Serial Position Effect

The serial position effect, a term coined by Herman Ebbinghaus, which refers to the finding that recall accuracy of an item from a list varies as a function of its position within the list. The two concepts involved, the primacy effect and the recency effect**,** explains how items presented at the beginning of a sequence and the end of a sequence are recalled with greater accuracy than items in the middle of a list.

We can make use of the recency and primacy effect in sequencing items in a menu of a GUI or a control panel of a product's interface. The more important or more frequently used items or controls should be placed in the beginning or end of the list. Items less frequently used should be placed in the middle of the list.

In case of a list using colours, the serial position effect may not be immediately seen. Here recall depends on various properties of colour such as brightness, hue and saturation too. Thus a brighter colour regardless of its position in the list is more likely to be recalled. This can be used to over-rule the serial position effect whenever the context demands. Thus, colour can be used as a design element to aid recall.

Assignment

Q. Design an effective GUI for the below problem with detailed analysis.

Prepare a list of 8 to 10 animals. Read this list sequentially and slowly to your friends within a stipulated time. Then ask them to recall the items in the list freely. Record the recall frequencies of these words. Analyze whether the recall % varies with the position of each item within the list? Does the behaviour change for each individual? Does it have something to do with the individual's favourite animal? What is the general trend?

Upload PDF file of all screen shots with explanation and analysis of results.

References:

1. https://hci-iitg.vlabs.ac.in/SerialPositionEffect.html

2. Article - Atkinson, R. C., & Shiffrin, R. M. (1968). Human memory: A proposed system and its control processes. *Psychology of learning and motivation: II, 249.*

3. Url - http://en.wikipedia.org/wiki/Serial_position_effect

4. Url - http://www.simplypsychology.org/primacy-recency.html