Online Workshop Details
Multimedia: The Real World of Immersive Augmented Reality
Online Workshop Schedule: 1-26 February 2018
Every Monday and Thursday 14.00-16.00 hrs
(Bangkok Time, GMT+7)

http://creativecamp.seameo.org/
Email: creativecamp@seameo.org

I. Details of main coordinator/focal person
   Name: Mr Achmad Purnomo Wijaya
   Position/Title: Project Assistant
   Organisation: SEAMEO Secretariat
   Email: purnomo@seameo.org
   Mobile: +66 966505835

II. Introduction
   Augmented Reality is such an effort taken to correlate learning and the 21st century technology. Augmented reality (AR) integrates digital information with the user's environment in real time. Unlike virtual reality, which creates a totally artificial environment, augmented reality uses the existing environment and overlays new information on top of it. AR creates direct, automatic, and actionable links between the physical world and electronic information. This goes beyond mobile computing and bridges the gap between virtual world and real world, both spatially and cognitively. With AR, the digital information appears to become part of the real world.

III. Objectives
   Through this online training, the participants are expected to understand the process in developing AR application and storybook. They will be able to create an Augmented Reality Storybook by integrating with STEM concept (Science, Technology, Engineering, Mathematics) and their programme’s study areas.

IV. Contents
   1. Introduction to Augmented Reality
   2. Basic Blender
   3. Advance Blender
   4. Material and Texture
5. Animating 3D model
6. Introduction to Storyboard
7. Introduction to Unity
8. Single Target
9. Multiple Target
10. Final Assignment

V. At the end of online workshop, what skills/knowledge participants will learn
1. Understand the process to develop Augmented Reality application
2. Able to design 3D model
3. Able to animate 3D model
4. Able to create storybook as Augmented Reality Marker
5. Able to develop AR application single target and multiple target by using Unity
6. Able to deploy application to Android

VI. Schedule of online workshop
1. Number of hours in total: 16 hrs (or 2 hours per session)
2. Online workshop schedule: Every Monday and Thursday at 14.00 – 16.00 Bangkok Time (GMT +7)
3. Online workshop Duration: 01 February 2018 to 27 February 2018

VII. Expected outputs (At the end of the workshop, what participants will produce for competition?)
At the end of the training the participants are expected to develop a story book on their own, incorporating the AR related lessons they learnt throughout the session. The participants have to choose one theme which is related to STEM (Science, Technology, Engineering, Math). At the end they are expected to compile at least five different objects that have been designed and developed by them in the book.

VIII. Online workshop schedule
The course will be announced by 15 January 2018 and registration of interested participants/schools shall commence on 16 January 2018 until 25 January 2018. The online sessions and other ensuing activities are as follows:

<table>
<thead>
<tr>
<th>Session</th>
<th>Online Workshop Schedule</th>
<th>Content</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thursday, 1 February 2018 14.00 – 16.00 Bangkok Time (GMT+7)</td>
<td>Introduction to Augmented Reality</td>
<td>Mr Alfan P Laksono SEAMEO SEAMOLEC Mr Purnomo SEAME Secretariat</td>
</tr>
<tr>
<td>2</td>
<td>Monday, 5 February 2018 14.00 – 16.00 Bangkok Time (GMT+7)</td>
<td>Basic Blender</td>
<td>Mr Purnomo SEAME Secretariat</td>
</tr>
<tr>
<td>3</td>
<td>Thursday, 8 February 2018 14.00 – 16.00 Bangkok Time (GMT+7)</td>
<td>Advance Blender</td>
<td>Mr Purnomo SEAME Secretariat</td>
</tr>
<tr>
<td>4</td>
<td>Monday, 12 February 2018 14.00 – 16.00 Bangkok Time (GMT+7)</td>
<td>Material and Texturing</td>
<td>Mr Purnomo SEAME Secretariat</td>
</tr>
</tbody>
</table>
### IX. Brief profile of targeted participants
Students and teachers of Junior/Senior High Schools/Vocational High Schools or Polytechnic/Colleges in Southeast Asian countries.

### X. Prerequisites (e.g. Basic knowledge and skills, programming knowledge, English ability)
- Spoken and written English proficiency
- Knowledge on 3D design

### XI. What participants need to bring along to join the online training
- Notebook/Personal Computer
  - System Requirement: Microsoft® Windows® 7/8/10 (32- or 64-bit)
  - Minimum 4 GB RAM
  - 16 GB of available disk space minimum, 32GB recommended
- Smart Phone (Android OS)
  - System Requirement: Minimum Lollipop (Android version 5.0), higher recommended

### XII. Maximum number of participants to be accepted for the online training (e.g. 100 participants)
- No maximum number of participants,
- One team consists of 1 teacher and 3 students

### XIII. Details of Instructors/Facilitators
1. Mr Alfan P Laksono, IT Content Knowledge Management Division Staff, SEAMEO SEAMOLEC
2. Mr Achmad Purnomo Wijaya, Project Assistant, SEAMEO Secretariat

### XIV. Evaluation Criteria/Mechanism for Completion
The teams are be considered to complete the online training and join the competition if they submit:
- Story Book (.pdf)
- Android Application (.apk)

### XV. Judging Criteria for Competitions
- 3D Models: originality, model, texture, animation (40%).
• Story book: based on theme, book layout, book design, content (30%).
• Application: application icon, application display, content (30%).

XVI. Tentative Judging Committee Members
1. Mr. Anusorn Dusitpirom, SEAMEO Secretariat
2. Mr. Haritz CN, SEAMEO BIOTROP
3. Mr. Alfan P Laksono, SEAMEO SEAMOLEC

XVII. Timeline of Multimedia: AR Online Workshop

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event announcement</td>
<td>Start from January 2018</td>
</tr>
<tr>
<td>Online registration</td>
<td>15 January – 25 January 2018</td>
</tr>
<tr>
<td>Announcement of participants and webex online meeting room number</td>
<td>27-28 January 2018</td>
</tr>
<tr>
<td>Webex tutorial for schools and participants who are not familiar to use the Webex online platform (Optional)</td>
<td>29-30 January 2018 (To be announced to all participants by email: The online tutorial session will be conducted by SEAMEO IT staff and it will take only 10-15 minutes. Participants can access to the system anytime during the provided period)</td>
</tr>
<tr>
<td>Online Training Orientation</td>
<td>1 February 2018</td>
</tr>
<tr>
<td>Online Training Sessions (8 sessions)</td>
<td>1 February – 26 February 2018</td>
</tr>
<tr>
<td>Assignment Period</td>
<td>27 February – 29 March 2018</td>
</tr>
<tr>
<td>Deadline for Submission of Assignment</td>
<td>30 March 2018</td>
</tr>
<tr>
<td>Evaluation by judging committee</td>
<td>2-6 April 2018</td>
</tr>
<tr>
<td>Announcement of shortlists</td>
<td>7 April 2018</td>
</tr>
<tr>
<td>Online presentation of shortlists</td>
<td>12-13 April 2018</td>
</tr>
<tr>
<td>Selection of winners</td>
<td>14 April 2018</td>
</tr>
<tr>
<td>Announcement of winners</td>
<td>15 April 2018</td>
</tr>
</tbody>
</table>

XVIII. Coordinators

For, general inquiry, please contact:
SEAMEO Secretariat, Bangkok
Email: creativecamp@seameo.org; secretariat@seameo.org
Website: www.seameo.org; http://creativecamp.seameo.org/

a. Ms Piyapa Su-angavation, Project Coordinator: piyapa@seameo.org
b. Mr Ahmad Wisnu Mulyadi, Webmaster and Technical Coordinator: wisnu@seameo.org
c. Mr Tan Ketudat, Online Workshop Coordinator: Tan@seameo.org
d. Ms Cao Yi, Project Assistant: creativecamp@seameo.org