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## Virtual Hajj and Umrah

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### ABSTRACT

“Virtual Haji” is an app to attract the attention of younger generations in the way of performing Hajj and umrah. This idea was prompted when we looked at the difficulty and lack of interest of the young generation in studying the science of Hajj and Umrah. As a solution, we created exciting applications using technology to upgrade the learning methods of Hajj and Umrah to attract attention and be easier to understand and more effective than reading books. “Virtual” which means virtual or something that seems to exist but actually does not exist and “Haji” is the fifth rule of Islam. The main objective of the creation of this application is to provide new learning methods for the younger generation in the implementation of Hajj. Within this app, the user can choose whether to execute Hajj in full or execute separately. This app is suitable for children aged 12 and above. Next, the price to create this application requires only a low cost. The target buyers for this app are parents and educators. We hope with this application, it can give pleasure and make learning more effective for the generation now to master the science of Hajj and Umrah.

**Keywords:** Hajj; virtual; effective

### INTRODUCTION

Hadith and Umrah are the fifth rule of Islam that Muslims should accept if they are able. “Islam is built on five things: to testify that there is no god but Allah, and to bear witness that Muhammad is the Messenger of Allah, to establish the Sabbath, to fulfill the Zakat, to fast in the month of Ramadan and to hide to Baitullah for those who can travel there [1]. Most of the younger generation at this time has a less interest in learning Hajj and umrah. They quickly get bored when they are taught orally by their teachers, especially in the era when technology is being built. Adolescents are also less prone to the execution of Hajj and Umrah because they are not taught practically. In addition, we found that adolescents are very easily affected by gadgets. The younger generation prefers short videos on social media that provide a more attractive visual to watch.

Therefore, we have created an innovation called “Virtual Hajj” to make Hajj learning more effective in the 21st century. We have created one app that can be downloaded by users aged 12 and over on smartphones. This app displays the situation in Mecca and Medina to fulfill Hajj. Users can also choose to perform Hajj in full or separately. For example, users can choose to view the wukuf in Arafah for implementation separately [2]. Next, the user can also choose to perform umrah or haji. For more effective use, the app is also brought by VR (virtual reality) so that the user can feel as if he is in the place of execution with a 360° angle [3]. The price of the app sold is also very affordable and meets the needs of customers. The aim of this study is to facilitate the learning of the young generation in Hajj or Umrah.

## INNOVATION DEVELOPMENT

The innovation that is applied to this Virtual Haji product is to take advantage of the increasingly evolving technology transition, i.e., VR technology (virtual reality) and then be used in Virtual Haji revenue. The main function of this product is to make learning and public exposure to Hajj and Umrah wider by using a method that is more interesting than attending a Hajj seminar or demanding science in the classroom. Studies have shown that learning methods conducted with fun methods can make something like science easier to accept by an individual regardless of age [4]. Thus, the main advantage of this product innovation is that users can learn the science of Hajj and Umrah virtually.

The table below shows the differences and similarities between Virtual Haji and conventional learning methods, i.e., learning in class and attending Hajj seminars.

**Table 1:** Equations and differences between Virtual Haji and conventional learning methods

Similarities	
Exposure and science regarding Hajj and Umrah	
The Islamic people were able to perform the 5th Islamic rule.	

Differences	
Virtual Haji	Conventional Learning Method
Dual language	The use of language is limited when science is delivered
Incorporating a variety of senses	Use only hearing and vision.
Interesting and can interact in virtual reality	Cannot interact directly

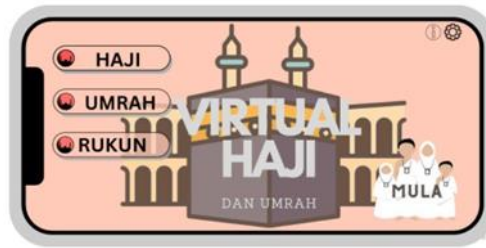
### How to use:

#### Use of VR Head Collaboration

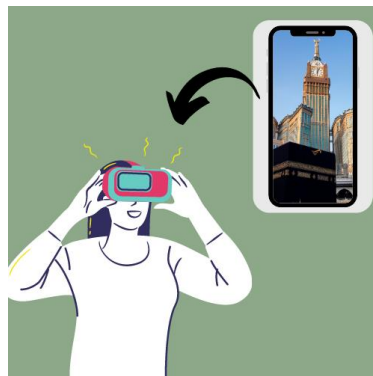
Download the app on your smart phone



Choose the desired mode.



Put your smartphone into the VR set.



Users now start (using Virtual Hajj) playing while learning



The Design:

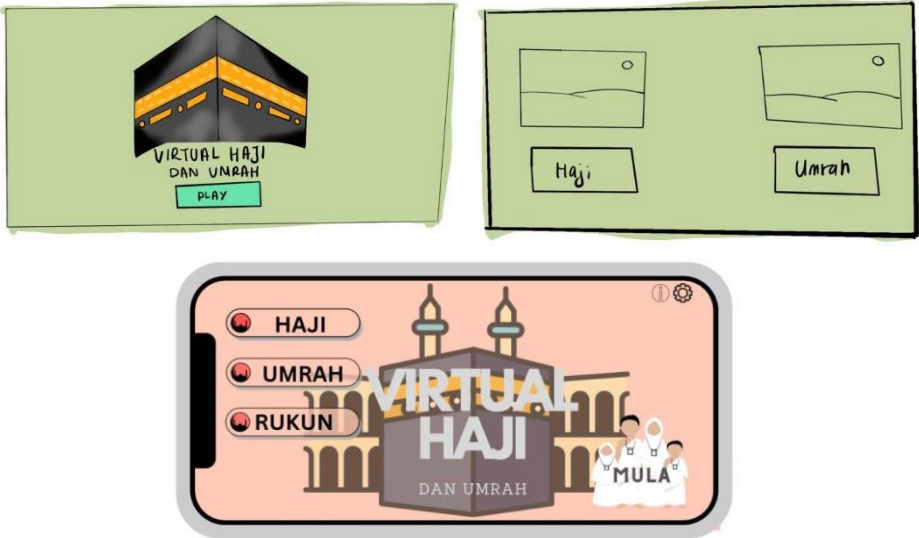


Figure 1: Prototype of innovation (age 1)



Figure 2: Prototype of innovation (Page 2)

COMMERCIAL POTENTIAL

Virtual Haji is a product that is suitable for every layer of society. With the existence of this product, not only those who want to perform Hajj can prepare themselves easily before going to the holy land of Mecca, but it can also attract the interest of younger generations to seek out science about Hajj with the latest technologies. The main objective of this product is for those who want to fulfill the worship of Hajj and Umrah. This simulated learning can make it easier for users to understand every step and deed they need to do while doing Hajj compared to learning through books.

With affordable price offerings, our innovative products can be used many times, anytime and anywhere. It can also be shared. It can not only increase knowledge, but it can also strengthen relationships of human beings. Aside from the individuals who want to perform Hajj and Umrah, parents are also among our primary targets. With this product, children and adolescents can get early exposure to the fifth Islamic Rukun. Interesting ways of learning are obviously easier to focus attention on. we have agreed to set a “Virtual Haji” price of RM 19.99/set. For each purchase, you will receive a ‘VR goggles’ along with a QR code for you to download the app. The profit margin is also estimated at 0.225.



**Table 2: Product cost**

<b>Materials</b>	<b>Cost</b>
Application development	RM 4.00
VR Box	RM 7.99
Overhead cost	RM 3.50
<b>Total cost</b>	<b>RM 15.49</b>
<b>Product price</b>	<b>RM 19.99</b>
<b>Total profit</b>	<b>RM 4.50</b>

## CONCLUSION

Virtual Hajj exists as an alternative for the younger generation to learn how to perform Hajj in an interesting method. By using this app, users will be easier to understand this fifth Islamic rule because it can be seen virtually. This application will be used more frequently with the implementation of improvements. Among them, it adds the choice of execution of worship, such as the prayers of bodies, tayamum and victims. This can give the user an understanding of the practice of worship clearly and also enjoyably. In conclusion, interesting learning methods can create curiosity and encourage the current generation to develop religious science in an effective and compact way.

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