

Modern Topics in IT

IT4020

Assignment 03

Group Id : MTIT-099

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Bachelor of Science Special Honors Degree in Information Technology

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# Declaration

We declare that this is our own work, and this report does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or Institute of higher learning and to the best of our knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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# INTRODUCTION TO THE SCENARIO

Augmented Reality (AR) is an enhanced version of the real physical world that can be obtained through the use of digital visual elements, sound, or other sensory stimuli provided through technology. AR applications that are widely used these days rely on smartphones to showcase the digitally developed world. Users can rely on an AR app to activate a camera on their smartphone, view the world around them on the screen and enhance that world in any way.

This technology helps to solve many real problems. As an example, consider a museum. Consider the National Museum of Sri Lanka. If a foreign visitor wants to know about the ancient history of Sri Lanka, the first place he should visit is the National Museum. This app is useful for those who are physically unable to visit the museum. Everything in the museum is freely visible to foreigners and locals alike.

This AR application is unique to small children. This can be used to identify animals, historically important places, and structures. Here we focus on identifying animals for children under 5 years of age and identifying historically important places and types of structures for children from 1 year to 5 years.

A picture containing text, tree, person, outdoor

Description automatically generated

# TASK 1 – WORK CONTRIBUTION

|  |  |  |
| --- | --- | --- |
| **IT NO.** | **NAME** | **CONTRIBUTION** |
| IT18195644 | D. I. Hettiarachchi | * Create simple augmented reality application. * Create own marker using AR.js website. * Download image and marker for own artifact. * Create 2D artifact by using augmented reality concept. * Create individual application and report. |
| IT18169454 | K.R.C.L. Bandara |
| IT18116052 | Dureksha D.D.T.D. |
| IT18172010 | Chandima .P.H.P.A |

# TASK 2 – 2D DIAGRAMS

IT18195644 : Hettiarachchi D.I.

A picture containing diagram

Description automatically generated

IT18169454 : Bandara K.R.C.L.

A screenshot of a video game

Description automatically generated with medium confidence

IT18116052 : Dureksha D.D.T.D

A screenshot of a blue bird

Description automatically generated with medium confidence

A screenshot of a cartoon character

Description automatically generated with medium confidenceIT18172010 : Chandima P.H.P.A.

All in One :

Graphical user interface

Description automatically generated

# TASK 3 – CODES OF INDIVIDUAL APPLICATIONS

## 2D - IT18195644

Text

Description automatically generated

## 3D – IT18195644

Text

Description automatically generated

## 2D - IT18169454

Text

Description automatically generated

## 3D – 18169454

Text

Description automatically generated

## 2D - IT18116052

Text

Description automatically generated

## 3D - IT18116052

Text

Description automatically generated

## 2D - IT18172010

Text

Description automatically generated

## 3D - IT18172010

Text

Description automatically generated

## 2D – ALL IN ONE

Graphical user interface, text, application

Description automatically generated

# TASK 4 – CREATE OWN MARKER

## IT18195644

Icon

Description automatically generated with medium confidence

## IT18169454

Logo

Description automatically generated with low confidence

## IT18116052

Icon

Description automatically generated with medium confidence

## IT18172010

Logo

Description automatically generated with low confidence

## All in One

A picture containing qr code

Description automatically generated

# APPENDIX

Link: [**AR.js Marker Training (jeromeetienne.github.io)**](https://jeromeetienne.github.io/AR.js/three.js/examples/marker-training/examples/generator.html)

Graphical user interface, application

Description automatically generated

Link: [**Free 3D Models download - Free3D**](https://free3d.com/3d-models/)

Graphical user interface, website

Description automatically generated