

Human Computer Interaction

Unit 1 and 2: Assignment

Unit 1

1. Conduct a quick Usability evaluation of your mobile phone & Compare it with the evaluation of your friend's phone.

Effective to use –Functional

Efficient to use –Efficient

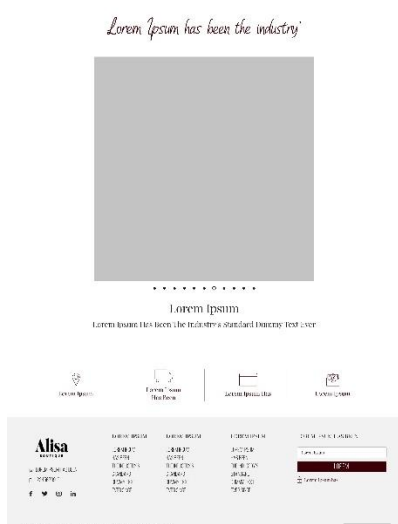
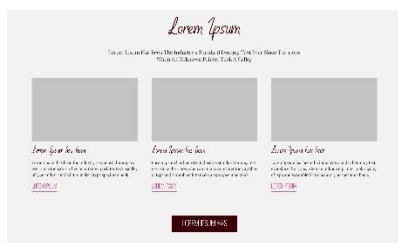
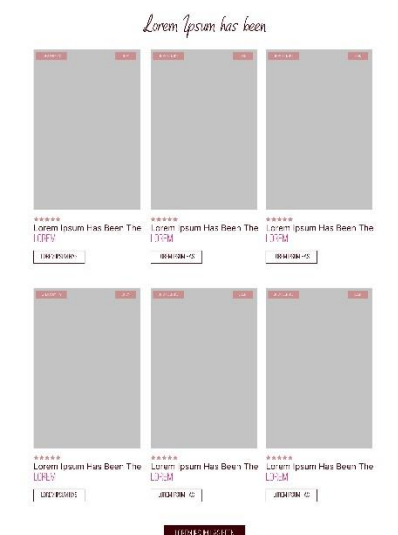
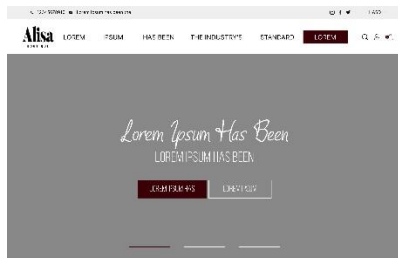
Error free in use –Safe

Easy to use –Friendly

Enjoyable in use –Pleasurable

Feature	My phone	Friend's phone
Effective to use	10	9
Efficient to use	9	10
Error free in use	7	9
Easy to use	10	7
Enjoyable in use	10	7
Total	46	42

2. Explore prototyping tool-Design 1 or 2 pages of Web application with proper usage of information design, navigation design, and interaction design. Also adding components, Layouts, logo...etc.



Unit 2

1. Suppose you are playing a video game or you are simply watching a video and wish to close it. In this case how much time it will take to close the video or close the game. Using KLM predict the total time you are likely to take to do that.

➔ Assuming that the video is being watched in full-screen mode,

Step 1: Exit video full screen

Description	Operator
Bring hand to keyboard	H
Move to Esc Key	M
Click the Esc key	K

Step 2: Close the video player

Description	Operator
Bring hand to mouse	H
Locate the close button	M
Point the mouse to the close button	P
Click the close button	BB

Total execution time (T) = the sum of all operator times in the component activities

$$T = \text{HMKHMPBB} = 0.40 + 1.35 + 1.20 + 0.40 + 1.35 + 1.10 + 0.20$$

T = 6 seconds

2. Deleting a file • one file is to be deleted • File icon is visible and can be pointed to • Trash can icon is visible and can be pointed to • Cursor must end up in the original window that the file icon was in • Hand starts and ends on mouse • User average non-secretary typist For the Above Simple case, Predict the total time to take to perform the task using KLM Model.

➔ There can many ways of doing this, here I am calculating for 2 such scenarios.

Scenario 1: Using the drag and drop method,

Step 1: Selecting the file to be deleted

Description	Operator
Bring hand to mouse	H
Locate the close button	M
Point the mouse to the close button	P
Click the close button	BB

Step 2: Dragging the file to the recycle bin

Description	Operator
Locate the recycle bin	M
Press and hold the file to delete	B
Drag the file to the bin	P
Release mouse button to drop the file	B

Step 3: Bringing the cursor back the window which the file was in

Description	Operator
Move the cursor back to original window	P
Click to refocus on the window	BB

Total execution time (T) = the sum of all operator times in the component activities

$$T = \text{HMPBBMBPBPBB} = 0.40 + 1.35 + 1.10 + 0.20 + 1.35 + 0.10 + 1.10 + 0.10 + 1.10 + 0.20$$

T = 7 seconds

Scenario 2: Using delete button and then verifying in bin (This scenario since the typing speed is explicitly mentioned in the question)

Step 1: Selecting the file to be deleted

Description	Operator
Bring hand to mouse	H
Locate the file to delete	M
Point the mouse to the file	P
Click on the file	BB

Step 2: Deleting the file

Description	Operator
Bring hand to keyboard	H
Locate the delete button	M
Click on the delete button	K

Step 3: Checking if the file is in bin

Description	Operator
Move hand to mouse	H
Locate the recycle bin	M
Move the cursor to the bin	P
Double click on the bin to open it	BBBB
Search for the deleted file	M

Step 4: Return to the original window

Description	Operator
Locate the close button	M
Move the cursor to the close button	P
Click on the close button	BB
Move cursor back to the original window	P
Click to refocus on the window	BB

Total execution time (T) = the sum of all operator times in the component activities

$$T = \text{HMPBBHMKHMPBBBBMMPBBPBB} = 0.40 + 1.35 + 1.10 + 0.20 + 0.40 + 1.35 + 0.28(\text{given in question}) + 0.40 + 1.35 + 1.10 + 0.20 + 0.20 + 1.35 + 1.35 + 1.10 + 0.20 + 1.10 + 0.20$$

T = 13.63 seconds

