

## AR OF BRITISH PILLBOX AS A MEDIUM IN EDUCATION THROUGH THE TOURISM SECTOR FOR YOUNG GENERATIONS

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**Highlights:** The development of the Augmented Reality (AR) application will be used as an effort to preserve the British pillbox monument in Kelantan for the heritage tourism industry and at the same time will become an educational medium to the younger generations. This method aims to foster awareness country's history in the young generations. With the preservation of the British pillbox in Kelantan through the Augmented Reality (AR) technology, it is seen to have a more effective impact in line with the 4th Industrial Revolution (4IR).

**Key words:** *Augmented Reality, Conservation, Heritage Tourism, Pillbox, Kelantan*

### Introduction

The development of the Augmented Reality (AR) application will be used as an effort to preserve the British pillbox monument in Kelantan for the heritage tourism industry and at the same time will become an educational medium to the younger generations. This method aims to foster awareness country's history in the young generations. With the preservation of the British pillbox in Kelantan through the Augmented Reality (AR) technology, it is seen to have a more effective impact in line with the 4th Industrial Revolution (4IR). Furthermore, virtual heritage tourism needs to be proposed to various aspects such as education, economy, and safety of the Covid-19 pandemic. The information on the pillbox will apply an easy-to-understand approach especially in heritage tourism which is also considered an educational material to the next generations.

According to researchers, the British pillboxes, located on the coast, suffered from a lot of damage, including waves, and efforts to preserve them cannot be carried out effectively caused of the lack of technology. With this method, the development of Augmented Reality is expected to make the monument remain and does not disappear.

### Content

#### Problems Statement

The problem that can be stated is almost all British pillbox in Kelantan suffer from problems such as deterioration of the effects of waves and coastal erosion, and vandalism. Other than that, the parties involved are unable to carry out the preservation because the location of the pillbox is in areas at risk of experiencing threats such as wave erosion. Lastly, lack of technology resources for conservation work.

#### Questions

In order to meet the objectives of the study, researchers have formulated some research questions:

- i) What is the effect of the use of the Augmented Reality (AR) of the British pillboxes for the younger generation through the context of heritage tourism?
- ii) How is the potential of virtual tourism to the tourism sector?

#### Objective

This research refers to some objectives:

- i) Review the effectiveness of the Augmented Application Augmented Reality of British pillboxes for the younger generations through the context of heritage tourism.
- ii) Analyze the potential of virtual tourism to the tourism sector.

#### Methodology

To produce Augmented Reality (AR) for British pillboxes in Kelantan, researchers will collect data about pillboxes in Kelantan, the way how to conserve them, and also the importance of the history of pillboxes. Next, the information will be created in video and prepare for Augmented Reality using the application in google play store and apple app store so that the user mostly the new generation can download and use the application.

AR Method (step by step) :



Figure 14 : An Album for British Pillbox

Step 1: Create an album for single British pillbox structure.



Figure 15: An Album for British Pillbox

Step 2: Select all the picture that provided, then click create, choose video.



Figure 16: Soloop application for video creator

Step 3: Import all image selected into SOLOOP application, edit and choose the best effects for the video, then click finish.



Figure 17: Soloop application for video creator

Step 4 : After click the finish button, the video is ready to generate by click Generate button on top right in yellow column.

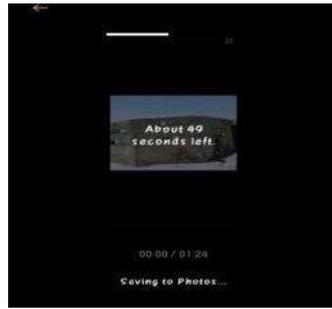


Figure 18: Soloop application for video creator

Step 5 : Wait for a while, then after finish generate, the video ready to use.

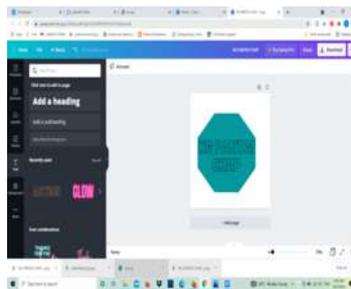


Figure 19: Canva. Com page

Step 6 : By using Canva.com, create marker for AR scanner.

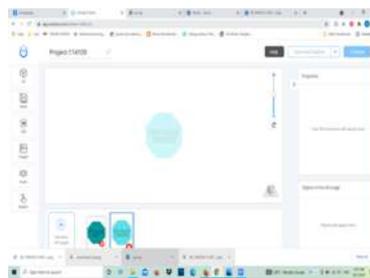


Figure 20: Unite AR page

Step 7 : Sign in to Unite AR, upload the image for marker.

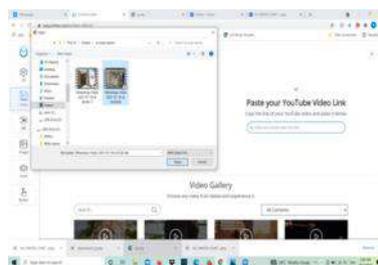


Figure 21: Unite AR page

Step 8 :Then choose the video for content.

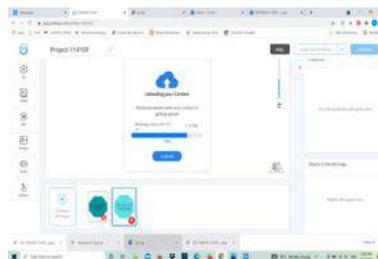


Figure 22: Unite AR page

Step 9 : Browse and upload the video from desktop.

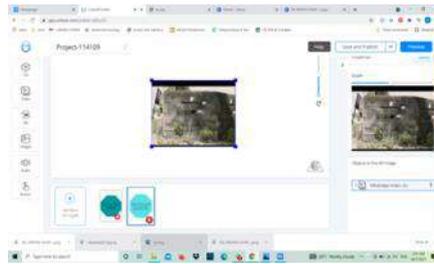


Figure 23: Unite AR page

Step 10 : Wait until the video ready to preview.



Figure 24: Unite AR page

Step 11 : Preview the AR with content to make sure the project succesful.

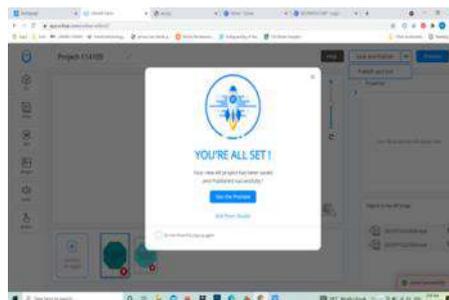


Figure 25: Unite AR page

Step 12 : Download the QR and image for AR scanner, then save and publish the project.



Figure 26: AR marker

Step 13 : Download Unite AR through the phone and the QR code is ready to scan.

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