

User Interface Design

Course Code	20CS4703C	Year	IV	Semester	I
Course Category	PEC	Branch	CSE	Course Type	Theory
Credits	3	L-T-P	3-0-0	Prerequisites	-
Continuous Internal Evaluation :	30	Semester End Evaluation:	70	Total Marks:	100

Course Outcomes

Upon successful completion of the course, the student will be able to

CO1	Understand the concepts and principles of graphical user interface design	L2
CO2	Apply concepts of interaction devices to identify appropriate devices for an application	L3
CO3	Analyze given scenario and apply screen elements and windows to design a screen	L4
CO4	Analyze human physical and mental limitations for using computers to provide solutions.	L4

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	√				√							√		
CO2	√								√			√		
CO3		√	√						√			√	√	
CO4		√				√	√					√		

Syllabus		
Unit No.	Contents	Mapped CO
I	Introduction to User Interface: Defining the user interface and its importance, The importance of Good design, Benefits of Good design, History of Screen design, Characteristics of graphical and web user interfaces, Principles of user interface design	CO1
II	Design Process: Understanding how people interact with computers, Human characteristics in Design, Human Considerations , Human Interaction speeds	CO1,CO4
III	Screen Designing: Screen and Web Page Meaning and Purpose, organizing screen elements, ordering of screen data and content, screen navigation and flow, visually pleasing composition, Presenting information simply and meaningfully.	CO1,CO 3
IV	Windows: Characteristics, Components, Types, Selection of device based and screen based controls. Components: Icons and images, Multimedia, Color and its uses	CO1, CO3
V	Interaction devices: Keyboards and Keypads, pointing devices, speech and Auditory Interfaces	CO1,CO2

Learning Resources

Text Book

1. –The Essential Guide to User Interface Design- An Introduction to GUI Design Principles and Techniques, Wilbert O Galitz, 3rd Edition, Wiley Dreama Tech
2. Designing the User Interface. Ben Shneidermann, 5th Edition, Pearson Education Asia

References

- 1 Human Computer Interaction. Alan Dix, Janet Finlay, Goryd, Abowd, Russell Beal,3rd Edition, 2004, PEA.
2. User Interface Design. Soren Lauesen, Pearson Education.

e-Resources and other Digital Material

1. <http://iiscs.wssu.edu/drupal/node/4607>
2. https://www.interaction-design.org/encyclopedia/human_computer_interaction_hci.html