

(13A05704) HUMAN COMPUTER INTERACTION

(Elective-II)

UNIT I

Introduction: Importance of user Interface: Definition, Importance of Good Design, Benefits of Good Design, A Brief History of Screen Design.

The Graphical User Interface: Popularity of Graphics, the Concept of Direct Manipulation, Graphical System, Characteristics,

Web User – Interface Popularity, Characteristics- Principles of User Interface.

UNIT II

Design process – Understanding how people interact with computers, importance of human characteristics human consideration, Human interaction speeds, and understanding business functions.

Screen Designing: Design goals – Screen meaning and purpose, organizing screen elements, ordering of screen data and content – screen navigation and flow – Visually pleasing composition – amount of information – focus and emphasis – presentation information simply and meaningfully – information retrieval on web – statistical graphics – Technological consideration in interface design

UNIT III

System menus: Structures of Menus, Functions of Menus, Content of Menus, Kinds of Graphical menus

Windows: Window characteristics, Components of a window, Window presentation styles, Types of windows, Window management

UNIT IV

Controls: Characteristics of device based controls, Selecting the proper device based controls, Operable controls, Text Entry/Read-only controls, Selection controls, Combination Entry/selection controls, Selecting the proper controls

UNIT V

Graphics: Icons, Multimedia, Colour-what is it, Colour uses, Colour and Human vision, Choosing colours

Testing: The purpose and importance of usability testing, Scope of testing, Prototypes, Kinds of Tests, Developing and conducting the test

Text Books:

1. *The essential guide to user interface design, Wilbert O Galitz, 2nd edition, 2013, Wiley.*

Reference Books:

1. *Designing the user interface, 3rd Edition Ben Shneidermann, Pearson Education Asia.*

2. *Human –Computer Interaction, D.R.Olsen, Cengage Learning.*

3. *Human – Computer Interaction, I.Scott Mackenzie, Elsevier Publishers.*

4. *Interaction Design, Prece, Rogers, Sharps, Wiley Dreamtech.*

5. *User Interface Design, Soren Lauesen, Pearson Education.*

6. *Human –Computer Interaction, Smith - Atakan, Cengage Learning*