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Question 1: Consider the chair given below. Your Employees want to use it as a computer chair. Your task is to write any As HCI Specialist, your job is point out any Five issues in the



design of this chair .

Answer :

In the above there is a chair is give and my employee want to use as a computer chair as a HCI specialist my job is to give 5 point that is to a computer chair and its not good

- 1** the main secret with computer chairs is that the backrest is much higher than a regular chair and the give chair has small backrest .
- 2** The key with PC gaming, and sitting at a computer in general, really, is that the desk is fixed, so the chair should be completely adjustable to make you as comfortable as possible at that unmoving desk.as you move easily but that chair is fixed and cannot move
- 3** Computer Chairs: Chairs that have a five-star base, usually with casters. These chairs may have fixed arms, adjustable arms, or no arms, and they are designed to be used at office desks. These are general use chairs and also go by the name “office chairs” or “task chairs

4 Computer chair should have rocking function but this chair does not have so this is not good for computer

Question 2: What is Paradigm, and what do you mean by paradigm shift?

Answer :

Paradigms are generally defined as a framework that has unwritten rules and that directs actions. A paradigm shift occurs when one paradigm loses its influence and another takes over. The concept defines paradigm and paradigm shift and explains how it can relate to company strategies and industry cycles.

True paradigm shifts represent drastic, sometimes uncomfortable change. It is not surprising, therefore, that these events can be met with resistance as organisational leaders step outside their comfort zones

Question3: Explain Design Rationale. Write and explain the types of design rationale.

Answer :

There are many definitions of Design Rationale :

"Design rationale expresses elements of the reasoning which has been invested behind the design of an artifact" [Shum & Hammond, 1993].

"Design rationale is the reasoning and argument that leads to the final decision of how the design intent is achieved." "Design intent is the 'expected' effect or behavior that the designer intended the design object should achieve to fulfil the required function." [Sim & Duffy, 1994]

"Design rationale means statements of reasoning underlying the design process that explain, derive, and justify design decisions" [Fischer, et. a., 1995]

Design rationale means "information that explains why an artifact is structured the way that it is and has the behavior that it has" [Conklin, Burgess-Yakemovic, 1995].

Types of Rationale :

Rationale can be classified into several types. These types are not mutually exclusive and some systems may support multiple types of rationales. The following types of rationale are discussed in this document:

- 1 Argumentation based - the design rationale is primarily used to represent the arguments that define a design [Garcia, 1993]. These arguments consist of issues raised, alternative responses to these issues, and arguments for and against each alternative.

- 2 History-based - the rationale consists of the design history – the sequence of events that occurred while performing the design [Garcia, 1993]. This information can be stored in many forms. It could be in the form of entries in a design notebook, an archive of e-mail messages, or other types of documents that capture actions taken over time.

- 3 Device-based - a model of the device itself is used to both obtain and present rationale [Gruber, 1990]. The explanations of the design would be produced by using the model to simulate the behavior of the device. It would be possible for the user to view the model and ask questions about its design and behavior.

- 4 Process-based -- the DR capture is integrated into the design process itself which guides the format of the rationale. In Ganeshan, et. al. [1994], the design description is modified only by changes to and refinements of the design objectives, thus capturing the rationale as part of the design process.

- 5 Active document-based - the DR is pre-generated and stored in the system. In these systems, the designer creates the design and the DR system generates the rationale for it based on the system's stored knowledge. For each decision made, the system compares the decision made by the user with the decision that it would have made based in its knowledge. If the actions of the user conflict with the system recommendations, they are given the option of changing their decision or modifying some of the criteria.

Question 4: Find the web pages that illustrate the principle of consistency. You must provide one good and one bad example of consistency. You must provide the screen shot of web pages along with URL and the written explanation justifying your good and bad example in your answer. To provide the relevant examples browse the internet.

Answer :

Consistency will make your design better, easier to use, and practically invisible. It gives the user plenty of room to experience the design in the way you intend.

Bad example :

One important aspect involves the consistent display of information. This requires that the system dependably use standard formats, fonts, line spacing, letter spacing and page lengths when displaying relevant information. The same information should appear in fixed places across all screens. Figure 1 shows a bad example of position related to consistency. Here the “submit” button is displayed in different places on different screens within the same task.

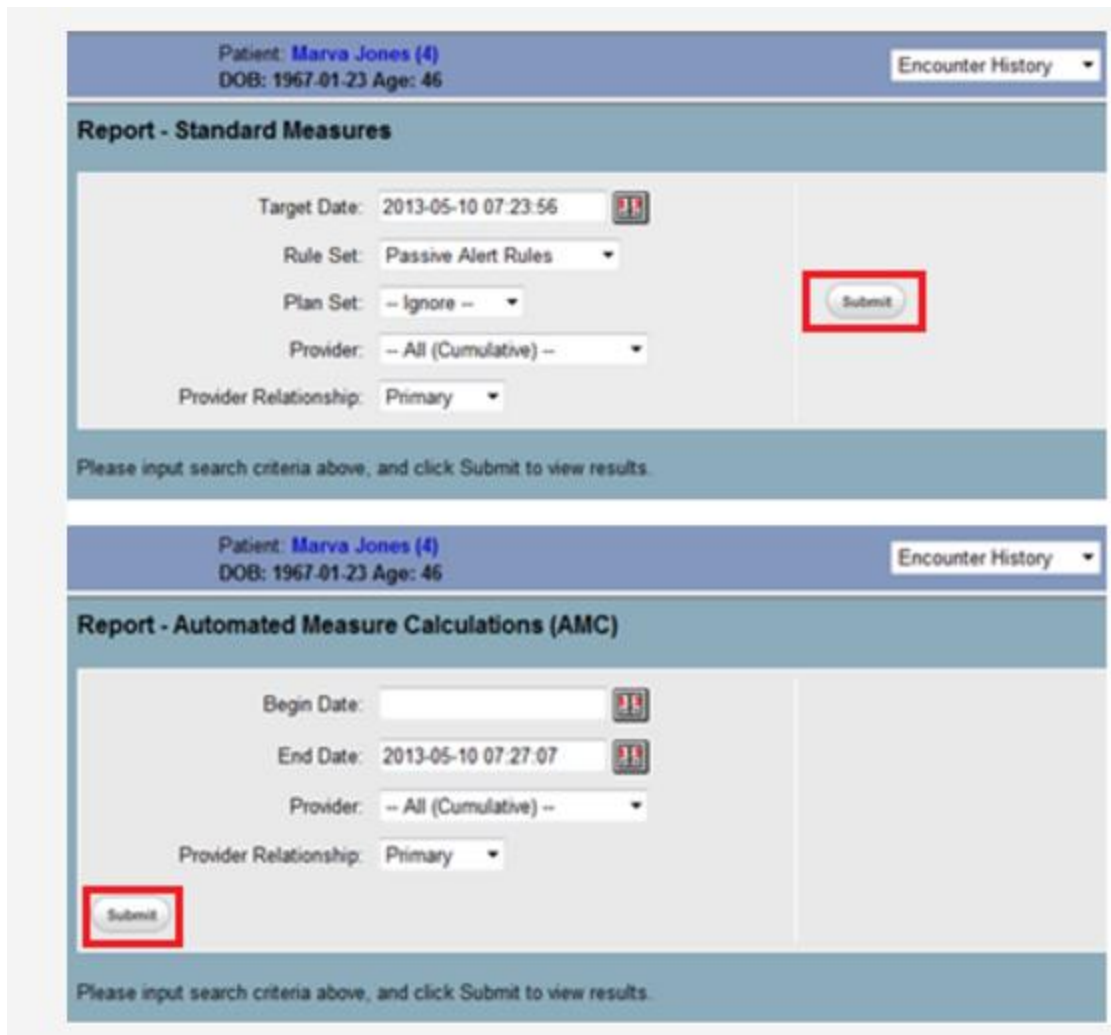


Figure 1. Inconsistent placement of controls.

This is a bad example because the “Submit” button appears in different places when filling the report.

The system should also to use consistent language. Some terminology and languages are widely used in the clinical settings or pre-existing clinical applications. Make sure they do not have different meanings in the EHR. Otherwise, users may have incorrect understanding of displayed information and act erroneously. In addition to consistent

display of information, another important point is to offer consistent user-system interactions. For example, the data input method and process, as well as corresponding assistant functionalities (e.g., filtering, sorting, and alerting etc.) should be standardized and remain consistent. That uniformity will potentially accelerate operation processes as the user repeatedly interacts with the system.

Question 5: Write the Shneiderman's 8 Golden Rules

Answer :

Shneiderman's "Eight Golden Rules of Interface Design"

These rules were obtained from the text *Designing the User Interface* by Ben Shneiderman. Shneiderman proposed this collection of principles that are derived heuristically from experience and applicable in most interactive systems after being properly refined, extended, and interpreted

To improve the usability of an application it is important to have a well designed interface. Shneiderman's "Eight Golden Rules of Interface Design" are a guide to good interaction design.

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.

Question 6: You are familiar with internet explorer. Explain any five usability goals in terms of internet explorer. Justify each goal with example

Answer :

Internet Explorer is a series of graphical web browsers developed by Microsoft and included in the Microsoft Windows line of operating

systems, starting in 1995. It was first released as part of the add-on package Plus! for Windows 95 that year.