Human Computer Interaction

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Đánh giá môn học

- Điểm danh: 10%
- Bài tập cá nhân: 10%
- Bài tập nhóm – tìm hiểu công nghệ: 30%
- Project – áp dụng công nghệ: 50%

Defining the User Interface

- User interface design is a subset of a field of study called *human-computer interaction* (HCI).

- **Human-computer interaction** is the **study**, **planning**, and **design** of how people and computers work together so that a person's needs are satisfied in the most effective way.

Defining the User Interface

- HCI designers must consider a variety of factors:
  - Human:
    - what people want and expect,
    - what physical limitations and abilities people possess,
    - how their perceptual and information processing systems work,
    - what people find enjoyable and attractive.
  - Computer:
    - Technical characteristics and limitations of the computer hardware and software must also be considered

Defining the User Interface

- The *user interface* is the part of a computer and its software that people can see, hear, touch, talk to, or otherwise understand or direct.

- The **user interface** has essentially two components: input and output.

  - *Input* is how a person communicates his or her needs or desires to the computer.

    - Common input components: the keyboard, mouse, trackball, one's finger (for touch-sensitive screens), and one's voice (for spoken instructions).

  - *Output* is how the computer conveys the results of its computations and requirements to the user. For example: display screen.

Defining the User Interface

- Proper interface design will provide a mix of well-designed input and output mechanisms that satisfy the user's needs, capabilities, and limitations in the most effective way possible.

The importance of Good Design

- A screen's layout and appearance affect a person in a variety of ways.
  - If they are confusing and inefficient, people will have greater difficulty in doing their jobs and will make more mistakes.
  - **Poor design** may even chase some people away from a system permanently. It can also lead to aggravation, frustration, and increased stress.

The purpose of this subject

- To present the important practical guidelines for good interface and screen design.

- The guidelines reflect a mix of human behavior, science, and art, and are organized within the context of the GUI design process.

The specific objectives

- Understand the many considerations that must be applied to the interface and screen design process.

- Understand the rationale and rules for an effective interface design methodology.

- Identify the components of graphical and Web interfaces and screens, including windows, menus, and controls.

- Design and organize graphical screens and Web pages to encourage the fastest and most accurate comprehension and execution of screen features.

- Choose screen colors and design screen icons.

- Perform the User Interface design process, including interface development and testing.
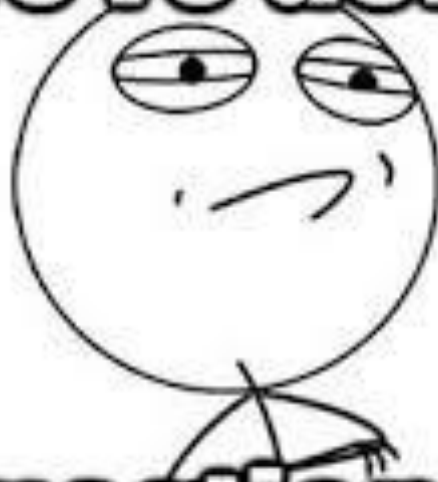
Some designs

I have recently developed a cellular phone accessory that is taking the market by storm. It will work with all cellular phones today.

Because all of you are my friends I am going to allow you to obtain one of these babies for yourself at the rock bottom price of $29.95 each.

Yêu cầu về bài tập nhóm tuần 1

- Tìm hiểu công nghệ tuần 1: **Tìm hiểu về Azure**
  - Tìm hiểu về Microsoft Azure, viết hướng dẫn sử dụng Azure.
  - Tạo một Web app của nhóm, đặt tên đường link sao cho có ý nghĩa.
  - Chụp lại toàn bộ hình ảnh của quá trình thao tác trên để đưa vào tài liệu
  - Trên Website có 1 menu: **Group diary** (Nhật ký nhóm)
    - Ghi lại phân công công việc cho từng thành viên trong tuần 1
    - Up nhật ký lên lên website của nhóm, với tiêu đề: **Week 1**
- Chỉ sử dụng tiếng Anh trên website nhóm

Tìm hiểu Azure- Tuần 1

- Tìm hiểu về Microsoft Azure, viết hướng dẫn sử dụng Azure.
- Tạo một Web app của nhóm, đặt tên đường link sao cho có ý nghĩa.
- Chụp lại toàn bộ hình ảnh của quá trình thao tác trên để đưa vào tài liệu
- Ghi lại phân công công việc cho từng thành viên trong tuần

Reference

- **The Essential Guide to User Interface Design**, Wilbert O. Galitz.