

# Human Computer Interaction

ThS. Trần Thị Thanh Nga

Khoa CNTT, Trường ĐH Nông Lâm TPHCM

Email: [ngattt@hcmuaf.edu.vn](mailto:ngattt@hcmuaf.edu.vn)

# Đánh giá môn học

- Điểm danh: 10%
- Bài tập cá nhân: 30%
- Project – áp dụng công nghệ: 60%

# 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, and one's voice (for spoken instructions).
  - *Output* is how the computer conveys the results of its computations and requirements to the user.
    - 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.

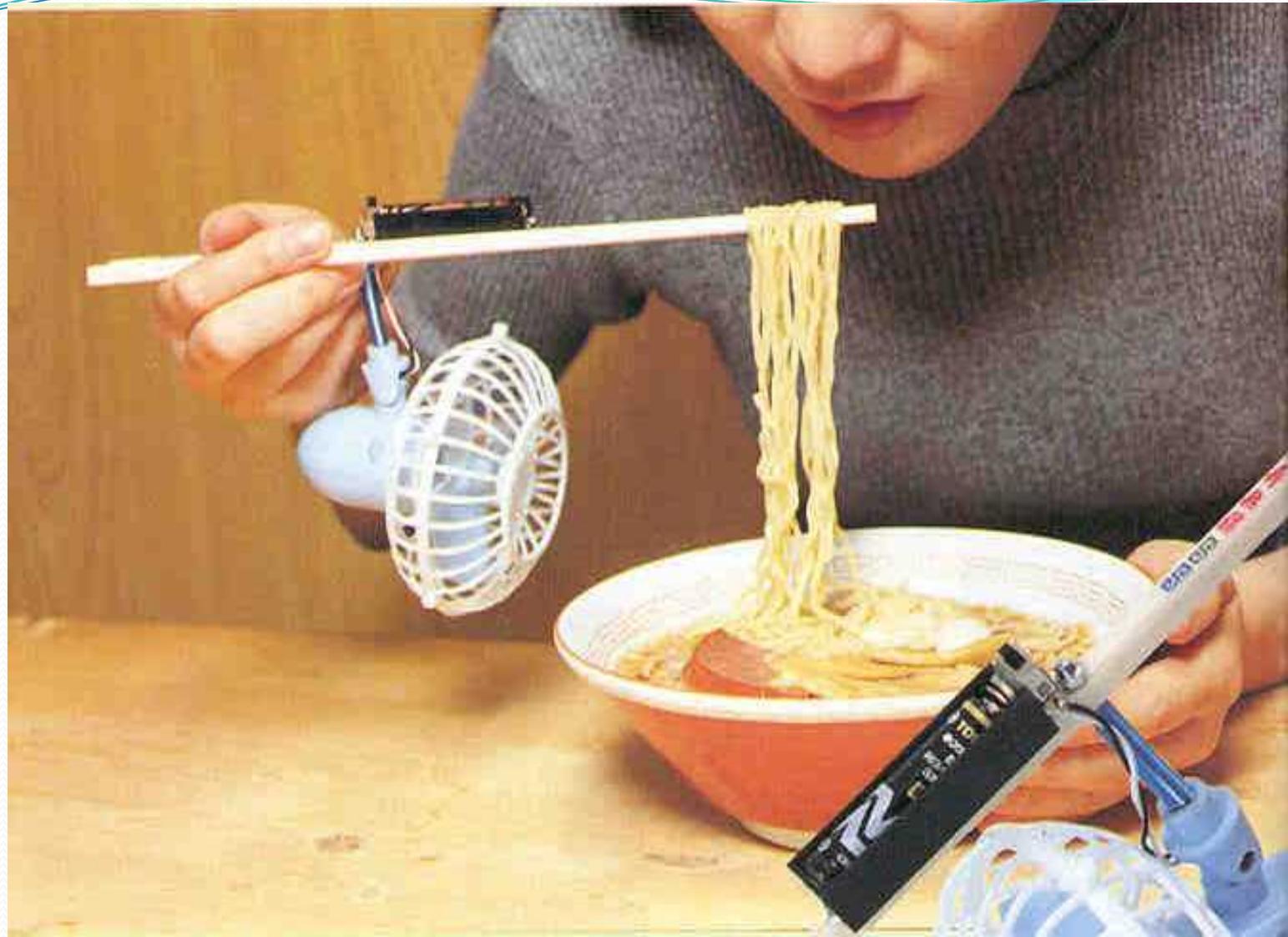
# **Some designs**





1. Introduction











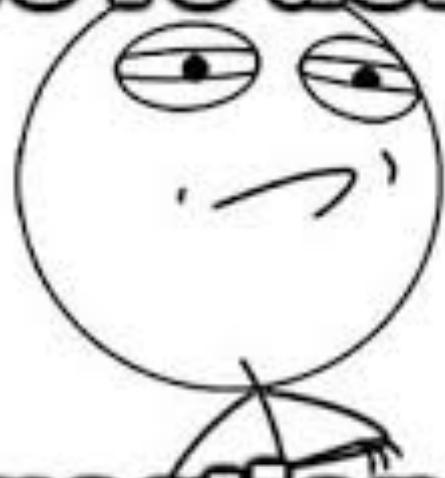
I have recently developed a cellular phone accessory that is taking the market by storm. It will work with all cellular phones today.

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.



## 1. Introduction

We're done.



Questions?

© 2013 www.mrmrs.com

# Yêu cầu về bài tập nhóm tuần 1

- Tìm hiểu công nghệ tuần 1: **Tìm hiểu về** Firebase
- Tìm hiểu về Firebase, viết hướng dẫn sử dụng, chụp màn hình quá trình mình làm (ko sao chép trên mạng, hình ảnh phải có tên nhóm trên đó, ví dụ: hci2021group01...).
  - Tạo một Web app của nhóm, đặt tên: hci2021groupXX (với XX là 01, 02...)
  - 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 website của nhóm, với tiêu đề: **Week 1**
- Chỉ sử dụng tiếng Anh trên website nhóm

# Yêu cầu về bài tập nhóm tuần 1

- Tạo 1 menu **Group Diary**: ghi lại phân công công việc cho từng thành viên trong tuần theo mẫu sau, phần Kết quả link tới kết quả công việc: hoặc file .html, .doc, .xls, .ppt...

STT	Mã SV	Họ tên	Mức độ hoàn thành	Kết quả
-----	-------	--------	-------------------	---------

# Chú ý

- Sau khi đã có đường link của nhóm, các em sử dụng tên miền .tk để chuyển tên nhóm thành: hci2021groupXX.tk

# Reference

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