**CSE-3002**

**INTERNET AND WEB PROGRAMMING**

**DIGITAL ASSIGNMENT-3**

NAME:- Swathi T

REGISTRATION NUMBER :- 15BCE0221

SLOT :- B2

**Using the following principles evaluate the web site designed by you.**

**1. Ben schneider principles**

**1 Strive for consistency.**  
Consistent sequences of actions should be required in similar situations; identical terminology should be used in prompts, menus, and help screens; and consistent commands should be employed throughout.

**2 Enable frequent users to use shortcuts.**  
As the frequency of use increases, so do the user's desires to reduce the number of interactions and to increase the pace of interaction. Abbreviations, function keys, hidden commands, and macro facilities are very helpful to an expert user.

**3 Offer informative feedback.**  
For every operator action, there should be some system feedback. For frequent and minor actions, the response can be modest, while for infrequent and major actions, the response should be more substantial.

**4 Design dialog to yield closure.**  
Sequences of actions should be organized into groups with a beginning, middle, and end. The informative feedback at the completion of a group of actions gives the operators the satisfaction of accomplishment, a sense of relief, the signal to drop contingency plans and options from their minds, and an indication that the way is clear to prepare for the next group of actions.

**5 Offer simple error handling.**  
As much as possible, design the system so the user cannot make a serious error. If an error is made, the system should be able to detect the error and offer simple, comprehensible mechanisms for handling the error.

**6 Permit easy reversal of actions.**  
This feature relieves anxiety, since the user knows that errors can be undone; it thus encourages exploration of unfamiliar options. The units of reversibility may be a single action, a data entry, or a complete group of actions.

**7 Support internal locus of control.**  
Experienced operators strongly desire the sense that they are in charge of the system and that the system responds to their actions. Design the system to make users the initiators of actions rather than the responders.

**8 Reduce short-term memory load.**  
The limitation of human information processing in short-term memory requires that displays be kept simple, multiple page displays be consolidated, window-motion frequency be reduced, and sufficient training time be allotted for codes, mnemonics, and sequences of actions.

**2. Nielsons Hueristics**

**Visibility of system status**

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

**Match between system and the real world**

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

**User control and freedom**

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

**Consistency and standards**

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow [platform conventions](https://www.nngroup.com/articles/do-interface-standards-stifle-design-creativity/).

**Error prevention**

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

(Read full article on [preventing user errors](https://www.nngroup.com/articles/slips/).)

**Recognition rather than recall**

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

(Read full article on [recognition vs. recall in UX](https://www.nngroup.com/articles/recognition-and-recall/).)

**Flexibility and efficiency of use**

Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

**Aesthetic and minimalist design**

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

**Help users recognize, diagnose, and recover from errors**

[Error messages](https://www.nngroup.com/articles/error-message-guidelines/) should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

**Help and documentation**

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

**3. Normans Principles.**

### Visibility

The visibilty principle simply states that the basic functions of the system or product easy enough for a user to understand and use. All performance aspects of the product or system should be relatively obvious to the user. The user should not find it difficult to understand the product or system if the visibilty principle is followed. The functions of the system or product should be evident just be looking at the device.

### Feedback

The feedback principle states that while using the product or system there should be some immediate and obvious kind of signal to let the user know that there was a response or a result. Some sort of system feedback should let the user know that they have done something. These signals could be audio or visual cues or something that is obvious to the user and it will let them know that did something. The response must aslo make sense and let the user know if what they are doing is correct or incorrect.

### Constraints

The constraints principle is useful in stopping users form taking certain actions that are not suppose to be taken with certain devices. There are physical, semantic, logical, and cultural contraints. Some constraints are put into place because some actions should never be executed on some products or devices. Perhaps a certain action would destroy the product and a contraint is put in to prevent this from happening.  
Examples of physical constraints: seat belt, locking mechanism, USB-port (only one way to insert the USB key).  
Examples of logical constraints: speed limit, log-in system.  
Examples of cultural constraints: language, keyboard for different languages.

### Mapping

Mapping principle also known as 'natural mapping' means that there should be a logical and/or cultural spatial/temporal relationship on how the product is used and displayed. There should be a relation between actions and intentions on using the product or system. The more clear the relationship is the easier it is for users to become accustomed to the product or device.  
One problem that exists with mapping is that the more complex the system or device is the harder is it to make it easy to use. If you do not take into account previous relations, users will become confused on your random mapping.  
For example, the cursor keys on the keyboard.

### Consistency

The consistency principle allows users to 'get used to a product or system' and therefore once they learn how to use it, they can continue to use it because given actions produce the same results so it is consistent every time. Consistency must also be taking into consideration as to other similar products or systems in the market, e.g. VCR, the key pad of cellular phones, and the layout of retail chains such as Home Depot and Starbucks.

### Affordances

"Does the design provide intuitive clues on what can or should be done?" e.g. to push or pull a door.