**Assignment 2**

Human Computer Interaction

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0034-BSCS-17

Section: A

**Submitted to**

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Predictibilty:

Predictability of an interactive system means that the user’s knowledge of the interaction history is sufficient to determine the result of his future interaction with it. Predictability of an interactive system is distinguished from deterministic behavior of the computer system alone.

As in windows 8 the start menu is displayed when we hover the mouse from the right edge of screen towards the middle of the screen whereas in traditional windows, the start is in the bottom left as a plain button. The menu then displays all the system options whereas in windows 8 it is not like that we get general options and each option in associated with a separate page. This opposes the concept of predictability and the user has to learn the new concept by going out of the way.

Synthesizability:

Synthesis is the ability of the user to assess the effect of past operations on the current state. When an operation changes some aspect of the internal state, it is important that the change is seen by the user. Windows 8 has the same concept in terms of synthesizability as in the previous versions of windows, it shows a progress menu when files are being transferred from one folder to another. Synthesizability basically refers to the honesty in representation of the information being processed and providing an immediate notification to the user . Windows 8 and 8.1 was well cooperative in terms of synthesizability.

Familiarity:

Windows 8 had a complete shift in terms of familiarity in it’s UI and some other features. It had a voice navigation assistant added with no proper instruction manual. It had a different start menu layout and quick access menu. It had different system menus and the notification bar was added to the bottom right of the task menu. Fast forward, it had quite a steep learning curve as compared to it’s ancestors.

Generalbility:

Generalibilty refers to the similarity in performing operations. It means that user can use his knowledge gained from performing one task to another task. Windows 8 did have this capability as the new UI was a bit new to the users but once they learned how to go about it, performing other daily routine tasks was not such a big deal for them.

Consistency:

Consistency related to the likeness in the different behaviors in arising from similar actions or operations.

This refers to the use of same techniques, principles, methodologies and procedures to perform multiple tasks without using or taking into consideration new possibilities without acknowledging how profitable the new techniques can be. Windows 8 did not follow the rule of consistency as it revolutionized the way window as being presented to the user. With new user interface it had the few following features:

* Faster startup with UEFI integration
* A new lock screen with a clock
* New notification system
* Native support for USB 3.0 devices
* 4KB advanced format support for hard disks
* File Explorer instead of Windows Explorer
* Xbox GUI integration and Account linking

Dialogue Initiative:

Dialogue initiative refers to the interaction between the user and the system. The dialogues prompt the user for information or input. It is dependent on the system programmer that how much control over the dialogue is given to the user. More control to the user increases the chances of losing track of process being performed. Windows 8 had a stable dialogue initiative. It provided the users sufficient control of the dialogue prompt that the specified tasks can be completed without much headache. Moreover, the addition of Cortana also made the dialogue initiative a breeze to use and provided more control than ever to the user.

Multithreading:

A thread of a dialog is a coherent subset of that dialog. In the user–system dialog, we can consider a thread to be that part of the dialog that relates to a given user task. *Multi*-*threading* of the user–system dialog allows for interaction to support more than one task at a time. A very simple example can occur in the windowing system with an audible bell. You are editing a program when a beep indicates that a new electronic mail message has arrived.

Windows included huge support of multi-threading for the user making it’s multitasking feature proficient but it resulted in huge load on the system memory making it slower and overloading the system capacity.

Task Migratabiltiy:

It is defined as the passing of responsibility between user and system. It means that the user can pass tasks that can be done better by the system itself to the system and the system can ask user to perform tasks that require user authorization or verification e.g contact validation or asking the user to check his/her name spellings etc.

The windows 8 had a traditional setup in term of task migratability. It provided user the control over tasks that should not be done without user assistance. For instance, the system must not be allowed spell checking without user’s assistance or deleting duplicate named files without user’s approval.

Substitutivity:

It offers a user alternative ways of specifying input or viewing output. For example, the temperature of a physical object over a period of time can be presented as a digital thermometer if the actual numerical value is important or as a graph if it is only important to notice trends. It might even be desirable to make these representations simultaneously available to the user.

Customizabilty:

Windows 8 was quite customizable as far as the UI was concerned. The users could customize different aspects i.e:

* Change lock screen picture
* Lock Screen Apps
* Start screen color
* Tile sizes of start menu
* Group or re-arrange tiles
* Default Apps
* Notifications