

[IT 920] Human Computer Interaction (HCI)

Assignment # 1 (30 Marks)

01. Write a note on history of the knowledge domain Human Computer Interaction (HCI). [05]
02. Compare Graphical User Interface and Web User Interface. [05]
03. Elaborate on the connection between human characteristics and user interface design. [05]
04. Write a note on screen navigation design. (Hint: Chapter#5) [05]
05. What is ergonomics? How ergonomics is connected to HCI? (Hint: Chapter#3) [05]
06. Give suitable example of direct and indirect manipulation, in the context of HCI. (Hint: Chapter#3) [05]

Assignment # 2 (60 Marks)

01. What are different interaction styles? Discuss each in detail. (Hint: Chapter 3 (3.5)) [10]
02. What is reasoning? Discuss about deductive reasoning, inductive reasoning, and abductive reasoning. (Hint: Chapter#1) [10]
03. Write a note on errors and mental model. (Hint: Chapter#1) [5]
04. What are various usability principles? Discuss in detail. (Hint: Chapter#7) [10]
 - [-learnability,
 - predictability; synthesizability; familiarity; generalizability; consistency.
 - flexibility,
 - robustness]
05. Write Norman's seven principles for transforming difficult tasks into simple ones. (Hint: Chapter#7) [5]
06. What is evaluation and what are the goals of evaluation? (Hint: Chapter#9) [5]
07. a) Write short notes on the following: (Hint: Chapter#9) [10]
 - Evaluation through expert analysis
 - Evaluation through user participation
- b) How can you choose an evaluation method? Elaborate. (Hint: Chapter#9) [5]

Assignment # 3 (Practical) (10 Marks)

01. Develop a User Interface following standard guidelines, for an application of your choice. Use necessary web technologies for developing the interface. [10]

Date of Submission: 13/Jun/2022 (hard deadline)