

# **CSE332 - Usability Design of Software Applications**

## **Assignment 1**

**Submission Date: 25.08.2025**

### **Answer ALL**

1. You are about to design an interactive product that helps users monitor their heartbeat rate. The product measures pulse waves for observing changes in the volume of a blood vessel that occur when the heart pumps blood. What would be your key concern in developing the design of the product?
2. You and your friend are collaborating on developing a software product. Your friend suggests implementing the product by abiding by the principles of Software Engineering, you, in contrast, as an interactive product designer, emphasize interaction design-based development of the software product. How do you explain to your friend that the interaction design-based development of the software product is best?
3. List the advantages and disadvantages of having a multidisciplinary team in the development of an interactive product.
4. Aariv is good at creating websites. He begins a start-up for developing websites for companies to expand their businesses. To have a successful career in his new start-up, he should increase the usability of the websites he creates. Suggest to him the influencing factors that impact the usability of websites.
5. Recall the basic activities of interaction design.
6. Malathy develops an interactive product based on the requirements specified by 'ABC' company for a desktop-based application. How does she ensure the safety of the interactive product?
7. How do you begin thinking through the problem space of an existing interactive product?
8. We have learnt that the use of interface metaphors in the interactive product is helpful in easy understanding and learning of the product by novices. Do you think it has any limitations? If so, mention them.
9. How are the cognitive processes- Attention and Memory are related to each other?
10. Summarize the benefits of 'training wheels'-based learning of an interactive product.