Unit 11 - Week 4: Virtual Environments

Assignment 4

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2019-03-27, 23:59 IST.

1) Which statement describes the usage of a Wizard-of-Oz approach for iterative design correctly?

- The wizard selects from the possible system actions one after another, until the user signals his satisfaction
- In the beginning the wizard replaces much functionality and over several trials the system functionality is extended
- The user tries to reach his goal with the (simulated) system, until he found the correct way to use the system

No, the answer is incorrect.
Score: 0

Accepted Answers:
- In the beginning the wizard replaces much functionality and over several trials the system functionality is extended

2) Which system functionalities can be replaced by trained human in a Wizard-of-Oz testing of a multimodal system?

- Automatic speech recognition (i.e. the wizard types in the text uttered by the user)
- Distance measurement (i.e. the wizard types in the distance between the eyes of the user)
- Emotion recognition (the wizard selects the current basic emotion of the user on the basis of his face and voice)
- The wizard copies and pastes automatically recognized text to search appropriate results in a database

No, the answer is incorrect.
Score: 0

Accepted Answers:
- Automatic speech recognition (i.e. the wizard types in the text uttered by the user)

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Hybrid approaches
ACT-R
None of those

No, the answer is incorrect.
Score: 0
Accepted Answers:
None of those

4) Which is the correct order of different stages in the Reality-Virtually 1 point Continuum?

Real Environment, Augmented Reality, Augmented Virtuality, Virtual Environment
Virtual Environment, Augmented Reality, Augmented Virtuality, Real Environment
Real Environment, Augmented Virtuality, Augmented Reality, Virtual Environment
Augmented Virtuality, Augmented Reality, Real Environment, Virtual Environment

No, the answer is incorrect.
Score: 0
Accepted Answers:
Real Environment, Augmented Reality, Augmented Virtuality, Virtual Environment

5) Based on Reality-Virtuality Continuum, select the terms that can be 1 point considered as part of Mixed Reality

Real Environment
Augmented Reality
Augmented Virtuality
Virtual Environment

No, the answer is incorrect.
Score: 0
Accepted Answers:
Augmented Reality
Augmented Virtuality

6) Select the correct statement about immersion in virtual environments 1 point

Immersion can be mental and physical
Immersion can be only mental
Immersion can be only physical

No, the answer is incorrect.
Score: 0
Accepted Answers:
Immersion can be mental and physical

7) What is a haptic example of augmented Virtuality? 1 point

Inserting a real video stream (e.g., video conferencing) into a virtual environment
Directing the smell of coffee grounds to a user when s/he passes near a virtual coffee maker in the virtual environment
Turning on a fan in front of the user when s/he approaches a spot in the virtual environment that is exposed to wind
8) A sound source is left from a person. What does that mean for the interaural time difference (ITD)?

- The ITD is zero
- The ITD is greater than zero
- The ITD is less than zero

No, the answer is incorrect.
Score: 0
Accepted Answers:
Turning on a fan in front of the user when s/he approaches a spot in the virtual environment that is exposed to wind

9) Which statements about dummy heads are true?

- Dummy heads mimic human anthropometry
- Dummy heads are used to measure head-related transfer functions
- One advantage of dummy heads is that they need only one microphone
- Recordings with dummy heads are can be realized with one loudspeaker

No, the answer is incorrect.
Score: 0
Accepted Answers:
Dummy heads mimic human anthropometry
Dummy heads are used to measure head-related transfer functions
Recordings with dummy heads are can be realized with one loudspeaker

10) Which statement about the ventriloquist effect is true?

- Appropriate visual perceptions can compensate individual deviations of head-related transfer functions
- The ventriloquist effect describes effects of temporally slightly different audio and video signals
- If a sound source moves, the perceived sound depends on whether a person can see the source or not

No, the answer is incorrect.
Score: 0
Accepted Answers:
Appropriate visual perceptions can compensate individual deviations of head-related transfer functions

11) Where can the phantom source be placed in stereophony?

- Between the left and right loudspeaker
- Up to 30° left/right from the left/right loudspeaker
- Up to 30° left or right from the center between the two loudspeakers

No, the answer is incorrect.
Score: 0
Accepted Answers:
Between the left and right loudspeaker

12) Which statement about the wave field synthesis is correct?

No, the answer is incorrect.
Score: 0
13) What is the main problem with virtual environments using projection walls and loudspeaker systems?

- Sound that is reflected by the projection walls
- The ventriloquist effect does not work
- At least 12 loudspeakers are necessary

No, the answer is incorrect.
Score: 0

Accepted Answers:
Sound that is reflected by the projection walls