

COMSATS University Islamabad,

## Abbottabad Campus

**Department of Computer Science**

Mid Term Lab – Fall 2024

Class: **BSE 7A**  Date: 5 November 2024

Subject: Human Computer Interaction Instructor: Mr. Ahsan Riaz

Total Time Allowed: 180 Minutes Total Marks: 35

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Registration #\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Note: Please make sure that the final submission of each student is unique. Any matching patterns found in the submission will be penalized.**

Q1**.** Design an interface that accommodates Normans first five design heuristics. Upload the document with the design screens mentioning the heuristic being applied along with a rationale of the design (10).

Q2. Calculate the efficiency of the designed interface? Explain the process fully along with formulas applied (5).

Q3. **Scenario**: Your company is launching a new budget-friendly smartphone targeted at young professionals. Develop a primary and secondary persona that the marketing team should focus on. (10)

1. Create two personas, including their name, age, occupation, and other relevant demographic details.
2. Outline their goals, challenges, and how the product can address their needs.
3. Describe the messaging or marketing channels that might appeal to each persona

Q4. Viva (10)

***10 Usability Heuristics for User Interface Design***

[1: Visibility of System Status](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-1-visibility-of-system-status-1)

[2: Match Between the System and the Real World](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-2-match-between-the-system-and-the-real-world-2)

[3: User Control and Freedom](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-3-user-control-and-freedom-3)

[4: Consistency and Standards](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-4-consistency-and-standards-4)

[5: Error Prevention](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-5-error-prevention-5)

[6: Recognition Rather than Recall](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-6-recognition-rather-than-recall-6)

[7: Flexibility and Efficiency of Use](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-7-flexibility-and-efficiency-of-use-7)

[8: Aesthetic and Minimalist Design](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-8-aesthetic-and-minimalist-design-8)

[9: Help Users Recognize, Diagnose, and Recover from Errors](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-9-help-users-recognize-diagnose-and-recover-from-errors-9)

[10: Help and Documentation](https://www.nngroup.com/articles/ten-usability-heuristics/#toc-10-help-and-documentation-10)