



Terna Engineering College, Nerul, Navi Mumbai
Computer Engineering Department
Assignment- 6 (FH 2021)

Subject: Human Machine Interaction (CSC801) Sem:VIII

Roll No	Question
43	Write guidelines for design of effective error messages for a software development environment.

Ans : Guidelines for design of effective error messages for a software development environment:

- 1) Hazard Control Hierarchy: Never show an error message if the cause of the error can be designed out or guarded against.
- 2) Clarity: You need to describe what happened, why it happened, and what the user can do about it. The message should be written in plain language so that the target users can easily understand both the problem and the solution.
- 3) Noticeable: Error messages must be noticeable because without actually noticing the error message, the user cannot be expected to understand the content and, therefore, it cannot affect the user's behavior.
- 4) Visual conspicuousness: Make sure error messages are visually conspicuous. An error message can be made more noticeable by increasing the relative size, using more contrasting colors, and increasing the font size and weight.
- 5) Placement: Error messages should be placed near the cause of an error in terms of location and time.
- 6) Modal messages: Use pop-overs or modal views only when it is necessary to stop the user from proceeding with the current task or where the error message is critical enough to interrupt the current task flow.
- 7) Understandable: The content of the error message must be easy to understand and should communicate the information required. Without the

user being given the required information in an easy-to understand format, the error message will not be successful in its communication or in its ability to affect the user's behavior.

- 8) Tone: Use a kind and helpful tone, never blaming the user but rather assigning blame to system deficiency.
- 9) Language: Use uncomplicated language. Examples of what to steer away from include long sentences, complicated sentence structures, complicated or compound words, and the unnecessary use of conjunctions.
- 10) Content: The error message content should include details about (a) what the effects of the error is. (b) what the cause of the error is. (c) and how to recover from the error.
- 11) Technical terms: Steer away from technical terms that the target audience might not fully understand or have misconceptions about.
- 12) Ambiguity: Ensure that the error message is unambiguous.
- 13) Concise: Make the error message as short as possible without compromising on the aforementioned guidelines.
- 14) Iconography: Add icons where applicable, focusing on semantic distance (how close the icon is to the function it represents) or using well known icons.