The Development Of Application with of Augmented Reality Technology For Buriram Tourism

Phutthaisong School
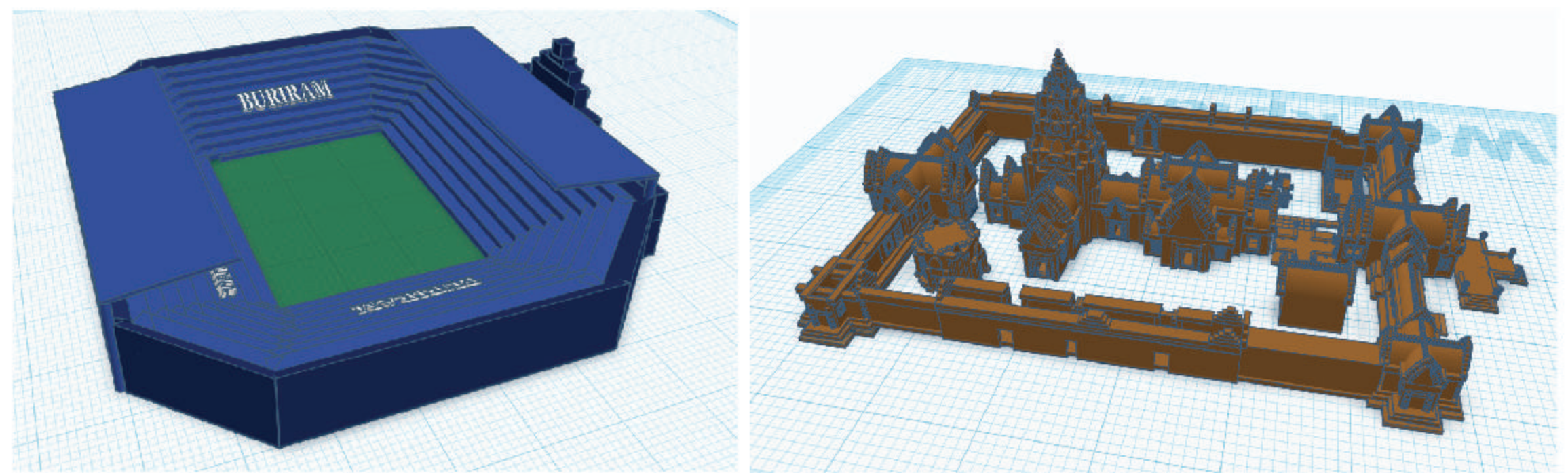Thanakorn Seetha, Buraphat Klonklang Advisors: Isaiah Thuesayom, Sarawut Shoorut

PROBLEM

As the number of tourists grows, the distribution of information about various tourist attractions may become insufficient. Additionally, in the modern era, people increasingly seek information online, enabling them to access details and updates that closely resemble the experience of visiting the actual locations.

Integrating Augmented Reality (AR) technology into tourism promotion can enhance tourists' knowledge and understanding of various attractions

PROJECT DESIGN

1 Problem Identification or Needs Assessment
Planning the project by studying the basic context, issues, and additional requirements related to tourism in Buriram

2 Data Collection
1. Researching information on AR application development
2. Studying and gathering contextual tourism information in Buriram
3. Reviewing theoretical principles and designing content to determine the application format for promoting Buriram tourism with 3D technology, titled Bravel

3 Method Selection
1. Selecting and researching prototype locations, including Phanom Rung Historical Park, Chang Arena, and Chang International Circuit
2. Choosing software for application development

4 Design and Implementation
1. Designing and creating a 3D model of Phanom Rung Historical Park
2. Designing posters to be used as markers
3. Developing the Bravel application using Unity and Vuforia

5 Testing
1. Selecting and researching prototype locations, including Phanom Rung Historical Park, Chang Arena, and Chang International Circuit
2. Choosing software for application development

6 Refinement
1. Designing and creating a 3D model of Phanom Rung Historical Park
2. Designing posters to be used as markers
3. Developing the Bravel application using Unity and Vuforia

7 Evaluation
Summarizing results and compiling the project documentation

FINDING

Criteria	Percentage	Evaluation Result
1. Ease of use and simplicity	4.80	Very High
2. Appropriate positioning of information on the screen	4.30	High
3. Modernity of the application	4.40	High
4. No cost for downloading the application	4.80	Very High
5. Security of downloading the application	3.80	High
6. Ability to download the application on Android and iOS	2.70	Medium
7. Quality of information through AR images	4.60	Very High
8. Ability to access additional information via the application	4.20	High
Overall Satisfaction	4.20	High

The summary table of the user satisfaction assessment for the 3D Bravel application shows that users' overall satisfaction with the application is 4.20 , with the evaluation result categorized as High Level.

INTERPRETAION

1. The "Braval" application, designed to promote Buriram tourism through Augmented Reality Technology, and
2. a questionnaire to evaluate satisfaction with the application's use. Results showed that the Android-compatible application effectively displayed 3D images using Augmented Reality Technology, achieving an average satisfaction score of 4.20, indicating a high level of user satisfaction.

REFERENCE

[1] Institute for the Promotion of Teaching Science and Technology. (2022). Technology process. Retrieved November 1, 2022, from http://designtechnology.ipst.ac.th/?page_id=165
[2] Mindphp.com. (2022). What is Unity? Retrieved November 1, 2022, from https://www.mind php.com/คู่มือ/73-คืออะไร/8286-program-unity.html
[3] Nattawat. (2022). Tinkercad: An easy-to-use design program for 3D printers. Retrieved November 1, 2022, from https://www.siamreprap.com/2015/12/using-tinkercad-program-for-3d-printer/
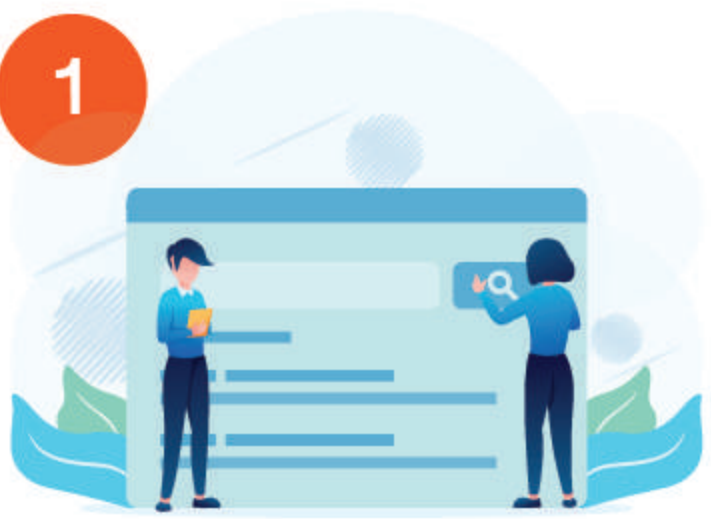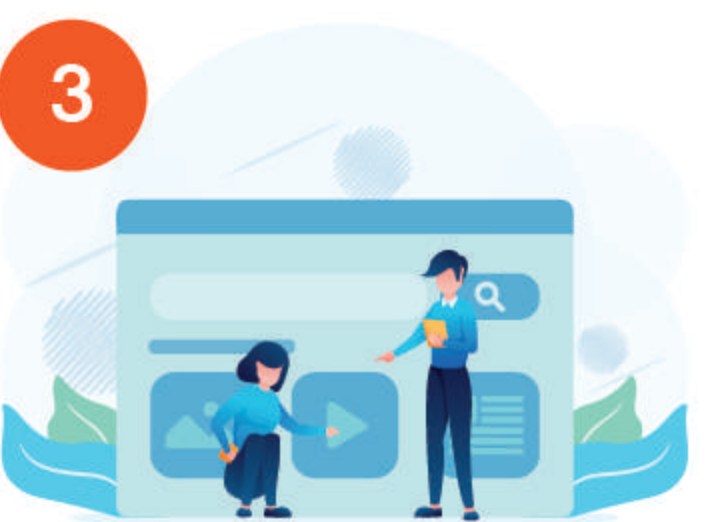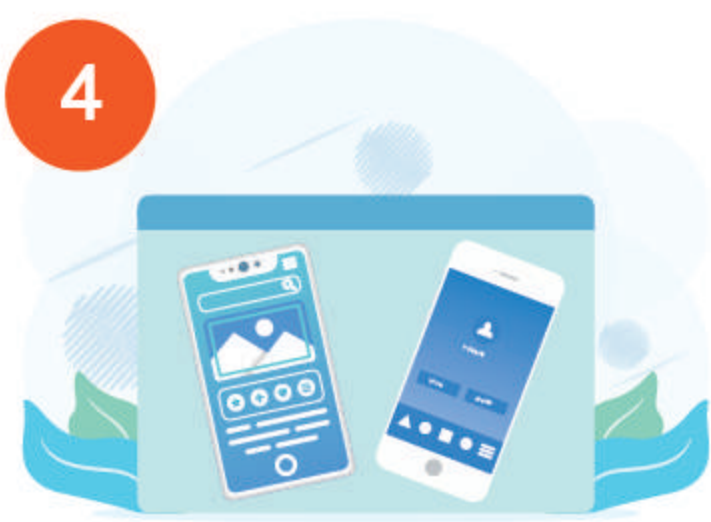[4] Sukbanjong, S. (2011). Development of online lessons for the course on Media and Presentation. College of Media and Society, Srinakharinwirot University.
[5] Pimboon, T. (2012). Communication theories and teaching. [Online]. Available at: http://tuksocial13.blogspot.com/ Chungsaman, N., & colleagues. (2020). Development of an application for the tourism industry in Surin province. Surin Rajabhat University

Bravel

"Come and explore the detailed miniature models of Phanomrung Historical Park, Chang Stadium, and Chang International Circuit, all located in Buriram Province. Scan now and dive into the rich culture and vibrant sports scene of this beautiful region!"

ปราสาทพนมรุ้ง Phanomrung Historical Park.

สนามช้าง Chang Stadium

ช้าง อินเตอร์เนชั่นแนล เซอร์กิต chang internations circuit