

**National University**

**of Computer and Emerging Sciences Peshawar Campus**

fast-logo

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Roll No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Program: BS(CS)

Semester: Spring-2023

Time Allowed: 1 hour

Course: CS2007 Human Computer Interaction

Examination: Assignment # 1

Total Marks: 50 Weightage: 2

Date: September 21st 2023 02:00 PM

Instructor Name: Zeshan Khan

**NOTE:** Attempt all questions.

Read each question completely before answering it. There are **5 questions** on **1 page**.

In case of any ambiguity, you may make assumption. But your assumption should not contradict any statement

in the question paper.

|  |  |  |
| --- | --- | --- |
| **Question No. 1** | **Define Laws** | |
| **Time: 10 Min** | **CLO-1** | **Marks: 10** |

Illustrate how Fitts's Law can be applied to evaluate the usability of a graphical user interface. Provide an example scenario and calculate the time required for a user to move the mouse cursor to a target.

|  |  |  |
| --- | --- | --- |
| **Question No. 2** | **Define Laws** | |
| **Time: 30 Min** | **CLO-1** | **Marks: 10+10=20** |

A team is designing a new e-commerce website. They want to ensure that the website is user-friendly and easy to navigate. As a UX designer, you've been tasked with conducting usability testing. Describe how you would plan and execute a usability testing session for this website. What specific metrics and feedback would you collect, and how would you analyze the results to improve the website's usability?

|  |  |  |
| --- | --- | --- |
| **Question No. 3** | **Reasoning** | |
| **Time: 30 Min** | **CLO-1** | **Marks: 10+10=20** |

You are designing a mobile game that involves tapping various targets on the screen. Explain how you would apply Fitts's Law principles to optimize the game's user interface. Consider factors like target size, spacing, and placement to make the game more enjoyable and accessible to players.

|  |  |  |
| --- | --- | --- |
| **Question No. 4** | **Reasoning** | |
| **Time: 30 Min** | **CLO-1** | **Marks: 10+10=20** |

A hospital wants to improve the user experience of its electronic health record (EHR) system for healthcare professionals. As a UX researcher, outline a user-centered design approach for gathering feedback and insights from doctors, nurses, and administrators who use the EHR system daily. Provide three different layouts for the different users of systems.

|  |  |  |
| --- | --- | --- |
| **Question No. 5** | **Reasoning** | |
| **Time: 10 Min** | **CLO-1** | **Marks: 10+10=20** |

A social networking platform wants to introduce a new feature that allows users to create and share live video content. How can the platform design the feature interface to ensure that users can easily understand and use it, promoting learnability while maintaining engagement and usability?