Usability: A proposed framework to verify the effectiveness of GUIs design

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Abstract:

The concept of Usability is a term that has been activated on a large scale in the field of designing products, systems, and services, and it refers to the ease of use of industrial products efficiently and effectively. As a direct result of applying the concept of Usability within any system or interactive product, it has become a general concept and an integral part of the development of programs dedicated to interactive products, and it is still an important topic in the field of information technology. It is done by creating a scenario and a fictitious user persona, and the research discusses testing the actual Graphical User Interfaces that were created by interaction designers to determine whether they meet the expectations of users, and the following points in particular: 1) Is the information displayed correctly? 2) Is the interface intuitive enough to understand its functionality? 3) Is navigation between elements clear and convenient? 4) Is the function flow path easy to follow? 5) Does the interface provide an appropriate level of support to the user during each step of the task being performed? , 6) Do users find the interface attractive and pleasant to use? ; In general, using a set of predefined criteria and conducting several tests on graphical interfaces with different geometric subdivisions, the success of interactive interface design was evaluated more accurately, and moreover, more general conclusions were drawn about the factors behind the success of the graphical interface design process. As well as determining the best ways to achieve optimal results, this paper discusses the various concepts related to the Usability test of interaction interfaces and shows how they can be applied to improve the overall quality of Graphical User Interface design by studying the division of design spaces within user interfaces in the form of engineering units, It also discusses the improvements that can be made to enrich the user experience, increase the effectiveness of the interactive product interface, and improve the overall user experience.

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