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SUBJECT	**HCI**

Question 1: Write and explain the main goals of HCI?

ANSWER NO # (1)

GOALS OF HUMAN COMPUTER INTERECTION

Human computer interaction is the study of how people interact with computer and also its name implies HCI consist of three parts the users the computer itself and the ways they work together .

2) The second main goal of hci is produce usable and safe system .

3) The third goal of hci are also to produce usable and safe system.

4) And also the usability is concerned with making system easy to learn and also easy to use ,

5) Also achieve efficient , effective and safe interaction .

6) Understand the factor that determine how people use technology .

QUESTION NO # 2

Write and explain the terms of interaction

ANSWER #2

INTERACTION

Interaction design as user oriented field of study that focuses on meaningful communication of media through cyclical and collaborative processes between people and technology .

Communication between   user   and   the system

SOME   TERMS   OF   INTERACTION

There   are   three   term   of   interaction   thats   are   given
below

1)   DOMAIN

2)   GOAL

3)   TASK

1)   DOMAIN

        The   domain   are that which   the   area   of   work
under   study   is   called   domain

A   domain is   the   area of   application   that   need   to   be
examined   to   solved   those   problem .

2) GOAL

    Goal   are   that   what   you   want   to   achieve .

    Goal   is   a   desierd   result   of   a system   plan   and
commits   to   achive   organizational   desired   end   point   in   some
sort   of   development .

3)   TASK

    Task   are   that   term   is   interaction   that   how   you   go
about   doing   it   is   called   task .

QUESTION #3

Write the 8 Golden Rules of Shneiderman.

ANSWER #3

8 Golden Rules of Shneiderman.

1) Sbieve for consistency

Don't do so much drastic changes in design element do they use has to put more effort .

2) Enable to frequent user to use shortcuts

Keyboard shortcuts to execute things fresh .

3) offer information feedback

The action we performed with system its replace feedback should reach to user . The feedback should be human readars .

4) Design dialogues to yeild closer

Not return in the guesing mode and to desk .
That you have perform output .

5) OFFER SIMPLE ERROR HANDING

If user a mistake we have a way that time so that we can reach to desired out if get redesire this is a plane to should be made error before faxiy mistake .

6) PERMIT EASY TO REVERSAL OF ACTION

They should be option or way should be present so that we can in revers and get previos design .

7)SUPPORT POTENTIAL FOCAS OF CONTROL

If give full occess or full to use that the full system
is has in cantrol

8) REDUCE SHORT TERM MEMORY LOAD

  Don't put load on user
  We have to give more importance to recognition if give
less importance to recall .

   QUESTION NO # 4

   What is Paradigm, and what do you mean by paradigm shift?

   ANSWER

   Paradigm:

   The term paradigm shift refers to a serious amendment within the ideas
and practices of however one thing works or is accomplished. A paradigm
shift will happen at intervals a large form of contexts. Paradigm shifts
usually happen once new technology is introduced that radically alters
the assembly method or producing of a decent or service. These shifts are
key drivers in several of the processes that a society undergoes.
Paradigms are vital as a result of the outline however we tend to
understand reality. As such, most are subject to the constraints and
distortions made by their socially conditioned nature. These shifts
became way more frequent within the past hundred years, because the age
reworked several social and industrial processes. These processes are
seemingly to become even a lot of commonplace within the future as our
rate of technological advancement will increase.

   Paradigm shifts happen during a wide selection of alternative
contexts to explain a profound amendment in model, modality, or perception.
Those found within the scientific world usually result from scientists
functioning on the perimeter.

   Example of a Paradigm Shift
   The internet created a paradigm shift within the means business is
conducted. Email and scan replaced the fax machine and traveler services.

Orders for securities will currently be placed on-line directly by the consumer and are generally dead in seconds.

QUESTION NO # 5

Explain Design Rationale. Write and explain the types of design rationale.

ANSWER # 5

Design Rationale

Design retionale are thta the information that explain why computer system is the way it is that are including the structural and its fuctional description .

TYPES OF DESIGN RETAIONALE

1) structure oriented
2) process oriented

1) structure oriented

Structure oriented are that the structure are emphasizes to pos hoc structuring of considered design is alternative

2) process oriented

Process oriented are that the presverves order of deliberation and also decision making is called process oriented .

QUESTION NO # 7

You are familiar with Google Chrome. Explain any five usability goals in terms of Google Chrome. Justify each goal with example.

ANSWER

FIVE USABILITY TERM OF GEOGLE CHROME .

1. Task manager

Chrome has its own Task Manager that shows you how much memory and CPU usage each tab and plug-in is using. You can open it by clicking Shift-Esc from within Chrome. You can get more details by clicking the "Stats for nerds" link on the Task Manager and it will open a page with a full breakdown of memory and CPU usage for each process within the browser.

I also like that Chrome makes each tab a separate process in Windows, so you can also go into the Windows Task Manager and shut down one of them if it's locked up. It also means that a bad process in one tab won't kill your whole browser session.

2. One box for search, address, and history

Instead of having separate input boxes for the search bar and the address bar, Google has united the two in Chrome. Google also added history to the equation. So you can type

something like "techrepublic" in the box and it will suggest the techrepublic.com home page as well as other recently visited TechRepublic pages. This is similar to the new "Awesome bar" in Firefox 3 but Google's "One box" includes search as well. If you type "techrepublic" in the box and hit return then it will simply open it in Google.com (or your default search engine).

3. Upgraded tabs

The Chrome development team views tabs as one of the best new innovations to Web browsing in recent years and so they wanted to expand the functionality of tabs since users . In Chrome you can drag a tab into its own window, and drag it back to the main window. This is called "Dynamic Tabs." Also, by default, the "New Tab" page in Chrome features a page that shows thumbnails of your most visited Web sites, a list of your recent bookmarks, and a search box that allows you to search your history.

4. New support for Web applications

Naturally, Google believes in Web-based applications and is invested in a future that includes applications running from the cloud and running in a Web browser. Current Web applications include Google Docs, Salesforce.com, and Outlook Web Access. Chrome makes it easier to make those applications feel more like desktop apps.

From the start page of your Web application you simply click the Chrome controls icon and then click "Create applications shortcuts" and you can create Desktop, Start Menu, and/or Quick Launch icons. Then when you launch those apps they open in a streamlined window without the address bar and separate from the Chrome Web browser window. If the apps integrate with Google Gears then you can even open them when you're offline.

5. Incognito browsing

Chrome includes an Incognito mode in which users can go to sites but nothing from that session -- history, form fields, or cookies -- will be saved in Chrome. This can be useful on shared computers and when viewing sensitive data through the Web browser. The beta version of Internet Explorer 8 includes a similar feature.

Question 6:

   Find the web pages that illustrate the principle of consistency. You must provide on good and one bad example of consistency. You must provide the screen shot of web pages along with URL and the written explanation justifying your good and bad example in your answer. To provide the relevant examples browse the internet.

ANSWER # 6

A human mind is an amazing pattern recognizing machine. We do a lot of things on autopilot, right from brushing our teeth or using keys to open the doors. These all have a sense of consistency and standards.

This saves us time and energy.

Imagine what would happen if each time you want to login into your email, the form fields are different or are placed differently?

With so much exposure and experience with the interfaces, our brain has created patterns and now we look at the specific things at specific places.

one good and one bad example of consistency.

Example On WhatsApp, the floating action buttons remains at a fixed position and the only thing that changes is the icon that represents the action that is relevant to that   screen.

The screenshot of Different Whatsapp screens showing Consistency and standards

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