

Class 01: Introduction to Interface Design

Description

The first class, called *Introduction to Interface Design*, is intended to give an overview of the concepts that will be covered in the larger course, Interface Design. In developing interactive systems, a designer is tasked with helping to define an experience. Before beginning, there are important questions to explore: Who are the target users? What needs do they have? How does one encourage exploration, learning, and accessibility for users through interfaces? Are there guidelines we, as designers, should be following? What experiences have target audiences had before?

This course explores these issues in relation to different expressions of interface design. It also devotes a good deal of time to exploring usability principles and concepts on which the class can base its expressions.

Objectives

- Introduce students to the concept of interface design. Give brief overview of the course.
- Define the concept of "interface" based on the group's prior knowledge. Ensure that all class members are comfortable with the working definition.
- Discuss different expressions of interface design - software interfaces, web interfaces, physical products, and concepts of pervasive computing - to gauge the class's familiarity with the topic.
- Foster critical thinking about interfaces as communication channels, allowing students to freely critique them.

Materials

Bag of Interfaces: Come prepared with an assortment of devices that bear interfaces of varying complexities and technologies. Bring objects that are familiar to the students, as well as objects that they may have never seen. Before class, ensure these interfaces align with your own definition of "interface," so you can use the objects to help define and support the concept.

Some examples are:

Remote control

Cell phone

PDA

Elevator panel

Telephone with rotary dial

Telephone with push button dial

CD discman

Mechanical pencil

Can of shoe polish

Walkman

Modo

Disposable coffee cup (with lid)

Blackberry

Digital watch

Analog watch

Computer keyboard

Can opener

Activities

- 🕒 **30 - 45 minutes** **Briefly introduce the class and its goals**
Introduce oneself and the course. Ask the same of students, finding out about their background and experiences. Pass out and briefly review syllabus and/or point the class to the course website (if available). Explain objectives, expectations, grading system, office hours, and other details.
- 🕒 **30 - 45 minutes** **Define "interface" based on group knowledge**
Goal Come away with a list of criteria that allows class to judge whether or not an object has an interface.
Activity Come prepared with a rough definition of the term "interface," and be prepared to modify it based on the expectations and background of the class. As a group, ask students to define interface. Use paper/board to keep track of all responses, and encourage and guide the class to create one working definition. Feel free to stimulate the thinking by inserting your own opinion as well.
- 🕒 **45 - 55 minutes** **Bag of interfaces exercise**
Goal This exercise should encourage the students to think about interfaces as a method of communication that can pass information from object to user and back. By having to think critically about the interface, its ease of use, and its audience, the students should begin to recognize that they can deconstruct them, and therefore, improve their design.
Activity Pass out objects from bag of devices, handing one object to each student. Ask students to examine the objects' interfaces, while keeping in mind the collective definition. Students should consider the following questions:
 - What is the purpose of the device?
 - Which part of the device is the interface? What is its purpose?
 - Who is the target audience for this device?
 - Does it seem to be easy to use? Why or why not?Students must present their object to the class, incorporating the answers to these questions into their description. Encourage discussion.
- 🕒 **20 - 30 minutes** **Interface redesign exercise**
Goal The redesign exercise should promote critical thinking about the specific design of the interface. Students should come away from the exercise noting areas of opportunity for redesign. It should also challenge them to think as designers, and introduce them to making suggestions.
Activity Ask students to write down three design improvements they would make to the interface based on the target audience and purpose they stated earlier in the class. Ask them to sketch out (using pencil and paper) a proposed improvement. Don't let them get caught up in the details of the drawing. Instead, give them ten minutes or less to complete the project. This helps ensure that they remain focused on the product development and think quickly. Ask several students to stand up and describe the interface problem and present their solution.

Homework

The homework assignment should inspire the students to be more observant and demanding of the interfaces they use every day. Hand out or post this assignment.

Everyday Interfaces

You interact with interfaces each day. Whether they reveal themselves as ATM machines, cell phones, Palm Pilots, elevator buttons, or countless other devices, these interfaces help us do the things we do.

Task Identify three interfaces you use in your everyday activities. In thinking about which interfaces to choose, consider: Is it easy to use? Is it important to you? Would you change it if you could? Provide a brief description of each, including its purpose, intended audience, and a summary of how you use this interface. For each interface, describe how easy it is for you to use.

Format Write one paragraph for each interface. Print out the assignment and bring to class. Bring one of the interfaces you choose to class with you for discussion.

Recommended reading for next class

"The Psychopathology of Everyday Things," Donald Norman; Chapter 1 from *The Design of Everyday Things*; 1998, Doubleday.