**Terna Engineering College**

**Computer Engineering Department**

Program: Sem VIII

**Course: Human Machine Interaction(HMI)**

**Faculty: Umesh B Mantale**

**LAB Manual**

**PART A**

(PART A : TO BE REFFERED BY STUDENTS)

**Experiment No.08**

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| **A.1** | **Aim:** |
|  | Design a theme based Icon for the selected Application. |
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| **A.2** | **Prerequisite:**   1. Knowledge about Icons and Images. 2. Knowledge of user interface and importance of Icons in Human Recognition |
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| **A.3** | **Outcome:** |
|  | **After successful completion of this experiment students will be able to**   1. To apply HMI principles and guidelines in designing effective User Interfaces. 2. To design Interactive user interfaces for any specific Application |
|  |  |
| **A.4** | **Theory:** |
|  | * **Icons** * Icons are most often used to represent objects and actions with which users can interact with or that they can manipulate. * These types of icons may stand alone on a desktop or in a window, or be grouped together in a toolbar. * A secondary use of an icon is to reinforce important information, a warning icon in a dialog message box, for example. * Icon is a small picture that represents an object or program. * Icons are very useful in applications that use windows, because with the click of a mouse button you can shrink an entire window into a small icon. (This is sometimes called minimizing.) To redisplay the window, you merely move the pointer to the icon and click (or double click) a mouse button. (This is sometimes called restoringormaximizing) Icons are a Principle feature of graphical user interfaces. Computer icons, in conjunction with computer windows, menus and a pointing device, form the graphical user interface (GUI) of the computer system, and enable the user to easily and intuitively navigate the system. * **Icon:** **Something that looks like what it means. OR Something that looks like what it means.** * **Types of icons:** * **Resemblance icon** —an image that looks like what it means. book, for example * **Analogy icon** —an image physically or semantically associated with something. * **A *symbolic* icon**: is an abstract image that represents something. A cracked glass, for example. * **Exemplar icon:**  represents an example or characteristic of something. A sign at a freeway exit picturing a knife and fork has come to indicate a restaurant. * **An arbitrary icon**: is not directly related in any way and must be learned. An image completely arbitrary in appearance whose meaning must be learned. * **Some Common Icons:** |
| **A.5** | **Procedure:**   1. Create an picture of size 10X10 pixel 2. Save the file with .ico extension (for Windows) 3. Change the icon of any folder by changing the properties of folder 4. Create different sized icons for display in various modes.   **Example:** |

**PART B**

(PART B: TO BE COMPLETED BY STUDENTS)

***(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the ERP or emailed to the concerned lab in charge faculties at the end of the practical in case the there is no ERP access available)***

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| --- | --- |
| Roll No.: 62 | Name: Atharva Deshmukh |
| Class: BE A | Batch: A3 |
| Date of Experiment: | Date of Submission: |
| Grade: |  |

|  |  |
| --- | --- |
| **B.1** | **Steps of Icon Design:**  **(**Write down steps of Icon Design.)   1. Use photo editing software to create your icon. 2. Mind the grid 3. Try to design something that will adhere to your brand image and that will be recognizable and memorable to people. 4. Decide if you want a transparent background. 5. Create a favicon that's easy to read. 6. Use colors that are cohesive to your brand. 7. Consider your audience when designing a icon. 8. Get the opinion of friends and colleagues. 9. Resize and save your favicon. |
| **B.2** | **ICONs Designed for themes** |
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|  |  |
| **B.3** | **Advantages of Icon:**  **(**Write down advantages of Icon)   * They can physically break up a page of text making it more interesting and appealing to read. * Icons can communicate an idea in seconds and can transcend language barriers. For example, everyone now recognizes an envelope symbol as an email facility, or an 'i' symbol as a link to further information. * Icons can help to add a creative touch to your website and this in turn can show the personality of your brand. |
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| **B.4** | **Disadvantages of Icon:**  **(**Write down disadvantages of Icon) Clutter Small things can be very distracting. A large dog strolling about the room minding its own business often goes ignored, but a tiny mosquito doing the same thing quickly commands the attention of everyone nearby. Lack of Purpose Before including any design element, it is critical to ask this primary question: “Do I need this?”. If it doesn’t immediately assist you in achieving your goal, don’t include it. If it helps, think of your site as a movie script. You have limited words, limited time, and limited space within which to command your audience’s attention and to communicate your point. Do not squander these valuable resources on unnecessary fluffery and flourishes. Redundancy Slavish focus on simplicity is great. Go too far in this direction, however, and you enter the realm of superfluity. If you need to explain what your icon means in words, either in the icon itself, or immediately nearby, then your design has failed. Having to repeat yourself defeats utterly the primary purpose of the icon, which is to keep your site as sleek and distraction-free as possible, while losing none of the core message. |
|  |  |
| **B.5** | **Snapshot of Design Icon :** |
|  | (Add Snapshot of Icon Design) |
|  |  |
| **B.6** | **Conclusion:**  **(**Prepare your conclusion about what principles you have used for designing the icons.)  principles i have used for designing the icons are:   * Aesthetically Pleasing * Clarity * Compatibility * Responsiveness * Simplicity * Transparency * Visibility |
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