

**1. Modify the following texts so that the statements are true (choose the correct word from brackets).**

A resistive touchscreen consists of (~~only two~~ **several**) layers, out of which the flexible plastic and glass layers are two important electrically (~~conductive~~ **resistive**) layers.

A capacitive touchscreen also consists of (~~many spaced~~ **two spaced**) layers of glass, which are coated with (~~resistor~~ **conductor**) such as Indium Tin Oxide.

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**2. Write the gesture types based on the notion of motion:**

1. **static**
  2. **dynamic**
  3. **continuous**
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**3. Choose two main approaches used in Recommendation System scheme:**

- linear regression
  - content-based**
  - random recommendation
  - collaborative filtering**
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**4. Write at least three applications using gesture control (except TV control):**

1. **TV control**
2. **Google maps**
3. **Clear – iOS application**
4. **professional coaching applications**
5. **Computer Aided Design (CAD)**
6. **drone navigation (Spark)**

**5. Which are the technologies used in BCI solutions?**

**X transcranial magnetic stimulation**

electrocardiography

**X electroencephalography**

electrooculography

electromyography

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**6. What statements regarding eye tracking are true?**

**X can be used for mouse navigation**

solutions for HMD (head mounted displays) are not yet available

**X there exist mobile binocular solutions**

**X eye tracker can be mounted below screen/monitor**

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**7. Complete the paragraph with correct words**

In a microphone, a diaphragm reacts to acoustic waves with vibration, which is converted into electrical signal. In a condenser microphone, a diaphragm serves as one of the condenser plates. This microphone requires power source. A dynamic microphone uses magnet inside a coil to produce electrical current when the membrane moves. Such microphone doesn't need external power source.