

1. Which are two main areas in the field of gesture recognition depending on the input hardware?

☐ microphone,

X touch devices (such as tablets, touchpads or smartphones),

X 2D/3D camera.

2. What are the basics categories of gestures in terms of user experience?

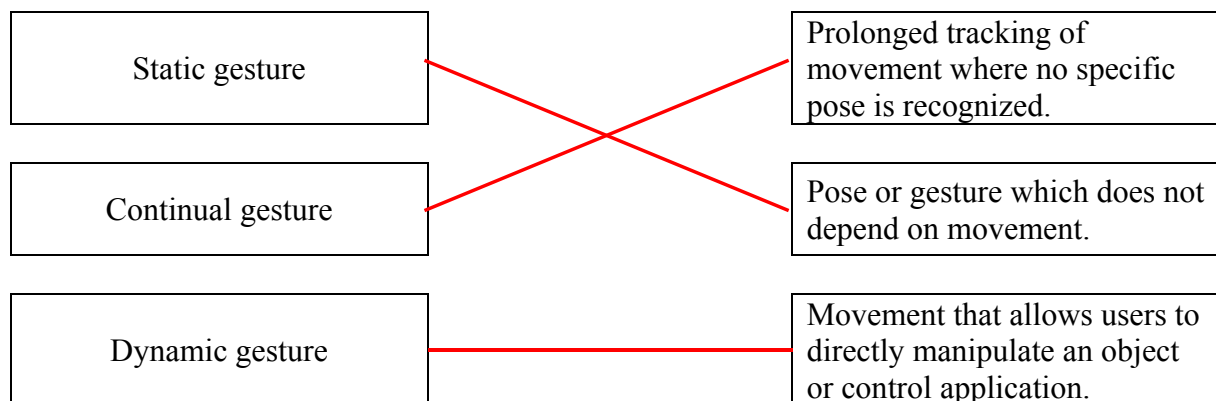
X innate gestures,

☐ static gestures,

X learned gestures,

☐ dynamic gestures.

3. Assign for each type of gesture the corresponding definition.



4. What parameters of RGB images are not affected by changing the illumination conditions of the scene?

☐ Brightness of image,

X Image resolution/size,

☐ contrast of image.

5. On what principle is based most depth sensors?

- ☐ emission and detection of ultraviolet light,
 - X emission and detection of infra-red light,**
 - ☐ emission and detection of white light (visible light spectrum).
-

6. Which statement about the depth image is correct??

- ☐ The depth image is a 2D image containing information about the absolute distance between the individual objects in the scene expressed in mm.
 - X The depth image is a 2D image containing information about the absolute distance between the sensor and each pixel of the image expressed in mm.**
 - ☐ The depth image is a 2D image containing information on the relative distance between the individual objects in the scene and center of the image expressed in mm.
-

7. Between the basic requirements for the gestures design does not belong:

- ☐ gesture naturalness,
 - ☐ user's comfort,
 - ☐ gesture should be easy to remember,
 - X user uniqueness gestures.**
-



8. Assign the significant characteristics of the individual gesture recognition methods.

Data glove	Camera
A	C
B	D
F	E

A – precise results,
B – low user comfort,
C – high user comfort,
D – algorithmic complexity,
E – relatively low price of the sensory part,
F – high price for sensory part.

9. Convexity defect algorithm returns as output of static gesture recognition:

- ☐ the coordinates of the hand and image background,
- ☐ the coordinates of the hand contour,
- X the coordinates of three points, the start point, deepest point and end point,**
- ☐ the coordinates of four points, the start point, central point, deepest point and end point.

