eon **XR**   magic leap

EON XR - MAGIC LEAP

USER GUIDE
SEPTEMBER 2020

CONTENT

CONTENT

INTRODUCTION TO AVR PLATFORM

AVR Platform is based on EASI concept making Immersive Learning as **E**ffortless, **A**ffordable, **S**elf-Service and **I**nterconnected

AVR Platform allows for rapid development, deployment and adoption of AR/VR solutions with following approach:

Faster Learning – Experiential Training provides real-time feedback and improves the efficiency of skills transfer, increased knowledge retention and better captures enterprise knowledge within institute/organization

Real-time Contextual Knowledge Injection – With advanced AR technology, knowledge directly relevant to the task at the hand can be displayed right in front of a user's eyes resulting in a higher quality of work and improved learning

Safety – Dangerous or difficult to replicate scenarios can be safely simulated in a VR/AR environment allowing students/trainees to repeatedly practice crucial scenarios while preventing damage to equipment and avoiding bodily harm

Greater Engagement – Experiential Training requires the student/trainee to participate in the exercise resulting in higher retention as this by passes boredom and poor classroom habits that accompany traditional teaching

Assessment – Students are evaluated based on their performance on the relevant grades and this data is transmitted to an institute's internal record keeping systems for certification and/or administrative action

AVR PLATFORM FEATURES
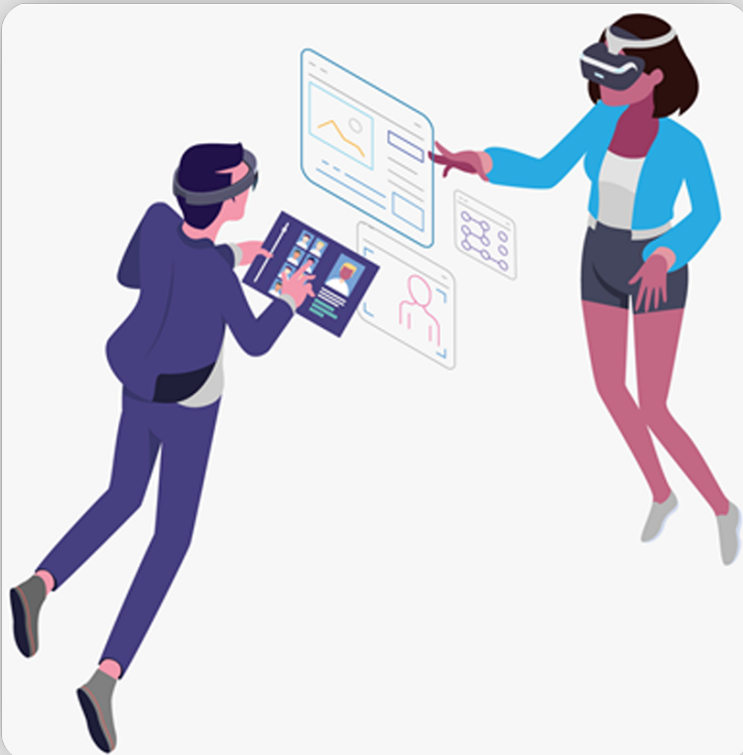
1. **Cloud-Based** - Develop, manage, access, host, and distribute AVR applications anywhere with internet connection

2. **CAD/Model & Data Import** - CAD, PLM, and scanned models can all be imported, as well as data (IoT, GIS) and other media

3. **User-Generated Interaction Creation** - The AI-supported non-programming-based interaction creation is easy to use regardless of experience

4. **Global Publishing** - Support for 30+ devices ranging from Android and iOS smartphones to VR headsets from brands such as Oculus and Vive to AR glasses including ODG and Microsoft HoloLens

5. **Data Management** - Tools like assessments, analytics, user profiles, and LMS integration all help users get the data they need

6. **Content Integration** - Content and data can be managed using enterprise systems, streaming, IoT and AI capabilities

REGISTER AS FREE USER / FORGOT PASSWORD

Create Account

First Name*

Last Name*

Email*

Password*

Confirm Password*

8 characters long, include at least one lower and upper case character, & one number or symbol

Terms and Conditions of Use

1. AGREEMENT TO TERMS

1.1 These Terms and Conditions constitute a legally binding agreement made between you, whether personally or on behalf of an entity (you), and EON Reality Inc, located at 18 Technology Drive, Suite 110, Irvine, CA 92618 United States, irvine, United States, CA 92618 United States (we, us), concerning your access to and use of the AVRPlatform

I agree to the Terms and Conditions.

SIGN UP ➜

Already have an account? Sign In

Forgot Password

Forgotten your password?

Enter your email below to reset your password.

EMAIL*

SUBMIT ➜

Back to login

1. When you are trying for **Free**, you will need to register and agree to the **Terms and Conditions** and then Proceed with Sign up option, post which you can login to the Platform

2. If you are registered user and have forgotten your password, you can click on **Forgot Password** option and enter your email ID and Reset password link will be sent to your registered email address and you can reset your password using the link provided in the mail you get and login to the Platform

DESKTOP LOGIN

Sign In

1a

vaibhav.shukla@eonreality.com

••••••••

SIGN IN ➡

2 Forgot Password | Can't access your account?

Not a Member? - Start for Free 3

OR

1b Sign in with Google

1c Sign in with Facebook

You can access AVR Platform as either of the two users:

- Individual user for evaluation purpose
- Registered institute user (provided you've been assigned license by your institute)

1. When you are logging into AVR Platform for the first time, you need to register/Sign in. You can do it by using either of these ways:
   a. Any of your email ID by registering it
   b. Your Google account
   c. Your Facebook account or

2. Evaluation Users can "Start for Free" and you will access AVR Platform as a Freemium User. Under this Freemium account, you can access the wide variety of Assets and can create **5 (Five)** Free Lessons

3. If you have issues logging in, you can reach out to our Support team by clicking **Can't access your account?** option
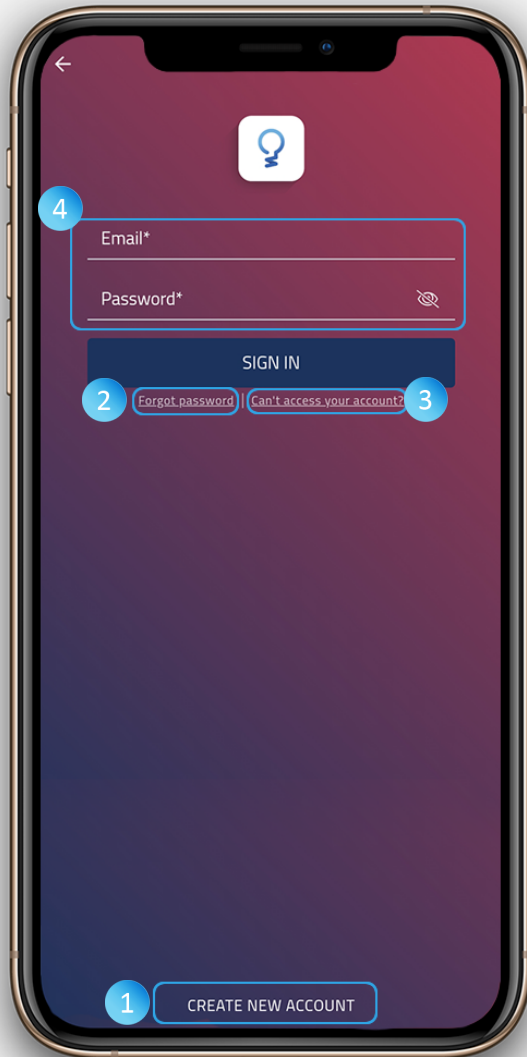
DESKTOP | LANDING PAGE

The **EASI MODE** home page have 5 main navigations:

1. Hamburger Menu
2. Library
3. My Workspace
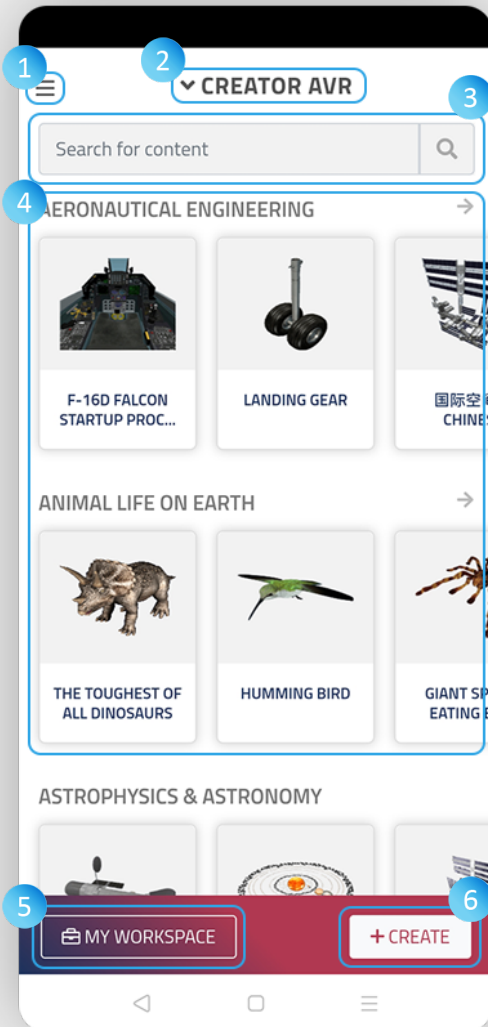4. Create Lesson
5. Profile Menu

MOBILE LOGIN

You can also access AVR Platform using your smart phone – either as an individual user for evaluation purpose or as a registered institute user (provided you've been assigned license by your institute)

1. If you do not have a registered email ID, you can Create New Account and then login to Platform

2. You can reset your Password, using **Forgot Password** option

3. If you have issues logging in, you can reach out to our Support team by clicking **Can't access your account?** option

4. If you are an already registered user or you've been assigned by your institute, you can login using your registered email ID & Password
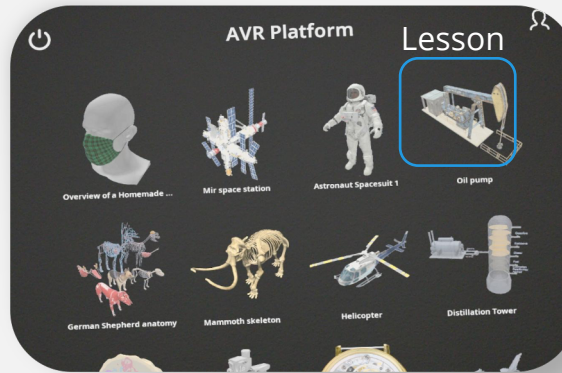
MOBILE | LANDING PAGE

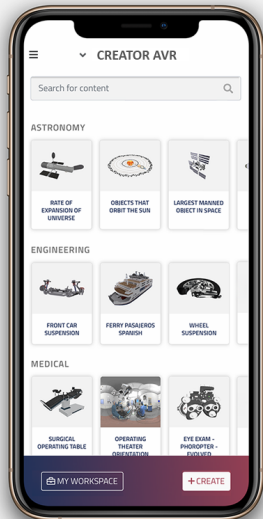This is the **home page** after a successful login to the creator AVR mobile app.

1. Hamburger Menu
2. Institute
3. Search
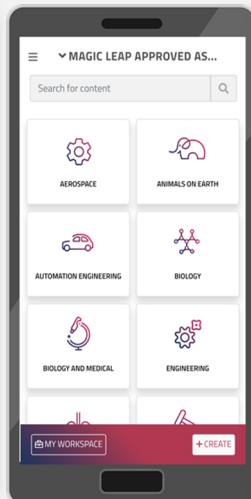4. Content Area
5. My Workspace
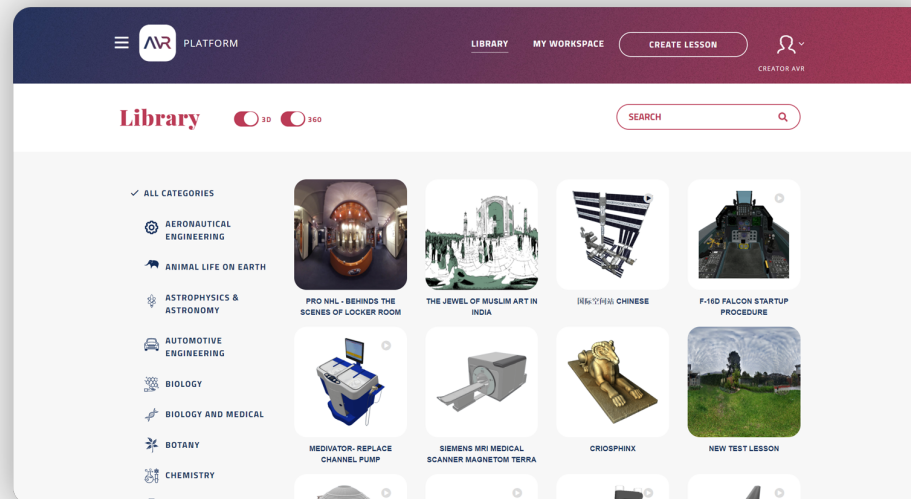6. Create

AVR FOR MAGIC LEAP (AVR ML)

AVR ML provides your lessons from the AVR Platform on your Magic Leap device

iOS

Android

Windows

It allows you to **Play** and **Manage** your Lessons in

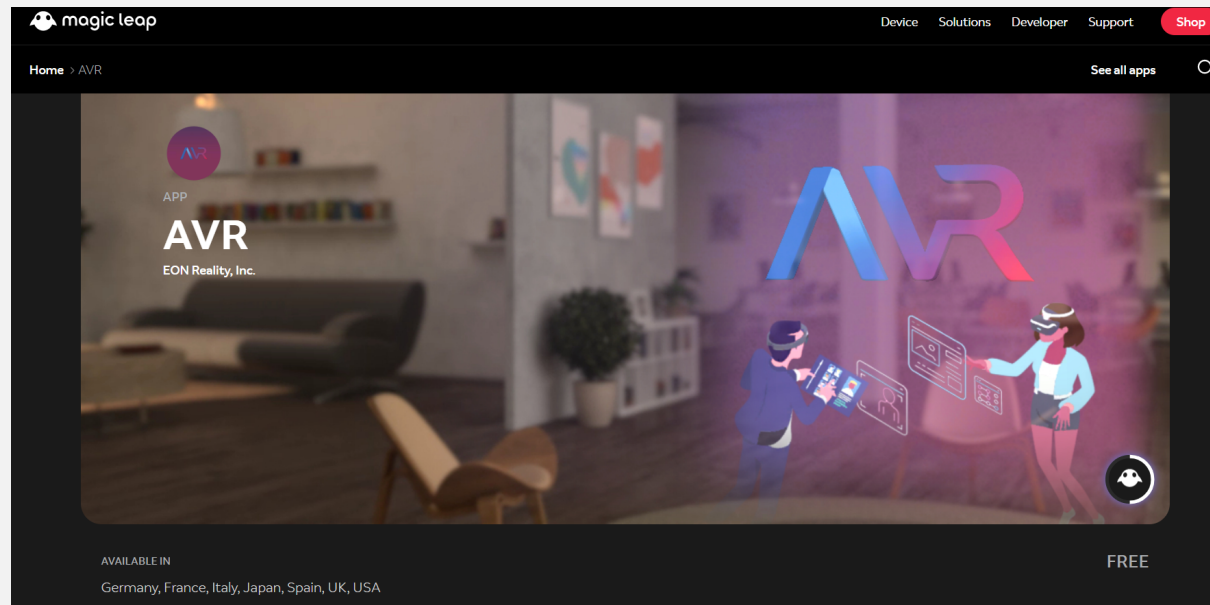- Mobile - AR
- Mobile - VR
- Windows

AVR ML - APP INFORMATION

AVR ML can be found on Magic Leap World (Magic Leap's app store) in Germany, France, Italy, Japan, Spain, UK and USA.

https://world.magicleap.com/en-us/details/com.eonreality.lumin.avr.public

NOTE If you can't find AVR on Magic Leap World, please check to see if the proper country is set on your account.
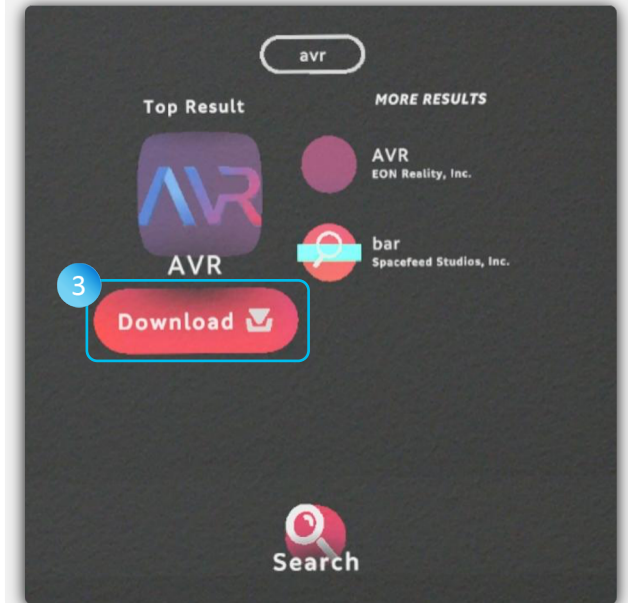https://www.magicleap.care/hc/en-us/articles/360030876972-Can-t-See-Apps-in-Magic-Leap-World-Set-Home-Country-

AVR ML - APP INSTALLATION

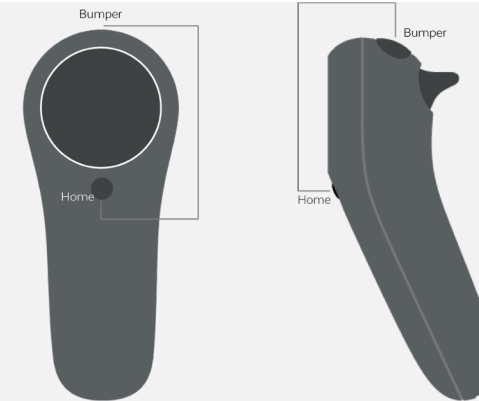AVR ML can be searched with the keyword '**avr**' from Search 🔍 in Magic Leap World.

1. Click Search button

2. Type and search 'avr'

3. Download and install 'avr'

AVR ML - DEVICE WORKING CONDITIONS

Magic Leap device must be connected to Wi-Fi in order to access lessons on AVR platform.

Bumper

Home

Bumper

Home

- Enough battery charge

- Single Controller

Indoor use recommended

TIP Magic Leap 1 implements a near clipping plane to minimize occurrences of discomfort for users that can occur when they focus on virtual content that is too close to them.
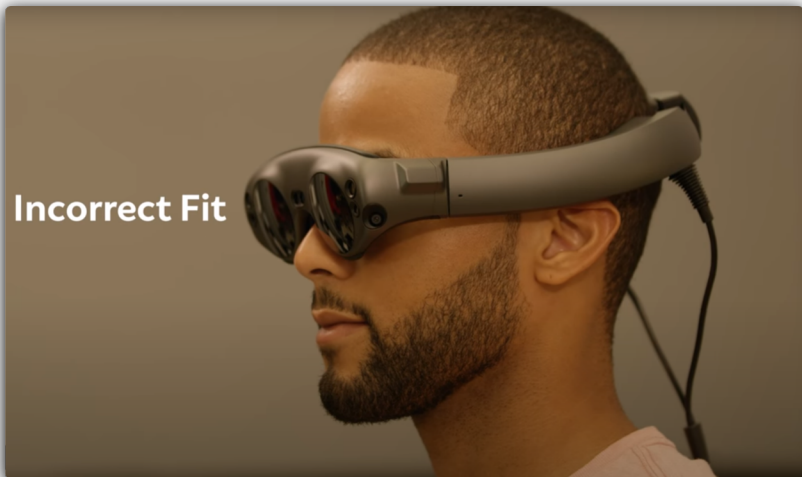Currently this near clipping plane is set at 37cm (14.57 inches) from the device.

WEAR IT RIGHT (ML DEVICE)

Proper Fit

Incorrect Fit

Please wear the glasses properly in order to avoid insufficient field of view experience.

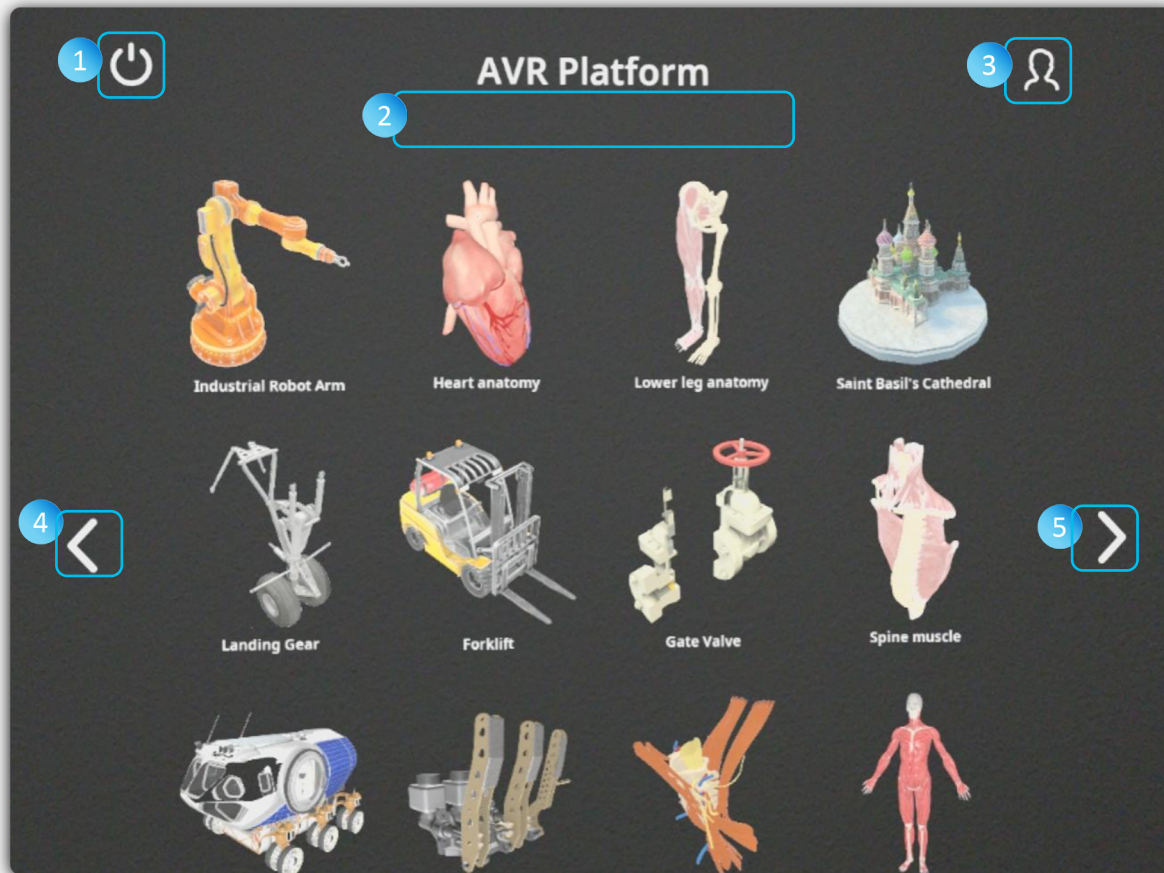**Keep in mind that it shouldn't rest on your ears.**

AVR ML LOBBY | FREEMIUM ACCESS TO LESSONS

Browse and launch from your institute's lesson list on Creator AVR in the lobby. AVR ML provides several free lessons for first-time users without AVR authentication.

1. Exit button

2. Institute name (if signed in)

3. Sign-in button

4. Previous list button

5. Next list button
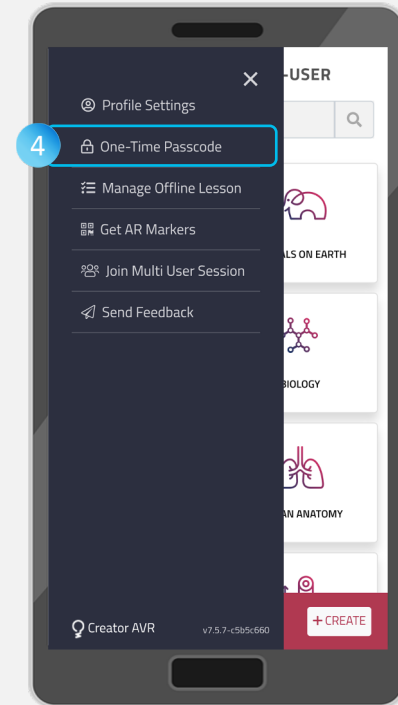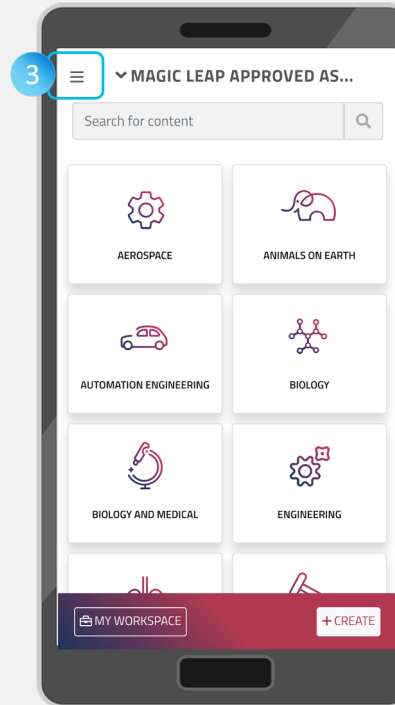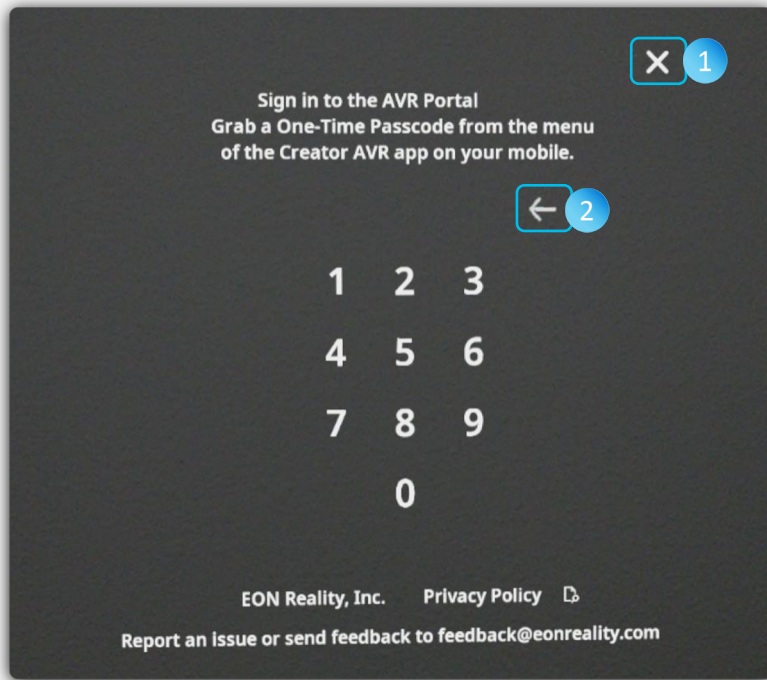
TIP When you click the Controller Home button, the lobby moves to the direction you're looking.
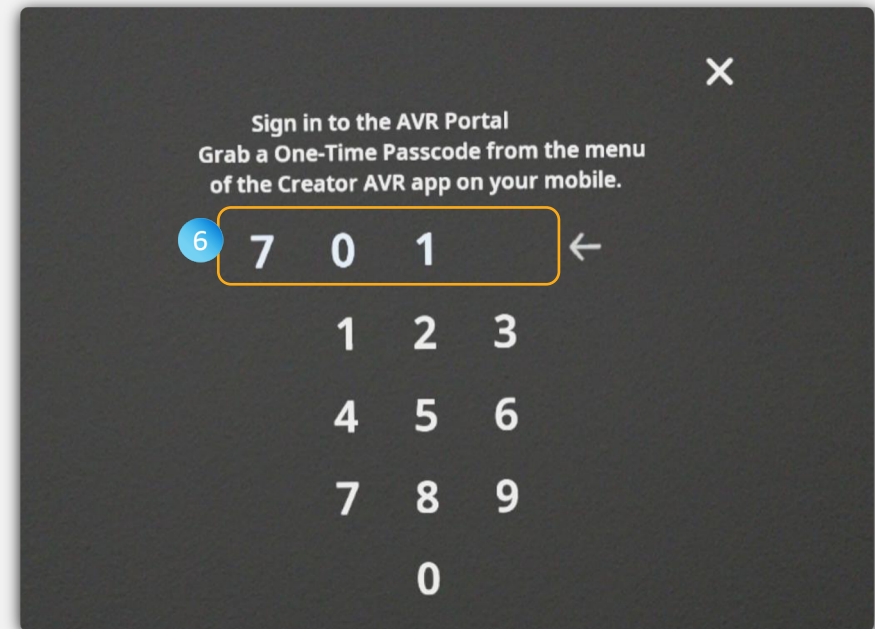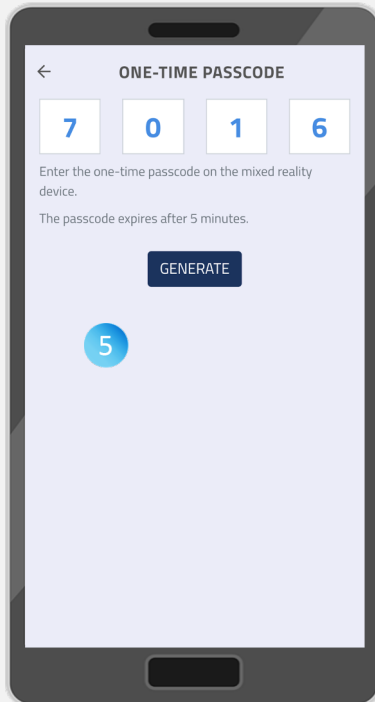
SIGN IN | LOBBY

If you want to access the lessons of your institute, click the Sign-in button 👤
and fill in the 4-digit code from the Creator AVR mobile app.

1. Go back to lobby main and load free lessons
2. Delete a number
3. Main dropdown menu
4. One-Time Passcode menu

1 2 3

SIGN IN | LOBBY

ONE-TIME PASSCODE

7 0 1 6

Enter the one-time passcode on the mixed reality device.

The passcode expires after 5 minutes.

GENERATE

Sign in to the AVR Portal
Grab a One-Time Passcode from the menu
of the Creator AVR app on your mobile.

7 0 1 ←

1 2 3
4 5 6
7 8 9
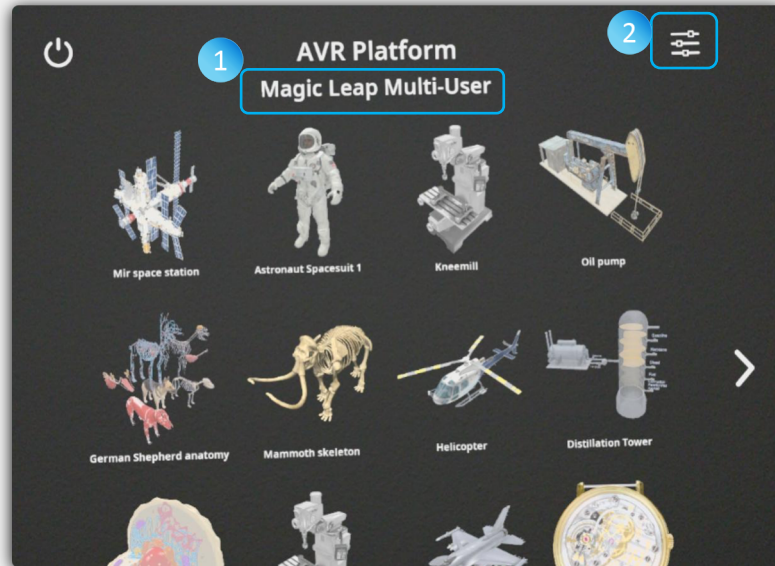0

One-Time Passcode should be generated automatically.

5. The code expires after 5 minutes. A new passcode can be created by clicking 'GENERATE' button
6. Use the One-Time Passcode on AVR ML

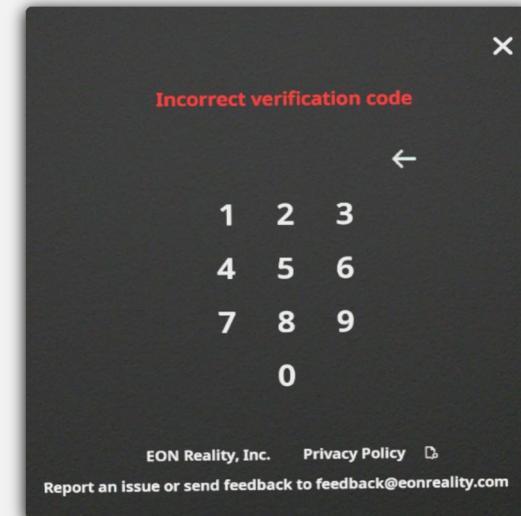1 2 3

SIGN IN | LOBBY

a. After successful Sign-in

Once sign-in is successful, you can see the following with the lesson list of the selected institute

1. Institute name
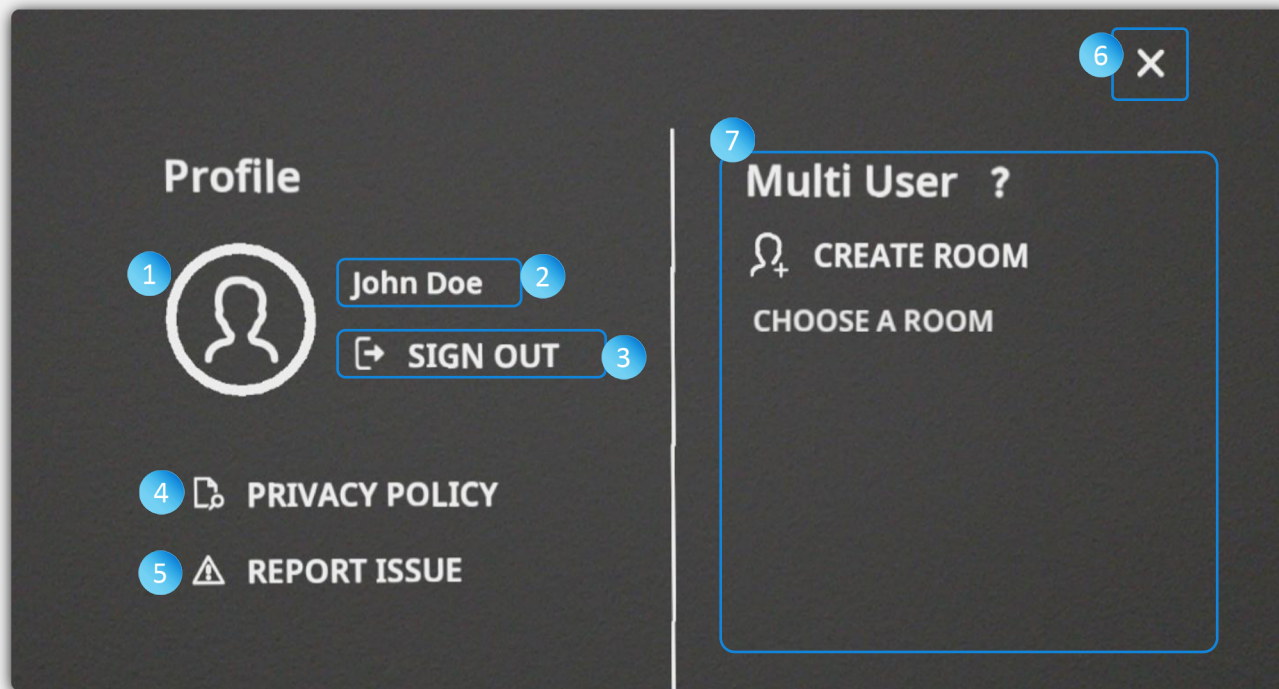
2. Main Menu button

b. After incorrect Sign-in

Please re-check the One-Time Passcode on your Creator AVR mobile app and try again.

NOTE One-Time Passcode expires after 5 minutes. So please try to generate it again after that.

1 2 3

LOBBY MENU | LOBBY

User Profile and Multi-user connection can be managed from lobby menu within the main menu.
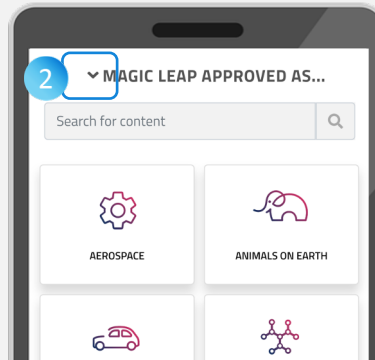
1. User Photo
2. Username
3. Sign-out button
4. Privacy Policy button
5. Report Issue button
6. Close and go back to lobby
7. Multi-user related UI (will be covered in Multi-user section)

SWITCH INSTITUTE | LOBBY
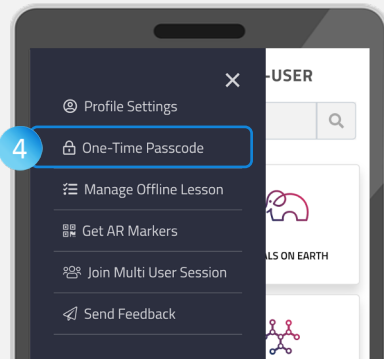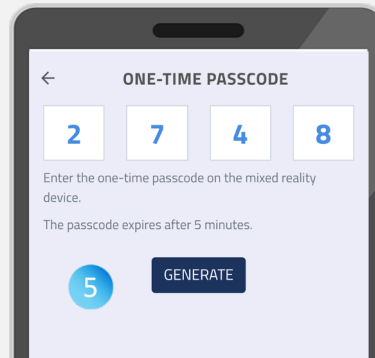

1. Sign Out

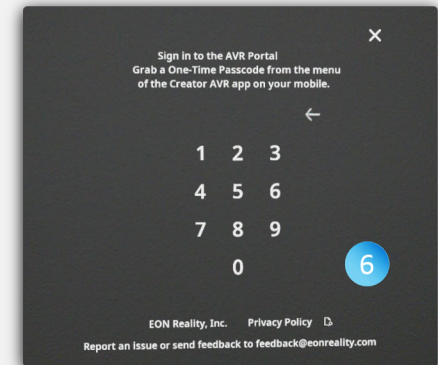
2. Expand Institute list

3. Switch Institute

4. Go to One-Time Passcode

5. Get a new code

6. Sign-in with new code

SWITCH ACCOUNT | LOBBY

If a Magic Leap device is to be shared with other users, please sign out before handing it over so the other user can use the same Magic Leap device with their own code obtained from Creator AVR mobile app.
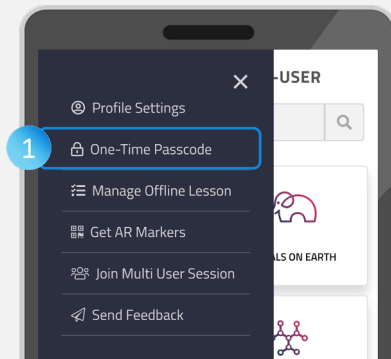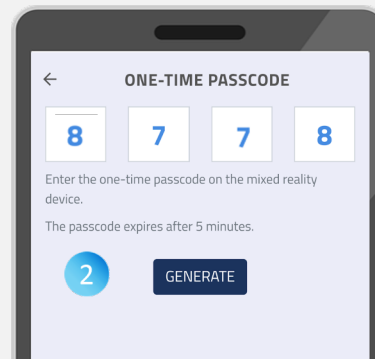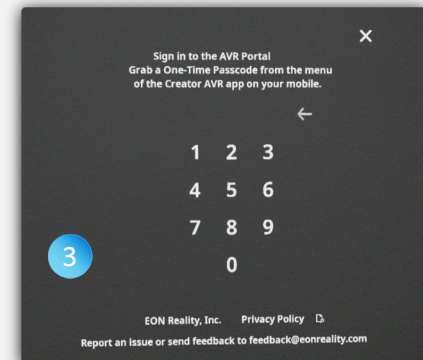
User A

Profile
John Doe
1 ⊡ SIGN OUT

▭ PRIVACY POLICY

⚠ REPORT ISSUE

1. Sign Out

User B

✕
⊙ Profile Settings
1 🔒 One-Time Passcode
☰ Manage Offline Lesson
▦ Get AR Markers
👥 Join Multi User Session
✈ Send Feedback

1. Go to One-Time Passcode

← ONE-TIME PASSCODE
8 7 7 8
Enter the one-time passcode on the mixed reality device.
The passcode expires after 5 minutes.
2 GENERATE

2. Get a new OTP

Sign in to the AVR Portal
Grab a One-Time Passcode from the menu of the Creator AVR app on your mobile.
←
1 2 3
4 5 6
7 8 9
3 0
EON Reality, Inc.   Privacy Policy
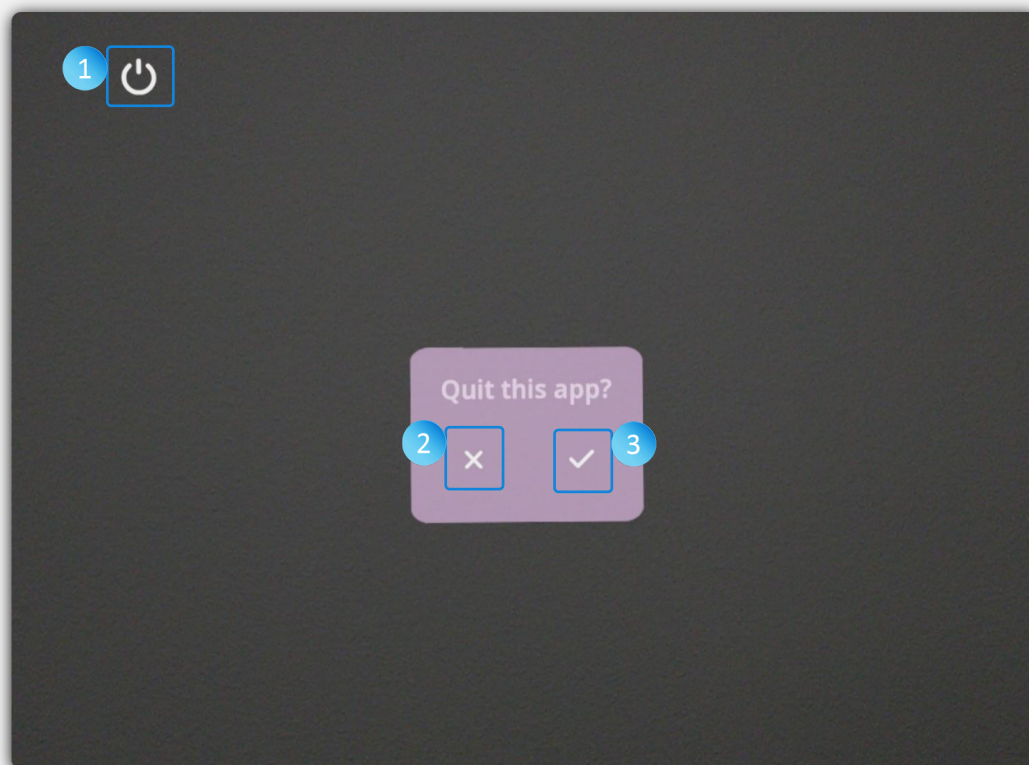Report an issue or send feedback to feedback@eonreality.com

3. Sign-in with the new OTP
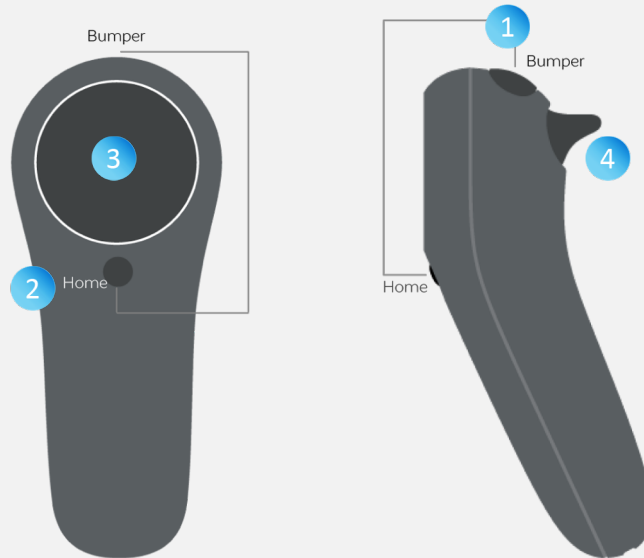
QUIT APP | LOBBY

AVR ML can be terminated by clicking Quit App button

1. Quit App button
2. Cancel and go back to lobby main
3. Confirm to quit

AVR ML CONTROLLER INTERACTIONS

The Magic Leap Controller has several inputs.

1. Bumper
2. Home
3. Touchpad
4. Trigger

TIP If the controller doesn't respond, you can turn it off by holding Home + Trigger for a couple of seconds
Taking a Photo or Video can be done by pressing Home + Bumper at the same time

CONTROLLER INTERACTIONS | IN LESSON

No	Interactions	Buttons	How
1	Move Object	Trigger	Point an object and hold Trigger Move it and release Trigger
2	Move Object Group	Bottom of Touchpad	Touch on Bottom of Touchpad Move the all the objects and release
3	Scale Up/Down	Left/Right of Touchpad	Touch on Right of Touchpad to scale up Touch on Left of Touchpad to scale down
4	Zoom Down Sub-Group	Bumper	Point an object and press Bumper
5	Zoom Up Parent-Group	Home	Press Home
6	Play Audio Annotation	Trigger	Point audio annotation and press Trigger
7	Play Video Annotation	Trigger	Point video annotation and press Trigger
8	Place cutting plane	Trigger	While activating cutting plane, move Controller Press Trigger where you want to place cutting plane

TIP

Available interactions per use case will be overlapped on your Controller

NOTE Pressing Home for 5 secs will result in suspending AVR ML and move to Magic Leap home. (Not recommended from the app)

RADIAL MENU INTERACTIONS

No	Interactions	Buttons	How
1	Place Radial Menu	Trigger	Direct Controller Press Home button where you want to place Radial Menu **NOTE** Radial Menu will be placed 1 meter from Controller
2	Click each button	Trigger	Press Trigger on a button as you want

1. Xray
2. Explode *
3. Annotation
4. Animation *
5. Recorded Lesson *
6. Reset (Initialize lesson)
7. Cross Section *
8. Multi-user
9. Home

NOTE   Buttons will be disabled if the lesson doesn't contain relevant data or 3d object part is not valid for a function.
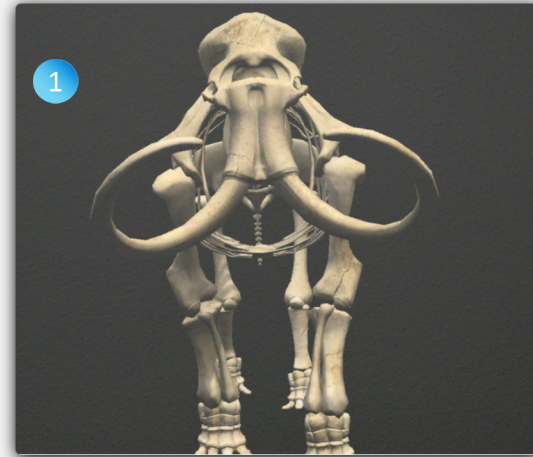
RADIAL MENU INTERACTIONS | LESSON | XRAY
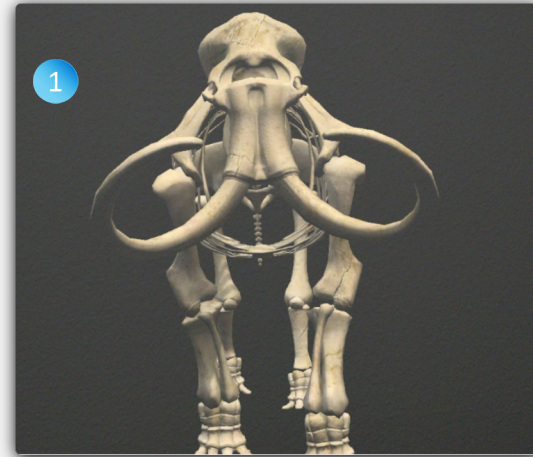
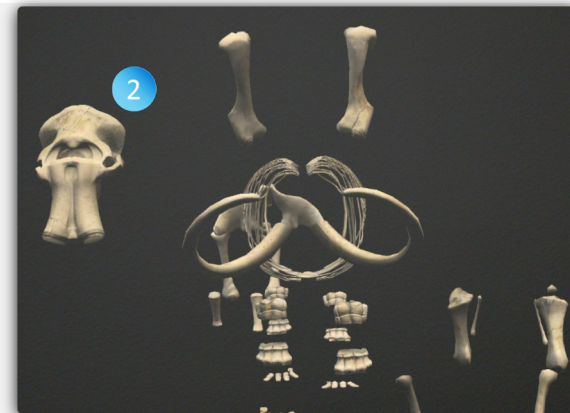1. XRay Off
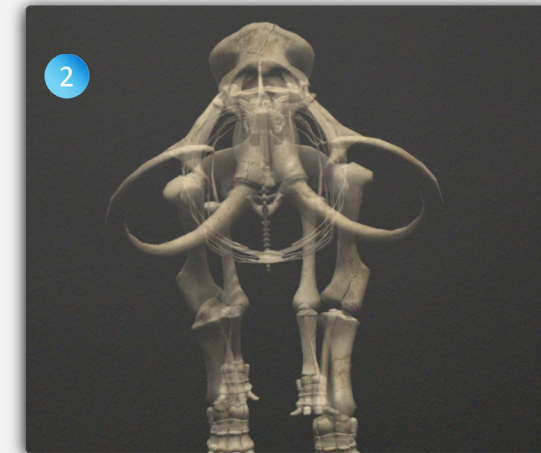
XRAY

2. XRay On

RADIAL MENU INTERACTIONS | LESSON | EXPLODE
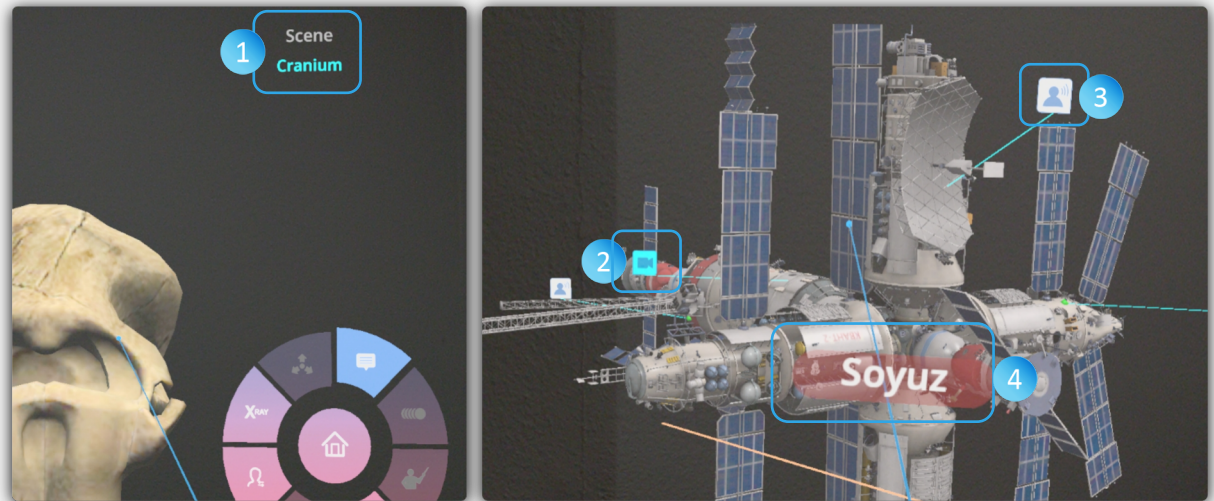

EXPLODE

1. Explode Off

2. Explode On

RADIAL MENU INTERACTIONS | LESSON | ANNOTATIONS
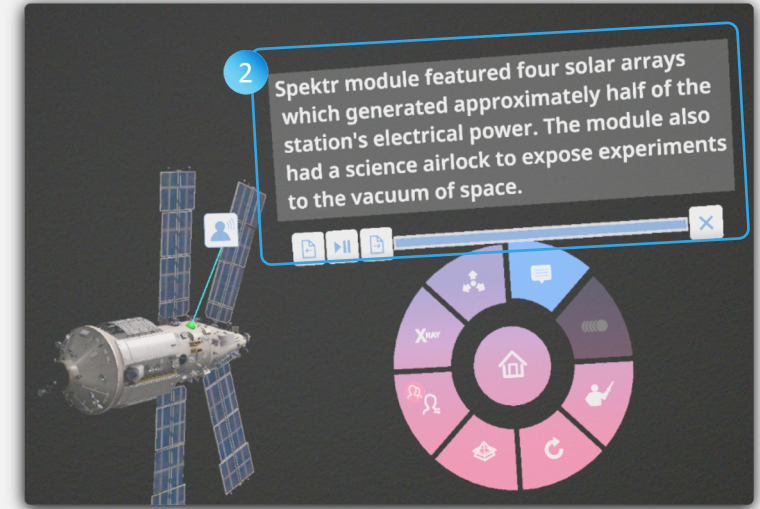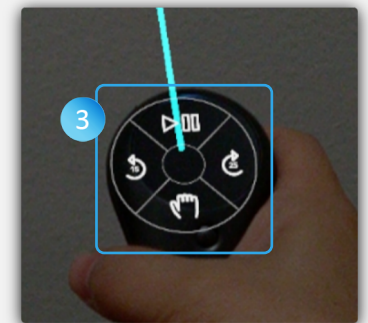

ANNOTATIONS

1. Model Hierarchy

2. Video Annotation

3. Audio Annotation with text

4. Name of the part pointed at by laser beam

RADIAL MENU INTERACTIONS | LESSON | ANNOTATIONS

1. Video Annotation   This is displayed above Radial Menu

2. Audio Annotation with text   This is displayed above Radial Menu
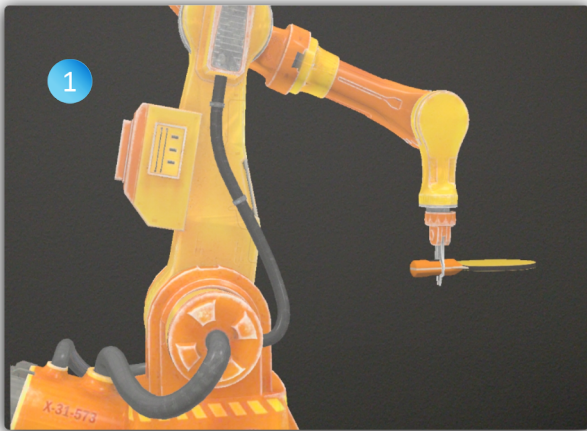
3. Interactions on Touchpad for Audio or Video Annotation
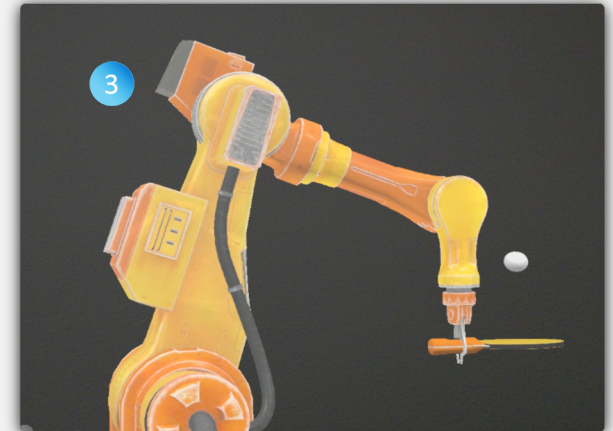
RADIAL MENU INTERACTIONS | LESSON | ANIMATIONS

ANIMATION

NOTE

Animation runs in loop mode so it can be stopped by clicking Animation button again.
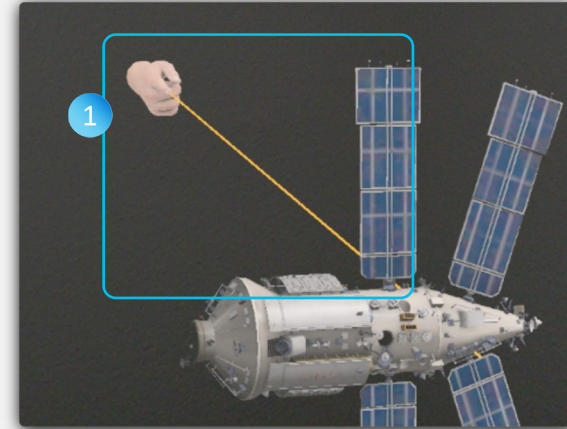
1. Animation Off

2-3. Animation On

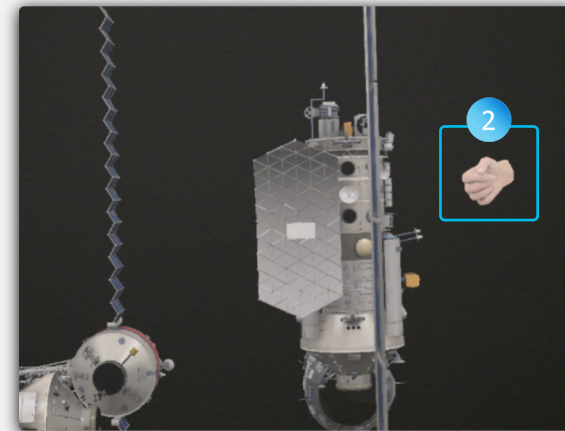# RADIAL MENU INTERACTIONS | RECORDED LESSON

LESSON RECORDING

1. Hand with laser beam pointing target object

2. Hand without pointing object

NOTE

Recorded Teaching is managed from Creator AVR Desktop or Mobile app.

RADIAL MENU INTERACTIONS | RESET LESSON
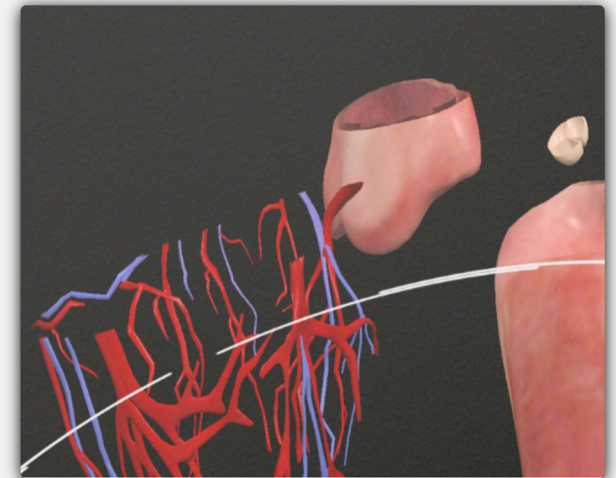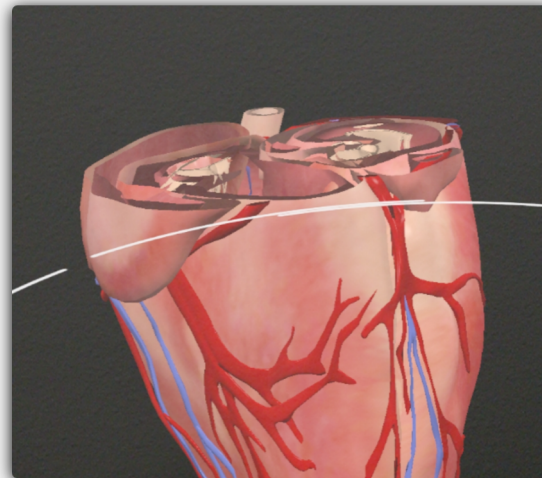
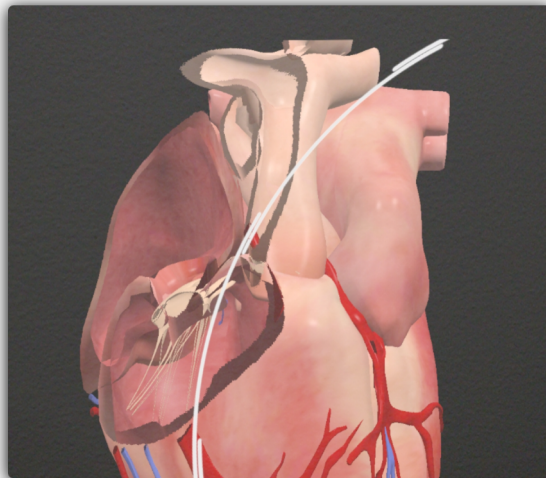Reset all the manipulations of a lesson.

- Turn off XRay
- Turn off Explode
- Turn off Annotation
- Reset scale and position of the objects

RADIAL MENU INTERACTIONS | CROSS SECTION

CROSS SECTION

NOTE

When you click 'Cross Section' button, cutting plane is activated
You can move the cutting plane using Controller and press Trigger to lock the cutting plane at a certain point
Cross Section is disabled by pressing Trigger again

RADIAL MENU INTERACTIONS |MULTI - USER

Multi-user mode

Single-user mode

1. Multi-user indicator ⚇ is on when you
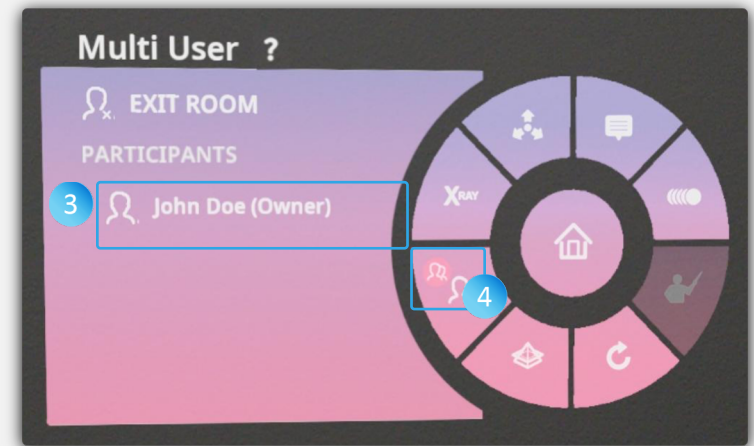
- Create a room

- Join a room

1 2 3

RADIAL MENU INTERACTIONS |MULTI - USER

Single-User Mode after Sign-In

Multi-User Mode after Sign-In

1. Click to create a room
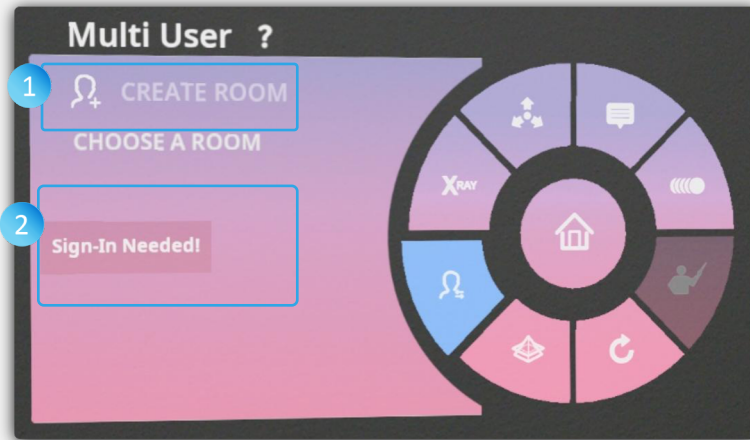2. Click room list to join it if available

3. You created a room
4. Multi-user indicator is on
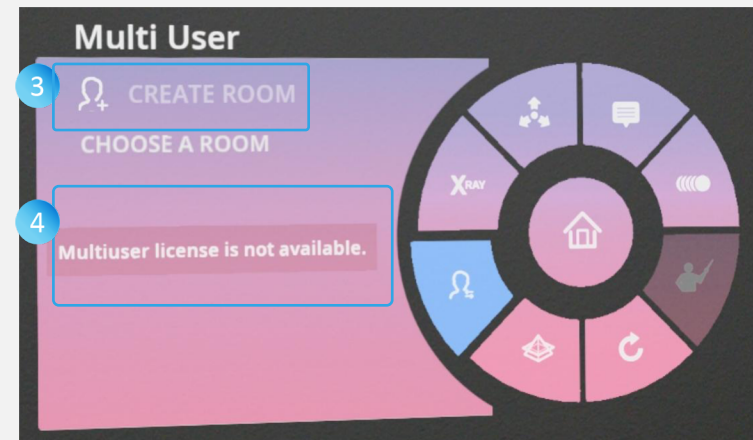
NOTE   The lesson will be reset if you create a room.

1 2 3

RADIAL MENU INTERACTIONS |MULTI - USER

Single-User Mode before Sign-In

Single-User Mode without a license

1. Can not create or join a room
2. Message : "Sign-in Needed!"

1. Can not create or join a room
2. Message : "Multi-user license is not available"

NOTE Action : You need to sign in. Please go to lobby and sign in.

NOTE Action : Please sign in with a new code from institute supporting multi-user.

1 2 3

37

AVR ML | MULTI-USER | OVERVIEW

AVR FOR MAGIC LEAP supports multi-user collaboration based on the following conditions.

- User must sign in first in order to create or join a room

- A room is available only to the members in the same institute

Lesson Collaboration

NOTE When you click 'Cross Section' button, cutting plane is activated
You can move the cutting plane using Controller and press Trigger to lock the cutting plane at a certain point
Cross Section is disabled by pressing Trigger again

OVERVIEW | MULTI-USER | SIGN IN FIRST
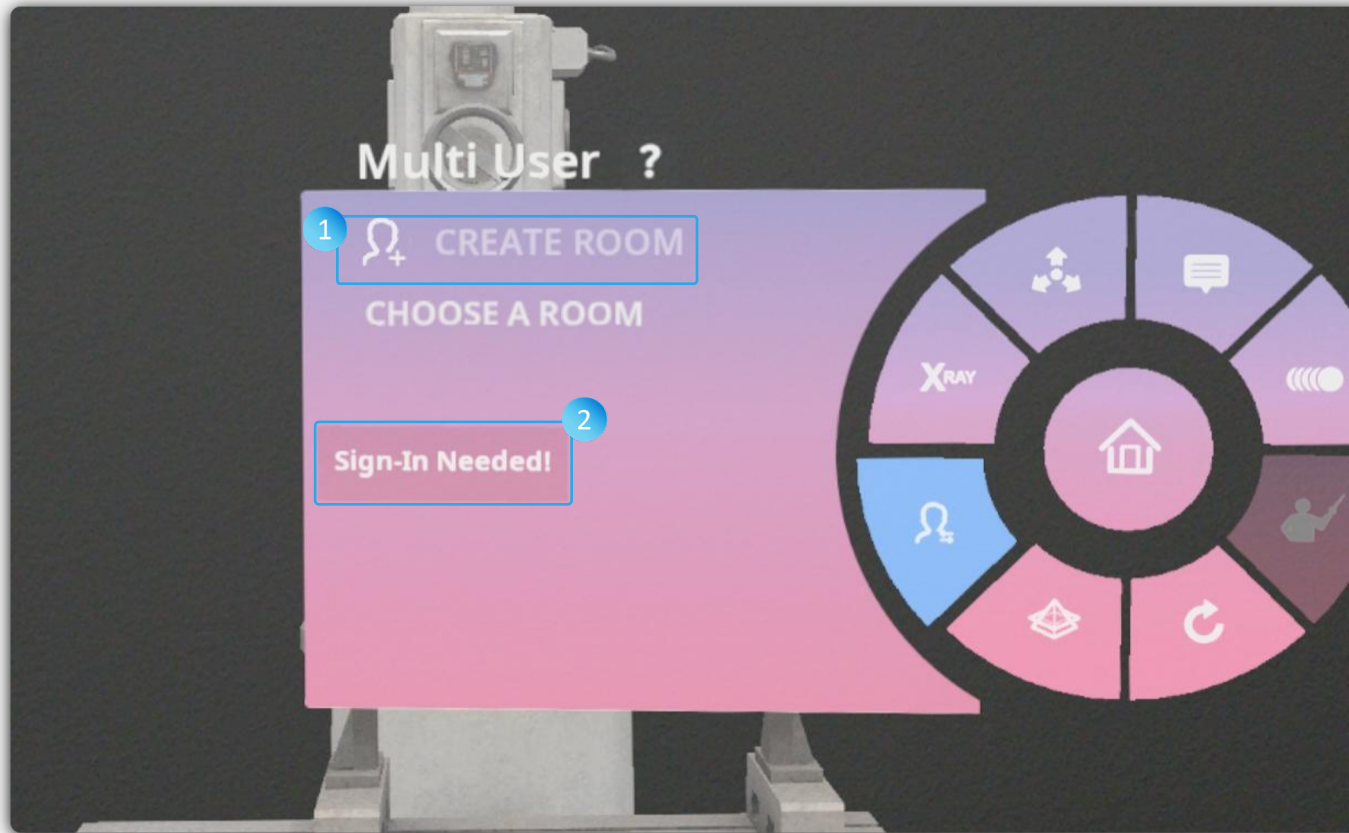
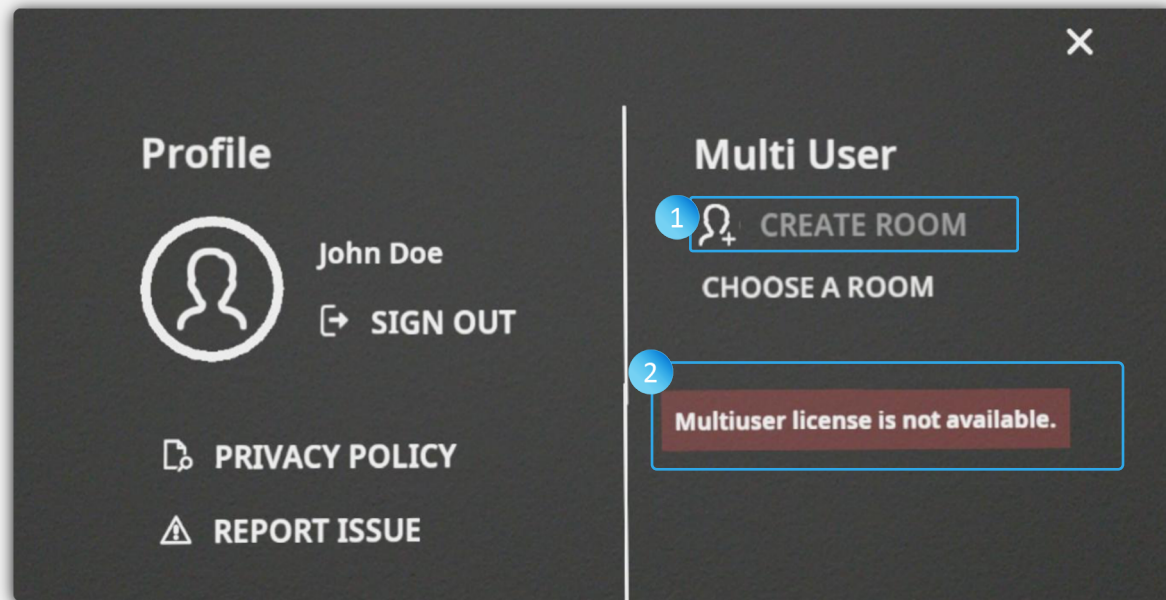Multi-user features are not available until you sign in

1. Create Room : disabled
2. Error message : "Sign-in Needed"

NOTE Please go to lobby and click 👤 to sign-in with One-Time Passcode

OVERVIEW | MULTI-USER | INSTITUTE WITH NO LICENSE FOR MULTI-USER

Multi-user features are not available if you sign in from an Institute without an appropriate license for multi-user

1. Create Room : disabled

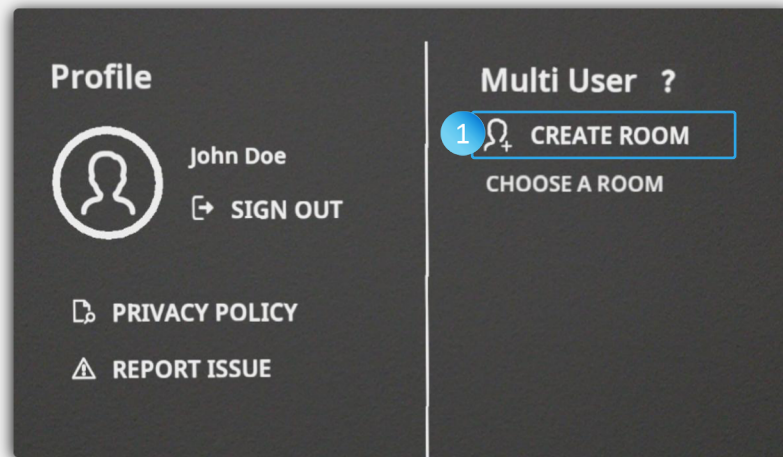2. Error message : "Multi-user license is not available"

NOTE Please go to lobby and click [icon] and sign out. Sign in with OTP of another institute with multi-user license.
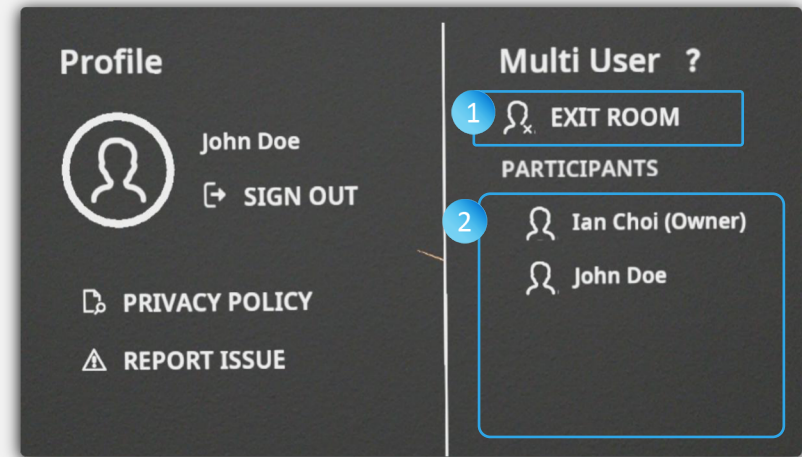
CREATE A ROOM | LOBBY | MULTI-USER

1. You can create a room which can be accessible from others in the same institute.
2. You can create a room at lobby or inside of a lesson

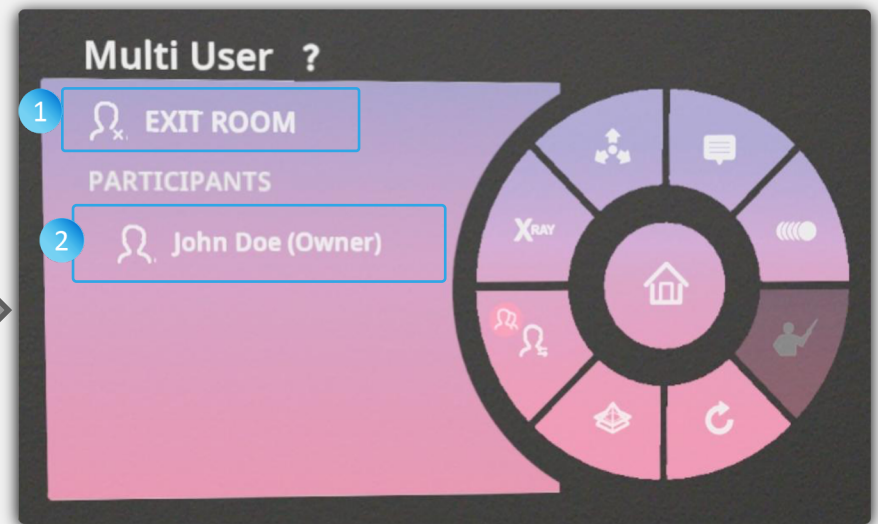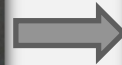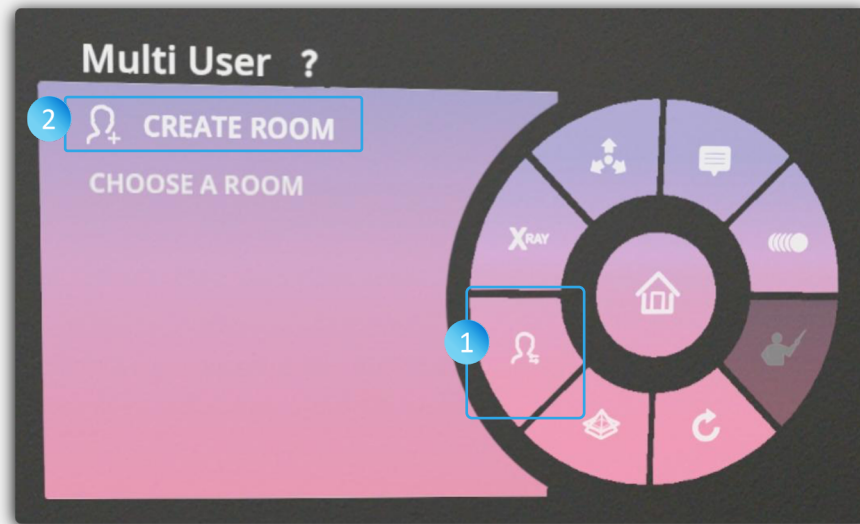**BEFORE** CREATING A ROOM

1. Click "CREATE ROOM" button

AFTER CREATING A ROOM

1. Exit Room button
2. You are the Owner of the room and other participants will be displayed below

CREATE A ROOM | MULTI-USER | INSIDE LESSON

BEFORE CREATING A ROOM

1. Click Multi-user button of Radial Menu
2. Click "CREATE ROOM" button
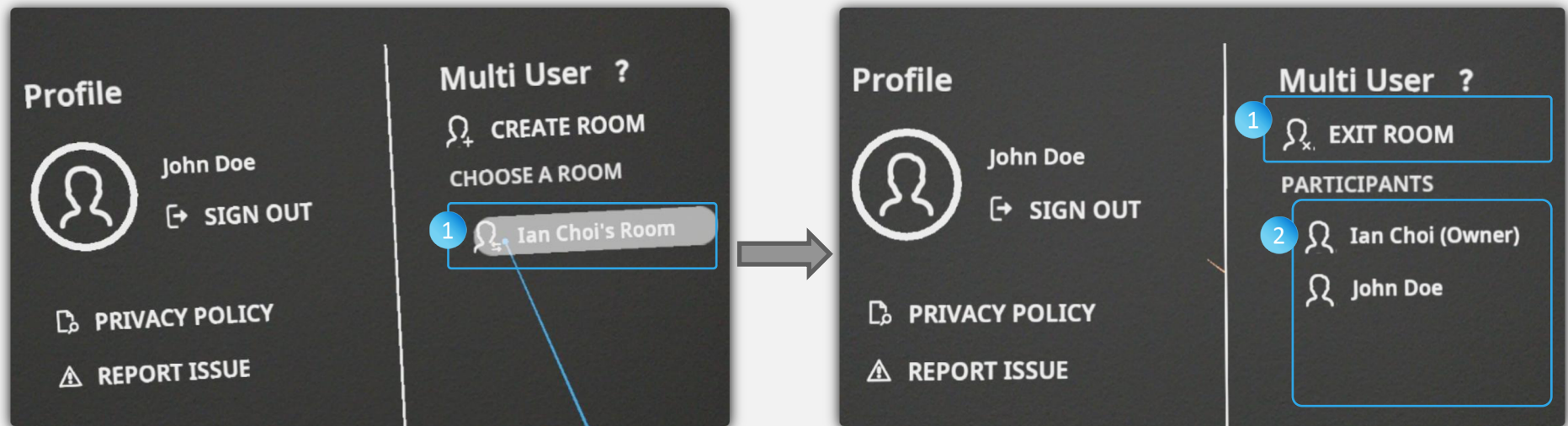
AFTER CREATING A ROOM

1. Exit Room button
2. You are the Owner of the room

JOIN ROOM | MULTI USER

1. You can join a room which has been created by a member in the same institute.
2. You can join a room at lobby or inside a lesson
3. Each room is named with the owner's name

BEFORE JOINING A ROOM

1. List of room in the same institute. Click one of them to join
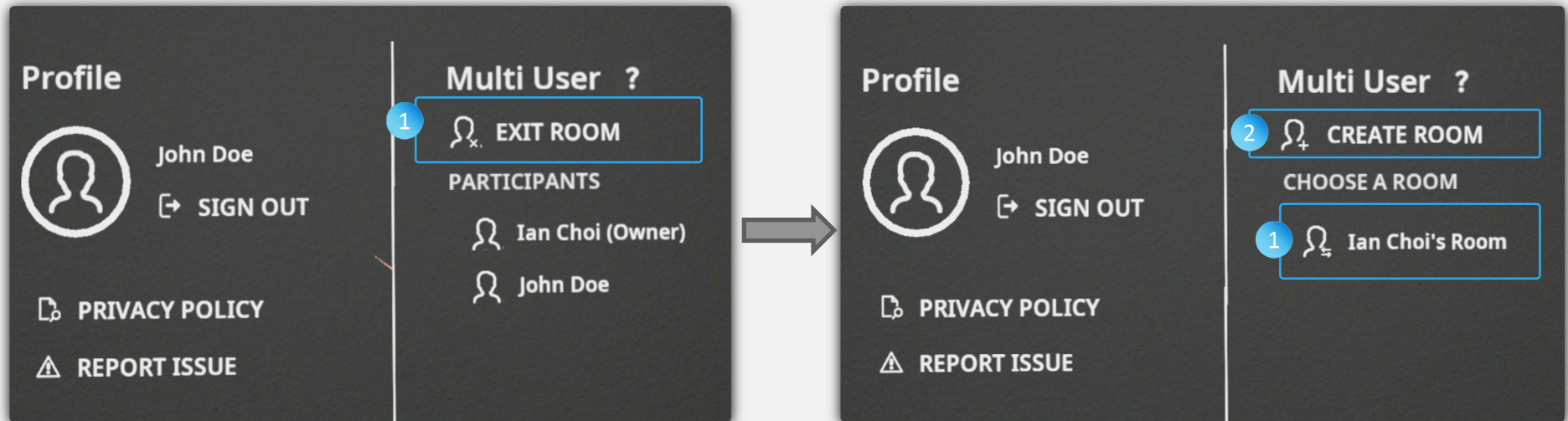
AFTER JOINING A ROOM

1. Exit Room button
2. List of participants in a room

EXIT ROOM | MULTIUSER | PARTICIPANT

1. You can exit a room at lobby or inside a lesson
2. If room owner exits a room, the room is closed so participants also leave from the room
3. If a participant exits a room, this room still exists unit the room owner exit the room.

BEFORE EXITING A ROOM

(John Doe) is in (Ian Choi)'s room.
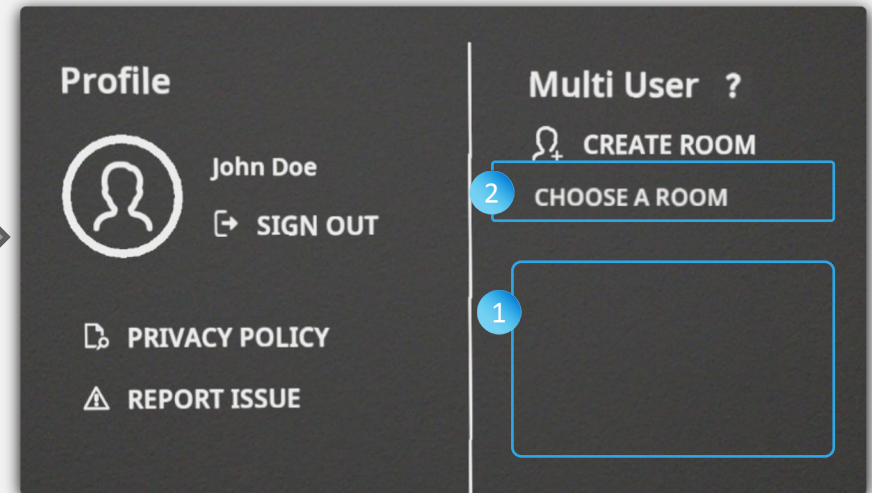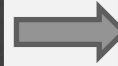
1. Exit (Ian Choi)'s room

AFTER EXITING A ROOM

(Ian Choi)'s room still exist

(John Doe) can create a room

EXIT ROOM | MULTIUSER | OWNER

BEFORE EXITING A ROOM

(John Doe) created a room and (Ian Choi) joined

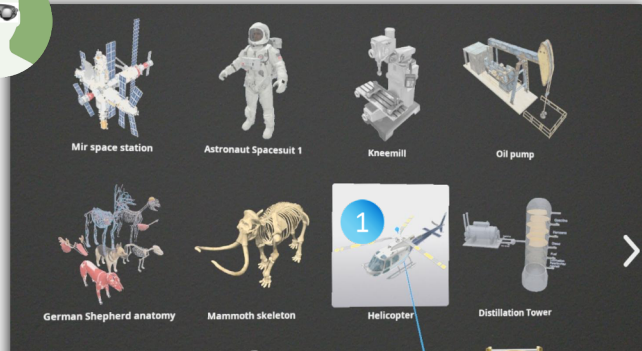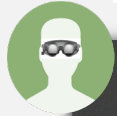1. Exit the room

AFTER EXITING A ROOM

1. (John Doe)'s room is closed and there is no room available
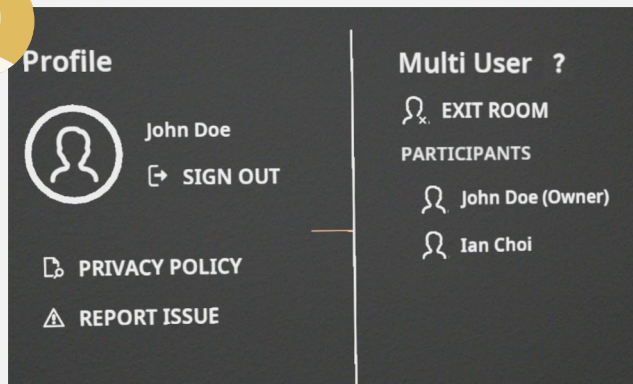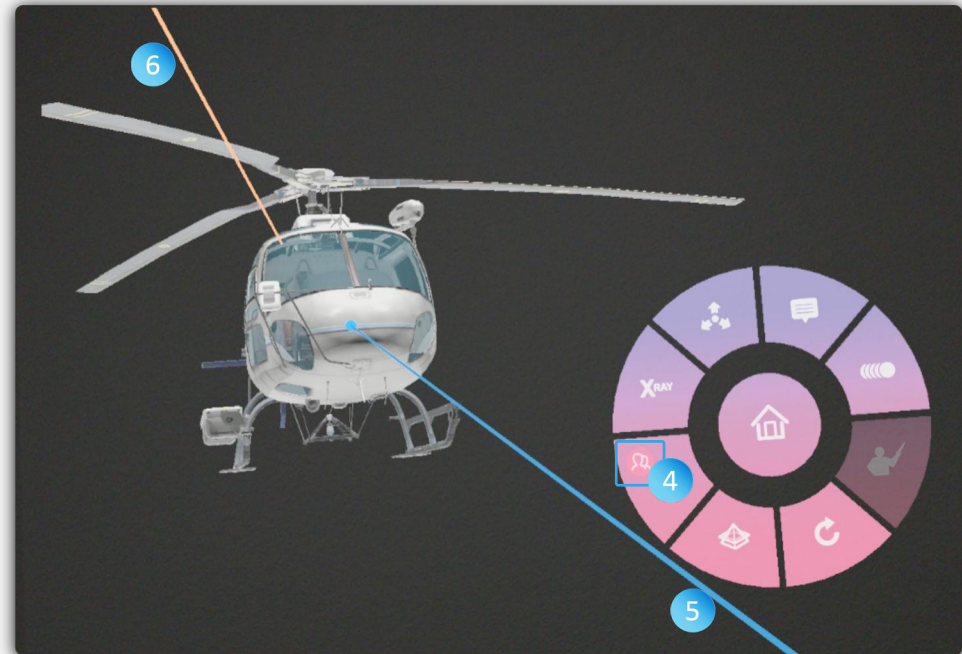2. (John Doe) can create your room

PLAY LESSON | MULTIUSER | LAUNCH A LESSON

Any user of a room can launch a lesson. Once a room is selected, it triggers other users to launch the same lesson.

User #2 at lobby menu

User #1 at lobby menu

1. Select a lesson : Helicopter
2. Launch the lesson
3. Get event to launch the lesson

4. Multiuser Indicator is on
5. Your laser beam (BLUE)
6. Other's laser beam (ORANGE)

PLAY LESSON | MULTIUSER | SYNCHRONIZE LESSON POSITION

Sync Lesson Origin At a Same Local Space

OWNER — Place the controller anywhere, and hold on BUMPER for 5 sec
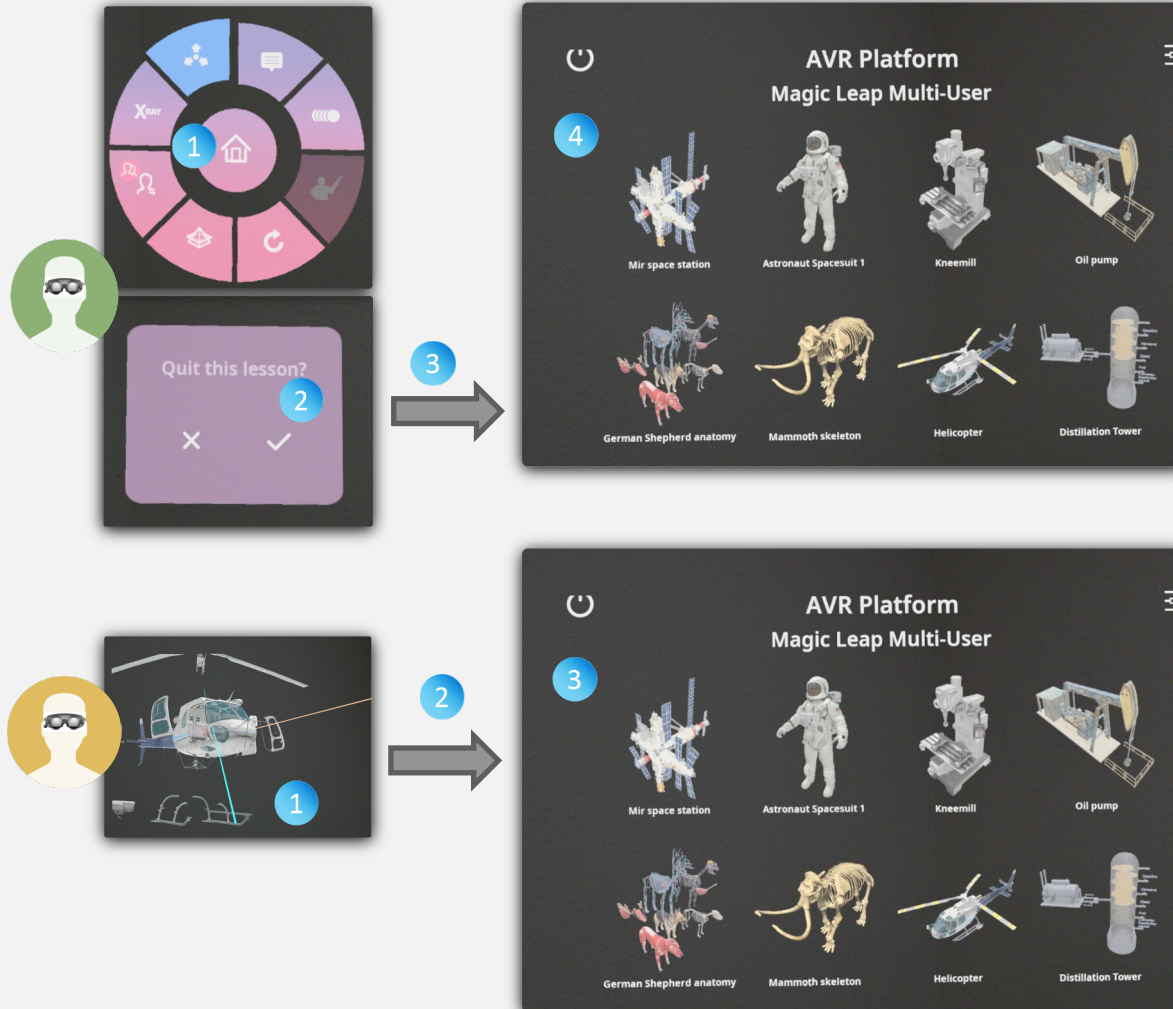
PARTICIPANTS — Place the controller at the same position, and hold on BUMPER for 5 sec

SWITCH LESSON | MULTI USER

Any user of a room can leave from a lesson and select another lesson to collaborate.

1. Click Home button
2. Confirm to quit lesson
3. Quit lesson
4. Go to lobby

1. Playing with the lesson
2. Get event and quit lesson
3. Go to lobby