can also spark their interest in the study of law.

The goals of this project are as follows: i) to provide students with a new teaching and learning method without requiring them to attend court; ii) to provide educators and students with a new teaching and learning method iii) to cut the cost and time it takes to bring students to the court for academic visits.

NOVELTY

This application is known as “ARCoS”, an application of Augmented Reality (AR) in experiencing courtroom structure. For educators, ARCoS is a novel application and a novel approach to teaching law subject. Students can effectively learn the court's structure using this new application and method. This initiative is not only effective for in-person teaching and learning, but it is also well suited for online courses.

COMMERCIALIZATION

The market potential is for higher education institutions that offer any courses that require students to learn the hierarchy of courts, e.g., Malaysian Legal System, Business Law, Commercial Law and Industrial Relations subjects.

PRODUCT PICTURE/PROCESS FLOW



Figure I. Product Picture

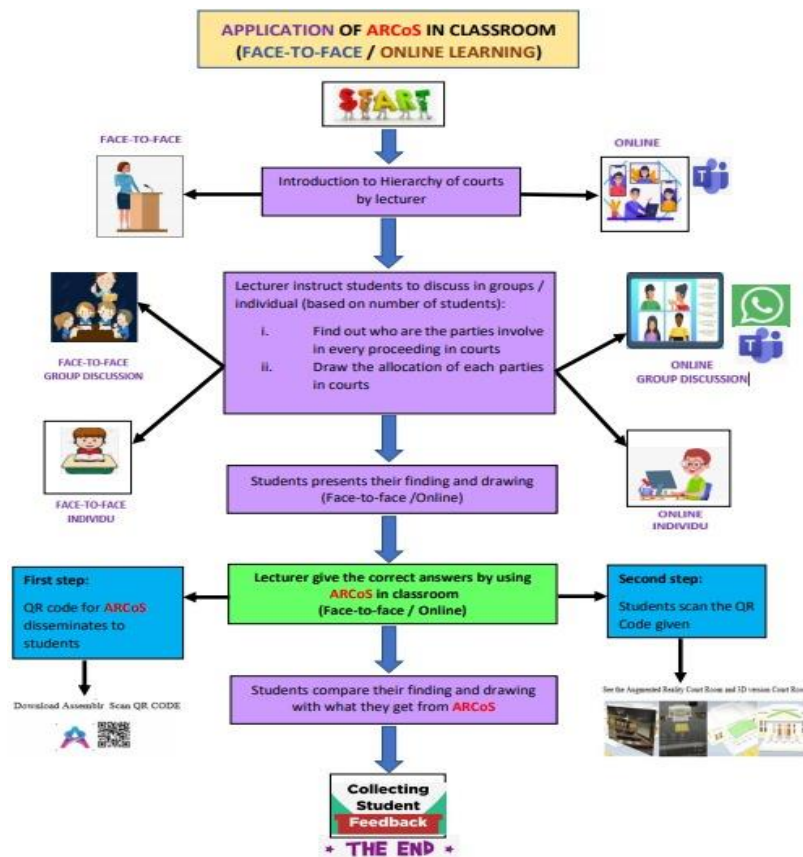


Figure II. Process Flow (Application of ARCoS In Classroom)

AWARD AND RECOGNITION

ARCoS received a silver medal at the 31st International Invention, Innovation Conference & Technology Exhibition, Malaysia (ITEX 2020) and also a bronze medal in IDE4TE Teaching and Learning Exhibition (IDE4TE x UTLF 2020).

USEFULNESS, APPLICATION AND ENVIRONMENTAL FRIENDLINESS

ARCoS will be able to (i) facilitate students' understanding of the court hearing process; (ii) expose students to real courtroom structure; and (iii) increase the positive learning experience of students in law subjects. Besides, by using ARCoS, it will provide environmental friendliness by reason of the non-use of paper.

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