Q1
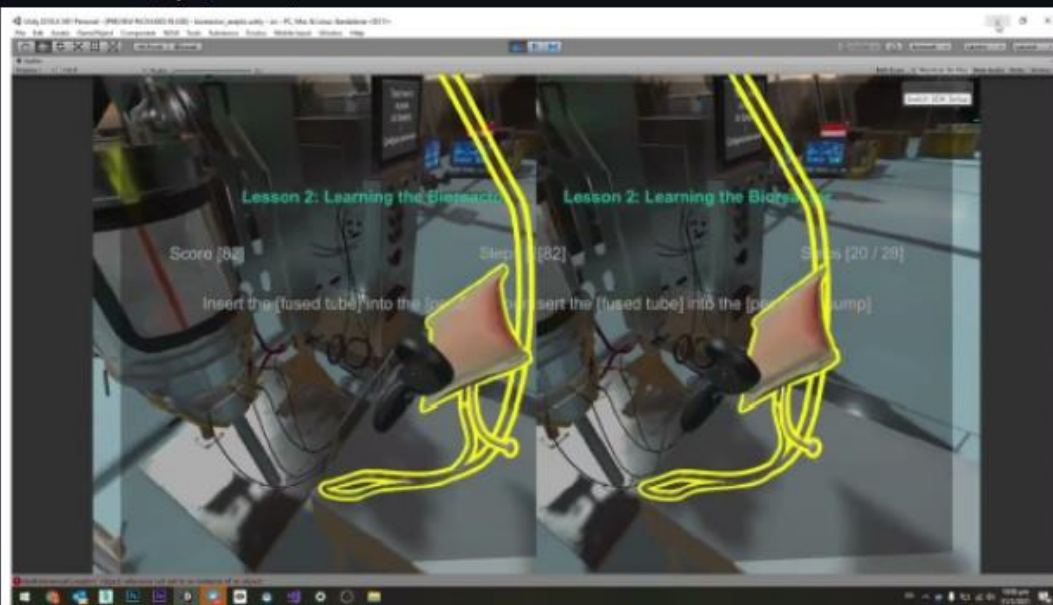
Which interaction mechanic is commonly deemed to be the most important in immersive AR, VR and MR experiences?

- Viewport Control
- Hand Gestures
- Body (Excluding hands gestures)
- All mechanics are equally important

▼ Answer
Viewport Control

VR Bioreactor Training

Q2

In the VR Bioreactor Training system, what interaction mechanics were implemented?

- Viewport Control
- Hand Gestures
- Body (Excluding hands gestures)
- All of the above

▼ Answer
Viewport Control
Hand Gestures

Q3

In the VR Bioreactor Training system, is viewport control a passive or active interaction mechanics?

- Passive
- Active

▼ Answer

Passive

Q4

In the VR Bioreactor Training system, are hand gestures a passive or active interaction mechanic?

- Passive
- Active

▼ Answer

Active

360 Video Lecture

Q5

In the 360 Video Lecture, what interaction mechanics were implemented?

- Viewport Control
- Hand Gestures
- Body (Excluding hands gestures)
- All of the above

▼ Answer
Viewport Control
Hand Gestures

Q6

In the 360 Video Lecture, is viewport control a passive or active interaction mechanics?

- Passive
- Active

▼ Answer
Passive
Active

Q7

In the 360 Video Lecture, what form of interaction authenticity is the eye-gaze point-and-click mechanic?

- Natural interaction
- Artificial magical interaction
- Artificial augmented natural interaction

▼ Answer

Artificial augmented natural interaction

Q8

Many users tend to route their hands behind the virtual saw blade when asked to place their hands in the target position? What is the primary reason?

- Limited field of view in the VR headset affecting depth perception
- The saw blade simply looks hyper-realistic
- High embodiment via realistic hand representation and precise tracking
- Difficult in accurately perceiving the virtual saw blade's position

▼ Answer

High embodiment via realistic hand representation and precise tracking

Q9

You are tasked to build a VR application to allow kids to learn physics in a classroom. Kids will be able to throw virtual balls to hit cans placed at different distances and heights. What form of interaction authenticity is optimal for this use case?

What interaction authenticity is optimal?

- Natural interaction
- Artificial magical interaction
- Artificial augmented natural interaction

▼ Answer

Natural interaction

Q10

You are tasked to build an MR application for people to practice taking care of a virtual pet dog in their house, to aid them with the decision of actually getting a real pet dog in the future. What form of interaction authenticity is optimal for this use case?

[https://youtu.be/-d2olflEzyY]

What interaction authenticity is optimal?

- Natural interaction
- Artificial magical interaction
- Artificial augmented natural interaction

▼ Answer
Natural interaction

Q11

You are tasked to build a VR training system to train aircraft maintenance engineers to repair various aircraft parts on a virtual plane. If we are aiming for maximum immersion with natural interactions around a life-sized virtual aircraft, what device is optimal for this use case?

Which device platform is the most appropriate here?

- Desktop
- Google Cardboard
- Meta Quest 2 (Wireless)
- HTC Vive Pro (Wired)
- Microsoft Hololens

▼ Answer

Meta Quest 2 (Wireless)

Q12

You are tasked to build a VR cycling game that can be played on a real bike on a stationary trainer, that places you on equal standing against elite cycling professionals in a virtual Tour de France. If we are aiming for maximum immersion with augmented natural interactions, what device is optimal for this use case (assuming sweat is not a consideration)?

Which device platform is the most appropriate here?

- Desktop
- Google Cardboard
- Meta Quest 2 (Wireless)
- HTC Vive Pro (Wired)
- Microsoft Hololens

▼ Answer

HTC Vive Pro (Wired)

Q13

You are tasked to build a VR virtual sightseeing experience for hotel guests and the client wants to obtain feedback after each virtual trips. The client can only provide the users with Google Cardboards. What form of GUI implementation is best suited for this use case?

What form of GUI implementation is best suited for this use case?

- GUI on a virtual paper (using a virtual pen)
- GUI on a 3D plane anchored in virtual world locations
- Real-world quiz on real paper (take off HMD when interacting)

▼ Answer

GUI on a 3D plane anchored in virtual world locations
Real-world quiz on real paper (take off HMD when interacting)

Q14

You are tasked to build a VR training simulation for aircraft maintenance engineers with a quizzing system to evaluate their performance during tasks. The immersion goal is to provide realistic training for typical maintenance operations. What form of GUI implementation is best suited for this use case?

What form of GUI implementation is best suited for this use case?

- GUI on a virtual paper (using a virtual pen)
- GUI on a 3D plane anchored in virtual world locations
- Real-world quiz on real paper (take off HMD when interacting)

▼ Answer

GUI on a 3D plane anchored in virtual world locations

Q15

You are tasked to build a VR game for persons on wheelchairs to explore famous mountains in the world. What locomotion technique is best suited for this use case?

- Teleportation
- Joystick-based
- Walking-in-place (WIP) with KatVR 360 slidemill
- Walking-in-place (WIP) with HTC Vive HMD and trackers
- Tracking real movement in physical space

▼ Answer

Teleportation

Q16

You are tasked to build a VR escape room experience targetted at able-bodied users. Naturally, an escape room experience aims to provide maximum immersion from all aspects. What locomotion technique is best suited for this use case?

- Teleportation
- Joystick-based
- Walking-in-place (WIP) with KatVR 360 slidemill
- Walking-in-place (WIP) with HTC Vive HMD and trackers
- Tracking real movement in physical space

▼ Answer

Tracking real movement in physical space

Q17

As a lead developer for a new VR action-adventure game, players will engage in a series of quests across varying terrain, from dense forests to steep mountains. Movement in the game needs to be intuitive and contribute to near-realistic interactions with the environment for tasks like trekking and light stealth. To encourage sustained play without causing disorientation, what locomotion technique should you integrate into your game design?

- Teleportation
- Joystick-based
- Walking-in-place (WIP) with KatVR 360 slidemill
- Walking-in-place (WIP) with HTC Vive HMD and trackers
- Tracking real movement in physical space

▼ Answer

Walking-in-place (WIP) with HTC Vive HMD and trackers