



Virtual Reality

SEAMOLEC ASSISTANCE PROGRAMME

SEAMEO SEAMOLEC

SEAMEO REGIONAL OPEN LEARNING CENTRE | 2021

General Explanation

The technology utilization in the information delivery process has experienced rapid development. One of the technologies is Virtual Reality (VR). Virtual Reality is a technology that allows users to interact with an existing environment in a virtual world that is simulated by a computer and makes the user feels he is in that environment

With VR, students can enter and practice in a virtual laboratory environment. For example, students majoring in culinary can feel the atmosphere in a luxury restaurant kitchen, or students majoring in medicine can facing critical patient situations. It all becomes possible with VR. This technology can increase efficiency in the classroom and provide students with hands-on experiences.

VR will also allow students to solve problems in their own way and building knowledge from their experiences. Therefore, students can engage in authentic problems, explore solutions and collaborate with others.

In education, VR is used as a learning media. Learning media is a bridge between educators and students in learning process that is able to connect, provide information and distribute messages in effective and efficient way.

Objectives

The main objective of this training is the participants can develop virtual reality-based learning media as a hyper content learning

media by integrating STEAM (Science, Technology, Engineering, Art, Mathematics) learning concepts.

Benefits

Benefits of this program are:

1. For teachers / lecturers / educators
As reference material for improving the quality of learning and adding the inventory of attractive learning media to students in learning process.
2. For students
Increase the interest of students to learn further, provide insight into virtual reality technology that can be used for learning media, and provide alternative learning resources through virtual reality-based learning media in more attractive and easier way to understand. In addition, it also develops the potential of students in seeking independent learning experiences.

Requirements & Qualifications

A. Device

- a. Laptop

Minimum requirement of device:

- System requirement: Microsoft® Windows® 10 Versi 17++ (32-or 64-bit)
- 4 GB RAM
- 16 GB of available disk space (32GB recommended)

b. Viewer device

Minimum requirement of viewer:

Android smartphone system, Lollipop

5 – 6 inch display

2 GB RAM

2 GB of available disk space (4GB recommended)

Gyroscope, Accelerator, Compass sensor system

Example of benchmark devices:

https://www.gsmarena.com/xiaomi_redmi_note_3-7863.php

c. VR Cardboard

B. Participant at least has:

a. Basic knowledge of graphical based application

b. Basic knowledge of programming

Stages

