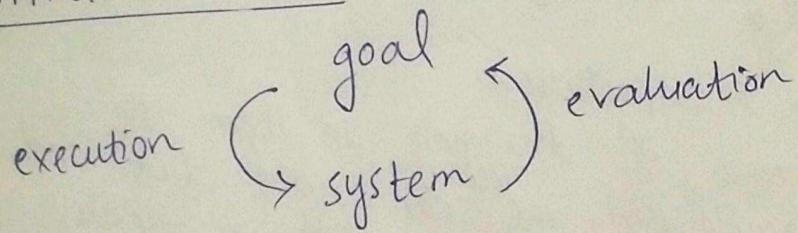


Q1.

Goal:

Submitting online course feedback
to Flex

• Norman's Model:



Goal:

- Submitting online feedback

Execution:

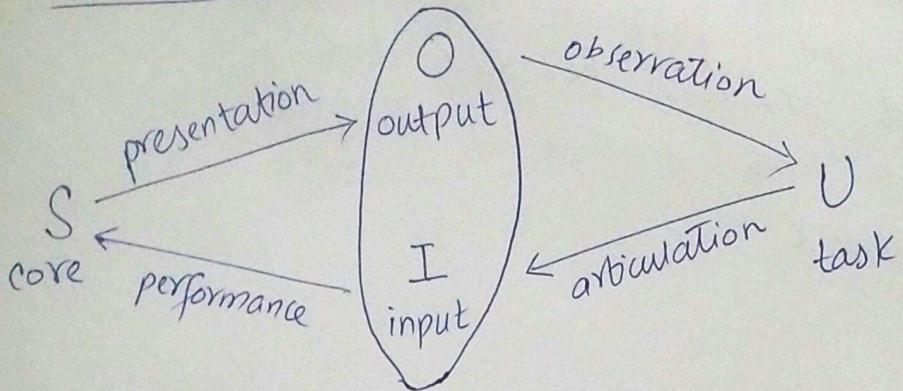
- Click on the course for which the feedback is to be submitted
- Fill the feedback form thoroughly
- Answer each mandatory question
- Give your opinions regarding the course.

6.5

Evaluation:

- Proofread the entire form
- If any information is missing or incorrect; formulate a new goal to correct it
- Click on the submit button at the end of the page.

Abound and Beale Framework:



Articulation:

- User opens the "Course Feedback" tab and clicks on a course.
- It is clearly | written in front of a course ~~submit~~ "Submit Feedback".

Performance:

- Upon clicking "Submit Feedback" a page opens which has details about the course, and is easily readable, and typed in layman terms.

Presentation:

- The feedback form allows users to quickly and easily scroll up and down to view and proofread the entire document.

Observation:

→ All the choices for the course feedback questions are marked ~~and~~ whenever the user clicks on them. This provides a valuable feedback.

Q2.

a)

Gulf of Execution:

- A person may want to open a document using "Ctrl + O". However, after pressing the keys, he will need to specify the location.
- A person needs to press 'Windows + G' key to record his screen. However, he needs to manually press the 'record' button.

Gulf of Evaluation:

- Whenever a user performs an action, like saving a document, they get a sign at the bottom of the screen saying "saving".
- When pressing the ~~mute~~ button on a laptop; the key light up, signalling us that the sound is ~~now~~ muted.

b)

Direct Manipulation:

→ Re-sizing ~~or~~ or Re-shaping a geometrical figure in MS Paint by dragging the edges and corners.

Indirect Manipulation:

→ Instead of dragging ~~an item to~~ the Recycle Bin, we can right click and select "delete" from drop-down menu.

Q3.

1. Strive for consistency:

Every icon or menu item should be consistent and having the same flow. In Flex, the tabs on the left hand side are all similar in design and follow the rule of consistency.

2. Enable frequent users to use shortcuts:

Flex's login page can be used as an example here. When we use flex for the first time, we have to enter all credentials.

3. Offer informative feedback:

If we click a tab on flex, such as "MARKS", it gets highlighted in a golden color which gives valuable feedback.

4. Design dialogue to yield closure:

When we submit feedback for all courses at the end of a semester, we get a notification of success which provides closure.

5. Offer simple error handling:

If we login to flex for too long, we are automatically logged out, and sometimes There is an error for time.

6. Permit easy reversal for actions:

While registering our courses, if we select a wrong section; we can easily select another section and click on update

7. Support internal locus of control:

Flex is a big application. It allows us to view all tabs/sections without any restrictions including user's profile

8. Reduce short-term memory load:

Overall GUI design for flex is very compact and provides easy navigation for all users. The tabs are aligned perfectly.

Q4.

Flex Student
Goal: Opening the "Marks" Tab.

steps:

1. Point to the "Marks" section on the left
2. Clicking the section.

PB

Time Analysis:

Applying 1st heuristic

\Rightarrow PMB

$$\begin{aligned} &= P + M + B \\ &= 1.1 + 1.3 + 0.2 \\ &= 2.6 \text{ seconds} \end{aligned}$$

4

• SLATE:

Goal: Submitting an assignment through computer

steps:

1- Point towards the desired course tab

=> P

2- Click on it.

=> PB

3- Point towards the "assignments" tab,

=> PBP

4- Click on it

=> PBPB

5- Point towards the desired assignment

=> PB PBP

6- Click on it

=> PBPBPB

7- Point towards the "choose File" operation.

8- Click on it

PBPBPBPB

9- Point to the location of file

PBPBPBPBP

10- Click the location, then point towards the file

PBPBPBPBPBP

11- Double-click the file

PBPB PBPBPBPBPBPBPB

12- Point towards submit button and
click it.

\Rightarrow PBPB PBPBPBPBPBPB

Time Analysis:

Applying 1st heuristic :

PMBPMBPMBPMBPMBPMBBPMB

$$= P + M + B + P + M + B + P + M + B + 3 \times (P + M + B) +$$

$$B + P + M + B$$

$$= 3 \times (1.1 + 1.3 + 0.2) + 3(1.1 + 1.3 + 0.2) + 0.2 + 2.6$$

$$= 15.6 + 0.2 + 2.6$$

$$= 18.4 \text{ seconds.}$$

6

Q5.

- Natural language:

This style enables the users to interact with the application using voice-only. It is similar to how we can communicate with other people. Using this, we can communicate without devices like keyboard.

Example:

Siri is a voice-based application for Apple.

- Three-dimensional interfaces:

This style is based upon human gestures and motions. It creates a 3D space around the user which enables them to interact with. It is one of the most advanced technologies.

Example:

Virtual Reality based applications such as Google cardboard.

- Touch:

Touch allows users to interact with applications using only gestures and fingers. It is extremely useful, as it disables the need for Keypad or Keyboard.

Example:

Screen designs in modern smartphones.

Q6.

Contextual task analysis is used for an in depth assessment of the users of an application in a typical work environment. Without it, we cannot create a generic application.

Example:

→ A ~~bank accountant filing a report for transactions~~
→ A surgeon operates on a patient

The image displays two screenshots of the Flex Student Portal. The top screenshot shows the 'Student Profile' page with a sidebar containing icons for Home, News, Semester Result Choice, Course Registration, Attendance, Marks, Transcript, and Fee Challan. The main content area shows 'University Information' with details: Roll No: 17L-4023, Degree: BS(CS), Batch: Fall 2017, Campus: Lahore, Status: Current. Below this is 'Personal Information' with details: Name: Umair Ahmad, DOB: 7/18/1999, Blood Group: N/A, Gender: Male, CNIC: , Nationality: Pakistan, Email: umair71999@gmail.com, Mobile No: 03244366566. The bottom section shows 'Contact Information'. A red arrow points from the text 'All the icons are consistent as they have the same sizes, shapes and flow' to the sidebar icons. The bottom screenshot shows the 'Login' page with a dropdown menu listing Roll Numbers: 17L-4023, 17-....., 174023, 17L-423, 1714, and 1714. A red box highlights the 'Allows quick and easy login' text next to the dropdown. The background of the login page features a bookshelf with various academic books.

Flex Student Profile

University Information

Roll No: 17L-4023 | Degree: BS(CS) | Batch: Fall 2017
Section: All the icons are consistent as they have the same sizes, shapes and flow | Campus: Lahore | Status: Current

Personal Information

Name: Umair Ahmad | DOB: 7/18/1999 | Blood Group: N/A
Gender: Male | CNIC: | Nationality: Pakistan
Email: umair71999@gmail.com | Mobile No: 03244366566

Contact Information

Permanent: **Current:**

Login

Allows quick and easy login

17L-4023 slate.nu.edu.pk

Manage passwords... 1111

Remember me Forget Password ?

Sign In

Welcome to Flex-Student

For Password related queries contact concerned Academic Officer
For Application related queries contact flex.support@nu.edu.pk

Type here to search

Student Marks

CL309-Object Oriented Analysis and Design Lab

Quiz #	Weightage	Obtained Marks	Total Marks	Average	Standard Deviation	Minimum	Maximum
1	10	7	10	6.68		0	10
Total	10	7					

Provides feedback about the tab/section we are currently in

Lab Work

Grand Total Marks

Course Feedback

S.No	Code	Course Name	Credits	Status	Feedback
1	CL309	Object Oriented Analysis and Design Lab	1	Feedback Submitted	
2	CS302	Design and Analysis of Algorithms	3	Feedback Submitted	
3	CS309	Object Oriented Analysis and Design	3	Feedback Submitted	
4	CS401	Artificial Intelligence	3	Feedback Submitted	
5	CS422	Human Computer Interaction	3	Feedback Submitted	
6	CS433	Advanced Programming	3	Feedback Submitted	
7	SS108	Technical and Business Writing	3	Feedback Submitted	Provides closure that we have successfully submitted our course feedback

Session Expired

Your session is expired.

This error occurs if we are logged in to flex for a long time

Ok

Flex

Not secure | flexstudent.nu.edu.pk/Student/CourseRegistration

Apps Classes KissAnime - Watch... Twitch SLATE : Gateway ... Flex | Student New Tab YouTube Pakistan vs Australia Google - My Activity Virtual Piano | Th...

Hello Mr. Umair Ahmad

Course Registration

Registration period not active.

Sr.#	Course Name	Cr.Hrs	Relation	Comments	Status	Section
1	CS401-Artificial Intelligence	3	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	BCS-6D
2	CS302-Design and Analysis of Algorithms	3	Core	Register! 5-New Offered Course <New> [Recommended] These sections can be changed during online course registration	Registered	BCS-6A
3	CS422-Human Computer Interaction	3	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	BCS-6A
4	CS309-Object Oriented Analysis and Design	3	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	BCS-6A
5	CL309-Object Oriented Analysis and Design Lab	1	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	BCS-6A2
6	SS108-Technical and Business Writing	3	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	BCS-6D
7	CS433-Advanced Programming	3	Elective	Register! 6-New Offered Course <New> [Can take]	Registered	BCS-6A
8	CS307-Computer Networks	3	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	
9	CL307-Computer Networks Lab	1	Core	Register! 5-New Offered Course <New> [Recommended]	Registered	

Show all

Flex

Not secure | flexstudent.nu.edu.pk

Apps Classes KissAnime - Watch... Twitch SLATE : Gateway ... Flex | Student New Tab YouTube Pakistan vs Australia Google - My Activity Virtual Piano | Th...

Hello Mr. Umair Ahmad

Student Profile

University Information

Roll No: 17L-4023 Degree: BS(CS) We can navigate freely on flex without any restrictions like locked content or restricted sections.

Section: A Campus: Lahore Batch: Fall 2017 Status: Current

Personal Information

Name: Umair Ahmad DOB: 7/18/1999 Blood Group: N/A

Gender: Male CNIC: Nationality: Pakistan

Email: umair71999@gmail.com Mobile No: 03244366566

Contact Information

2.png

Inbox - I174023@lhr.nu.edu.pk | Human Computer Interaction | HCI Spring 2020 Final Exam | SLATE : Gateway : Welcome | Flex | Student

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Apps Classes KissAnime - Watch... Twitch SLATE : Gateway ... Flex | Student New Tab YouTube Pakistan vs Australia Google - My Activity Virtual Piano | Th...

Hello Mr. Umair Ahmad

Flex

Student Profile | Home

University Information

Roll No: I7L-4023	Every tab is aligned properly and provides us with easy navigation space. The items are labelled properly.	Degree: BS(CS)	Batch: Fall 2017
Section: A		Campus: Lahore	Status: Current

Personal Information

Name: Umair Ahmad	DOB: 7/18/1999	Blood Group: N/A
Gender: Male	CNIC:	Nationality: Pakistan
	Email: umair71999@gmail.com	Mobile No: 03244366566

Contact Information

2.png

Type here to search

Show all

11:04 AM 10/07/2020