

(02)

3

@ Time sharing concept is the part of the initial paradigm. paradigm basically indicates the evolve of HCI history. In the early age we didn't had a huge amount of computer or electronic devices because the size of the computer is so large that in one room only one device can be stored. Besides the use of that device wasn't so much familiar to the users that's why they need time to do any tasks. For this reason time sharing concept occurred. Here user were dividing the users of time among them. like one will use 5 mins then the other will next 5 mins. By this way all the tasks were completed.

(b) Metaphors is basically the part of intermediate paradigm. In this stage, people were always thinking about how to optimization of any tasks can be done and that should be more realistic. For this reason they were trying to invent such a method by which we can easily relate our real life. But real life scenarios can be harmful for us sometimes. Because people were depending more to prove any incident in real or they just tried to make them understand that what they see are absolutely correct at all. And real life scenarios were attracting them a lot that's why their time was wasting a lot. They got bad impact on their mental health also. And then we have transferred in direct manipulation

Paradigm.

② We have a lots of new paradigm among them we will only talk about 3 of them and I'm thinking that in near future all of them will bring remarkable changes for the world.

① Agent based paradigm:- we all know that how Smart AI technology is now a days. In this paradigm we basically gives inputs to the agent and expecting to them they will behave in the right way. we can take them for doing risky work instead of manpower. And those agents are much faster than a normal human. Here some example of Agent based paradigm

like speech driven interface, automated text,

Voice recognition etc. Basically they are doing

about all the impossible tasks nowadays.

② Ubiquitous computing:- computer is now need

for every sector of the life. After the invention

of microprocessor all of the device have been

reduced their size and now it is easy to carry

a computer system in the pocket. We can't

imagine a single moment without the help

of computing technology. In this paradigm,

we can just feel that how dependent we

are on them. In near future maybe our

every tasks will be done via those technology.
have to

X

(10)

③ Sensor based technology: In this paradigm, we are finding a lots of sensor that is crying need for our daily work. Like we need the temperature sensor to predict the weather and also the temperature of human or anything. Here we have finger print, biometric system, light detecting sensor, soil sensors. All of these things are now our daily needs. In every sectors of life we are depending on them.

So, we can come in conclusion that these paradigm will take a significant role in near future to perform an interactive computing with the whole world.

01

@ For performing interaction we have to mind some ~~task~~ terms.

- ① goal:- What we want to achieve.
- ② domain:- the total area of the work.
- ③ concept:- indicating the significance of domain.
- ④ tasks:- All the actions that we have to take to reach the goal.

Later we can make a framework :-

User → input → system → Result.

that means we need user to interact with the system. user basically gives proper inputs to the system. system will try to

~~Q~~ 2

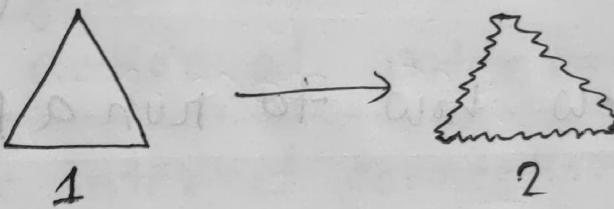
Understand the scenarios and demand then it will simply provide the real output.

And the real output will be shown to the display.

In this way a perfect interaction happens.

(b)

= Norman's gulf of execution:-



Suppose, I want to draw a triangle like 1,

but in my system I don't have linear line, I

have something like zigzag shape. So I made the triangle but this is not the actual one.

So here the execution creates problem and it is known as gulf of execution.

3

Slipp:- If I know the system, and also the working process of the system but I made wrong attempt suddenly, that is slipp. that may be

happened for bad user interface or hasty

Mistakes:- on the other hand, my intention is bad

I don't know how to run a program or if

don't know the functionalities of any system

that will lead me to mistake. For solving

that we can add proper instructions to the design and user must have to learn

about how to control the system.

©

① User establishes goal :-

he will withdraw the money in three transactions for getting total 50000 taka.

② Set the intention :-

As there is no way to get all the money together, he thought withdrawing separately may help him to achieve the goal.

③ Specifies action at interface :-

Fir^{the} checks the internet connection and also the balance he wants to withdraw. He calls in charge while facing problems.

④ Executes Action :-

Starting the withdrawing process, one transaction has already finished. Next one will be start soon. Waiting....

3.5

⑤ Perceives system state:-

he observed the withdrawing process. After withdrawn for one time he checks whether total 20000 taka enipos or not. that means he is understanding the process.

⑥ Interpret system state:-

he interprets that system has been stopped for no internet, then he understand system is working again when got internet connection.

⑦ Evaluates the system based on the goal:-

he takes actions by calling incharge and attempts 3 time for withdraws separately.

finally he reached to his goal by withdrawing all the money.



United International University

Name
(Optional)

Azizul Islam Nayem

ID No.

011201262

Section

A

CP 21.11.22

Invigilator's
Signature with date

Course Code

CSE 4451

Trimester / Semester : Spring / Summer / Fall, 20.22

Name of Exam : Class Test / Mid-term 1 / Mid-term 2 / Final

Date: 21.11.2022

03

a) We have to follow some rules for having an appropriate appearance of interface design.

① Aesthetics and Utility :- Better frontend may not give comfort user sometimes, so aesthetic means here making the interface as relaxed to user. So that, they never getting bored or anxiety. Besides have to look on the Utility.

② Making use of colour and 3D shape:- we have

careful about color combination in any page

so that all type of people easily can be able to recognize the interface. We have to reduce the amount of 3D shapes.

③ Localization/ Internationalization:- there are so many countries in the world. So many languages we have. So many cultures we have. So, we have to give ^{Priority to} all of the cultures, social aspects while designing any interface.

④ Good representation: While we are putting any tables, image, Paragraph, these should be represent in a specific format.

① Yes, I can know where I'm now;

Home → Home appliances → cooling and

Heating → Fan.

② Yes, I can know what I can do from this.

We have Brand name in checkbox format, that means by clicking the band, the page will only show me those product only. I can see my desired product from this page.

③ Yes, I can know what will happen. Look at the view option now in mode but

when we will press we will be able to see serially all of the products.

④ Yes I can easily track where I was few seconds ago from the websites like we click on Home button it will take us to the main page. simply it gives us to go back.

From the above mentioned analysis we can say that the website is following the four rules of local structure.

⑤ Yes, I'm considering Miller's 7 ± 2 rule for deciding menu size. Because in short time memory peoples only can have 7 ± 2 chunks



United International University

Name
(Optional)

ID No.

Azizul Islam Nayem

011201262

Section

A

S
CJN 11-12
Invigilator's
Signature with date

Course Code CSE 4451

Trimester / Semester : Spring / Summer / Fall, 2022

Name of Exam : Class Test / Mid-term 1 / Mid-term 2 / Final ✓

Date: 21.11.2022

to remember anything. People don't want to remember so much by born. So they need recognition by giving option like menu. Here in menu a set of choices have been given, people can easily see them, and remember them shortly till their works done. As short time memory has limited space and it's easy to recall and recognition in STM. For this reason Miller's 7±2 rule will

give comfort to the user till the task end.

And For short term memory, less delay occurs and easy to access anything. So I'm considering the rules for menu bar.

② User action control :-

① Entering information :- In every page, we

have sign in/up, Password, gmail giving

options. So while we are designing we

have to give placeholder on this text fields.

So that user never makes a mistakes while

putting the information in it. Besides we have

to set length of any name, password

in a way that, people will never claim
that they can do whatever they want.

② Knowing how to do:- A system is used by so many users. All of them are not same or their quality is not same. So, we have to give them some hints or options describing the rules or techniques that they can be done. And we have to give them option to take help from us in any unforeseen situation.

③ Affordances:- People always like to see the things what they usually see in their real life. So, we have to make the interface such a way that they never feel tired or bore. We can take the example

of OTT platform netflix and hoichoi.
Netflix is used by people from all over the
world. on the other hand hoichoi for only
the Bengali people. But they are inspiring
themselves from netflix's interface and they
also made their interface like that so that
people can relate.

overall we have to give user's demand.
priority to

our main goal should be always to make
them happy at any cost. that will help
us to survive long run in the market with
our interface.