**Experiment No.3**

**Aim:** Redesign of a user interface (Suggest and implement changes in Existing User Interface)

**Theory:**

The principles of user interface design are intended to improve the quality of user interface design. The user interface design goals can be refined to achieve the objective of a good design. They are fundamental to the design and implementation of all effective interfaces, GUI and Web. These principles are general characteristics of the interface, and they apply to all aspects.

They can be described as follows:

**1. Aesthetically Pleasing:**

i) Provide visual appeal by following these presentation and graphic design principles.

ii) Use color and graphics effectively and simply.

**2. Clarity:**

The interface should be visually, conceptually, and linguistically clear, including Visual elements Functions Metaphors Words and Text.

**3. Compatibility:**

Provide compatibility with the following:

i) The user

ii) The task and job

iii) The Product Adopt the User’s Perspective

**4. Configurability**

Permit easy personalization, configuration, and reconfiguration of settings

**5. Comprehensibility:**

A system should be easily learned and understood. The flow of actions, responses, visual presentations, and information should be in a sensible order that is easy to recollect and place in context.

**6. Consistency:**

A system should look, act, and operate the same throughout.

**7. Control:**

The user must control the interaction. Actions should result from explicit user requests. Actions should be performed quickly. Actions should be capable of interruption or termination.

**8. Directness:**

Provide direct ways to accomplish tasks. Available alternatives should be visible. The effect of actions on objects should be visible.

**9. Flexibility:**

A system must be sensitive to the differing needs of its users, enabling a level and type of performance based upon each user's knowledge and skills.

**10. Efficiency:**

Minimize eye and hand movements, and other control actions.

**11. Familiarity:**

Employ familiar concepts and use a language that is familiar to the user. Keep the interface natural, mimicking the user's behavior patterns. Use real-world metaphors.

**12. Forgiveness:**

Tolerate and forgive common and unavoidable human errors. Prevent errors from occurring whenever possible.

**14. Recovery:**

A system should permit commands or actions to be abolished or reversed.

**15. Responsiveness:**

The system must rapidly respond to the user's requests.

**16. Transparency:**

Permit the user to focus on the task or job, without concern for the mechanics of the interface.

**17. Simplicity:**

Provide as simple an interface as possible.

**Conclusion:**

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