



GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Integrated Master of Computer Applications, 7th Semester

Subject Name: Web User Interface Design

Subject Code: 2678606

With effective
from academic
year 2020-21

1. Learning Objectives:

- To learn User Interface techniques
- To be able to design effective and user friendly User Interface

2. Prerequisites:

Basic experience of web UI access

3. Course Contents:

Unit	Course Content	Weightage Percentage
Unit I	Introduction to User Interface Defining the User Interface, The Importance of Good Design, A Brief History of the Human-Computer Interface, Interaction Styles, The Graphical User Interface, The Web User Interface, Principles of User Interface Design	25%
Unit II	The User Interface Design Process based on client, Business functions and Principal of Screen Design Know Your Client, Understanding How People Interact with Computers, Important Human Characteristics in Design, Human Considerations in the Design of Business Systems, Business Definition and Requirements Analysis, Determining Basic Business Functions, Design Standards or Style Guides, System Training and Documentation Needs, Human Considerations in Interface and Screen Design, Technological Considerations in Interface Design	25%
Unit III	System Menus, Navigation Schemes and selection of windows Structures of Menus, Functions of Menus, Content of Menus, Formatting of Menus, Phrasing the Menu, Selecting Menu Choices, Web Site Navigation, Kinds of Graphical Menus, Window Characteristics, Components of a Window, Window Presentation Styles, Types of Windows, Organizing Window Functions	25%
Unit IV	Screen Based Control for User Experience Operable Controls, Text Entry/Read-Only Controls, Selection Controls, Radio Buttons, Check Boxes, Palettes, List Boxes, List View Controls, Drop-Down/Pop-Up List Boxes, Combination Entry/Selection Controls, Spin Boxes, Combo Boxes, Drop-Down/Pop-Up Combo Boxes, Slider, Tabs, Date-Picker, Tree View, Scroll Bars, Presentation Controls, Static Text Fields, Group Boxes, Column Headings, ToolTips, Balloon Tips, Progress Indicators, Sample Box, Scrolling Tickers, Selecting the Proper Controls	25%

4. Text Book:

- "The Essential Guide to User Interface Design" 3rd Edition, Wilbert O. Galitz, Wiley Publication



5. Reference Books:

- 1) "Simple and Usable Web, Mobile, and Interaction Design" by Giles Colborne , 2nd Edition, Pearson Publication
- 2) About Face: The Essentials of Interaction Design by Alan Cooper, Robert Reimann, 4th Edition, Wiley Publication
- 3) "Designing Interactive Systems - A comprehensive guide to HCI, UX and interaction design" by David Benyon, Third edition, Pearson Education Limited
- 4) "Designing the user interface strategies for effective Human-Computer Interaction" by Shneiderman, Plaisant, Cohen, Jacobs, Elmqvist , 6th Edition, Pearson Education Limited.
- 5) Don't Make Me Think, Revisited - A Common Sense Approach to Web and Mobile Usability by Steve Krug, New Rider
- 6) "Interaction Design beyond human-computer interaction" by Helen Sharp, Yvonne Rogers and Jennifer Preece, Fifth Edition, Wiley Publication
- 7) "Lean UX Applying Lean Principles to Improve User Experience" by Jeff Gothelf, First Edition, O'Reilly Publication
- 8) Design of Everyday Things by Donald Norman, Basic books Publication,

6. Chapter wise Coverage from the Text Book:

Unit #	Book#	Chapter
I	1	Part 1 – Chapter 1, 2
II	1	Part 2 – Step 2, Step 3
III	1	Part 2 – Step 4, Step 5
IV	1	Part 2 – Step 7

7. Accomplishment of the student after completing the course:

- 1) Describe basic user interface engineering definitions, concepts, and principles
- 2) Familiar with a variety of methods for evaluating the design of user interfaces.
- 3) Apply user interface concepts and principles to analyze and evaluate a variety of approaches to user interface design.

8. Active Learning assignment / Practical (Desirable)

Student may form group and decide Application (preferably the project application of semester) for better implementation of UI/UX features mentioned in syllabus. The faculty may guide in identification of tools to groups of students. Students need to work on various types of user interface screens of project identified. The power-point slides may be uploaded on the web-site of the College/ Institute, along with the names of the students of the group, the name of the faculty, Department and College on the first slide.

Suggested Tools for Web user interface Design:

ADOB XD, WireFrame, Craft, Axure etc.