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November 3, 2015

Contents

1 Design of a user interface Test change

Design of a user interface begins with the task analysis — an understanding of the user's underlying tasks and the problem domain (Shneiderman 1992), 1992**. The user interface should be designed in terms of the users' terminology and conception of their jobs, rather than the programmer's (Shneiderman 1983)(Hutchins, Hollan, and Norman 1986; Stephenson 1999),.

2 Syntactic level of design: interaction styles

The principal classes of user interfaces currently in use are command languages, menus, forms, natural language, direct manipulation, virtual reality, and combinations of these **Hartson, 1989**. Each interaction style has its merits for particular user communities or set of tasks **Myers,1995**.

3 Command language

Command language interfaces (CLIs) use artificial languages, much like programming languages. They are concise and unambiguous, but they are often difficult for a novice to learn and remember **Stephenson, 1999**.

4 Menu

Menu based user interfaces explicitly present the options available to a user at each point in a dialog **Stephenson,1999 and Hutchins, 1986**.

5 Natural language

The principal benefit of natural languages is, of course, that the user already knows the language **Foley, 1987**.

6 Graphical user interface

In a graphical user interface (GUI), a set of objects called icons is presented on a screen, and the user has a repertoire of manipulations that can be performed on any of them **Jacob, 1986 and Foley, 1990 and Johnson, 1989**. This means that the user has no command language to remember beyond the standard set of manipulations, few cognitive changes of mode, and a reminder of the available objects and their states shown continuously on the display.

7 User interface management systems

A user interface management system (UIMS) is a software component that is separate from the application program that performs the underlaying task **Olsen, 1992**.

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