**EXPERIMENT NO : 4**

**Aim:** Design a navigator for a person new in tourist city/village

**Theory:**

**Navigation**

* **Navigation and flow**

Navigation through a screen or page should be obvious and easy to accomplish. Navigation can be made obvious by grouping and aligning screen controls, and judiciously using line borders to guide the eye. Using the various display techniques, focus attention on the most important parts of a screen. Always tab through a screen in the logical order of the information displayed, and locate command buttons at the end of the tab order sequence. Guidelines for accomplishing all of these general objectives will be found in subsequent pages. The direction of movement between screen items should be obvious, consistent, and rhythmic. The eye can be guided through the screen with lines formed through use of white space and display elements. Sequence of use can be made more obvious through the incorporation of borders around groupings of related information or screen controls. Borders provide visual cues concerning the arrangement of screen elements, because the eye will tend to stay within a border to complete a task. Aligning elements will also minimize screen scanning and navigation movements.

* **Visually pleasing composition**

Eyeball fixation studies also indicate that during the initial scanning of a display in a clockwise direction, people are influenced by the symmetrical balance and weight of the titles, graphics, and text of the display. A cluttered or unclear screen requires that some effort be expended in learning and understanding what is presented. The screen user who must deal with the display is forced to spend time to learn and understand. The user who has an option concerning whether the screen will or will not be used may reject it at this point if the perceived effort in understanding the screen is greater than the perceived gain in using it. An entity’s design is an unconscious process that attracts, motivates, directs, or distracts. Visually pleasing composition draws attention subliminally, conveying a positive message clearly and quickly. A lack of visually pleasing composition is disorienting, obscures the intent and meaning, slows one down and confuses one.

* **Balance**

Balance is stabilization or equilibrium, a midway centre of suspension. The design elements have an equal weight, left to right, top to bottom. Our discomfort with instability, or imbalance, is reflected every time we straighten a picture hanging askew on the wall. Balance is most often informal or asymmetrical, with elements of different colors, sizes and shapes being positioned to strike the proper relationships.

* **Symmetry**

Symmetry is axial duplication: A unit on one side of the centerline is exactly replicated on the other side. This exact replication creates formal balance, but the difference is that balance can be achieved without symmetry. Symmetry’s opposite is asymmetry. Our eye tends to perceive something as more compressed or compact when it is symmetric. Asymmetric arrays are perceived as large.

* **Presenting information simply and meaningfully**

Following are guidelines for presenting information on screens. The fundamental goals are clarity and simplicity in form, comprehensibility in organization, efficient information assimilation, and pleasantness in tone.

1. **Legibility:** Legibility is distinguishableness. Computer technology today presents a seemingly endless array of choices in such aspects as font styles, sizes, and weights. Is the type of the proper kind and of adequate size and clarity for viewers of all ages? Is the contrast between text and its background adequate?
2. **Readability:** Readability is the degree to which prose can be understood and based on the complexity of words and sentences. Readability is established by factors like the length and commonality of words used, sentence length, and the number of syllables and clauses contain within a sentence. In design, is the information written at an understandable level for all users? Is it direct, simple, and easy to comprehend? Is visual interference minimized?

**Conclusion:**

**Use of navigation and flow in your GUI:**

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| **Program Execution**  **(7)** | **Documentation**  **(2)** | **Punctuality**  **(2)** | **Viva**  **(4)** | **Experiment**  **Marks**  **(15)** | **Teacher**  **Signature**  **with date** |
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