

2.744



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2.744 Individual Project

Goals for today

Introduce the project

Start thinking about the project

More symbol design practice

Drawing kit homework

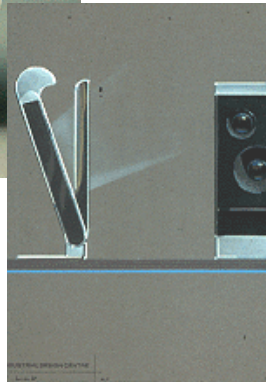
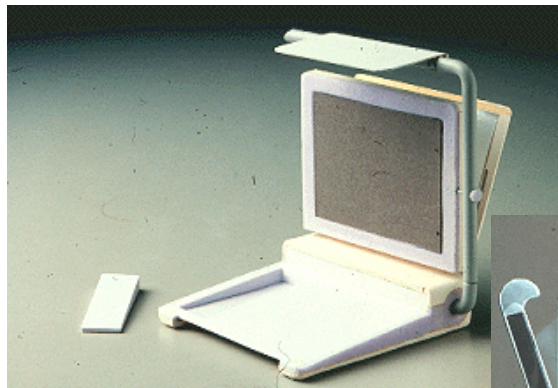


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Goals

Design a visual prototype for a new product and, in the process, learn a variety of design techniques and develop an awareness of industrial design issues.

Create, forward-looking, well-reasoned concepts that we may actually see 5 years from now.



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Scenario

From: Jane Boss <vip@big.xyz>
To: Medical Appliance Group <mag@big.xyz>
Cc: Jane's Boss <vvip@big.xyz>
Subject: New Product Vision
Date: Mon, 10 Feb 2003 12:00:59 -0600

MAG,

As I warned last week, we have a new challenge. The folks in strategic product planning have identified “Medical Information Appliances” as critical for our future. They have requested a group of visual models to illustrate products that we might produce in 5 to 6 years.

This time they have not over-specified the product. You should be able to think quite broadly—maybe even define a product for a general audience. However, the product designs must satisfy the target audience—caregivers.

Description at

<http://web.mit.edu/2.744/www/CourseInformation/ProjectIndex.html>

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Product Context

We make medical instrumentation, computers, and communications gear

We are respected in hospitals and our instruments and software are used in critical care situations

Mistakes are too easily made in complex care-giving systems

Caregivers are overloaded

Description at

<http://web.mit.edu/2.744/www/CourseInformation/ProjectIndex.html>

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Product Context

Most drug companies are introducing bar-coded, single-dose packaging

Several personal security identification schemes are being introduced

New-generation caregivers are not technophobic

Patients are more aggressive about knowing more about their own treatments

Military markets may become more important

Rapid and accurate communications is becoming more critical for caregivers

Description at

<http://web.mit.edu/2.744/www/CourseInformation/ProjectIndex.html>

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Technology Context

In the next four years

- computation speeds will likely quadruple
- wi-fi (wireless fidelity) speed will likely increase by a factor of ten
- battery energy density will likely improve by 2X
- flexible display screens will be available
- display resolution will improve 2X to 4X
- display power requirements will decrease by 3X
- power for CPUs will stay flat or decrease
- memory cost and size is decreasing and speed is increasing

We must get the feature set and product form right!
We cannot afford to have our product be like the
“Newton” for the PDA market.

Description at

<http://web.mit.edu/2.744/www/CourseInformation/ProjectIndex.html>

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Start thinking about it

What's out there



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Start thinking about it

What's out there



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Start thinking about it

What's out there



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Billing charges also apply.



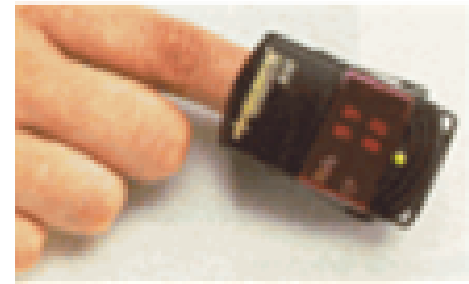
pdaMD.com



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Start thinking about it

What's out there



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Start thinking about it

Situation Identification

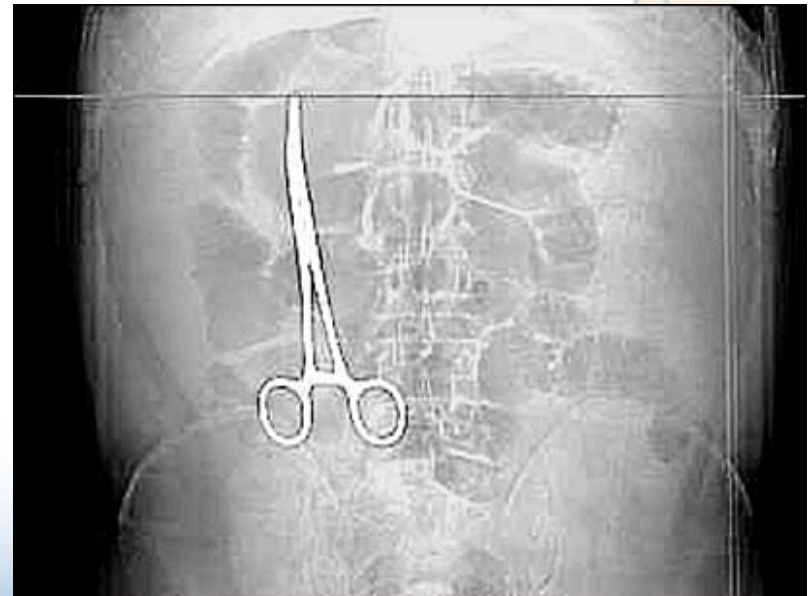
Surgical tools left behind

Medical instruments are left inside about 1,500 surgery patients a year, a new study shows. Surgical sponges and clamps are the objects most often left behind.

SOURCE: AP/NEJM

 **AUTO-ID CENTER**

Identify Any Object Anywhere Automatically



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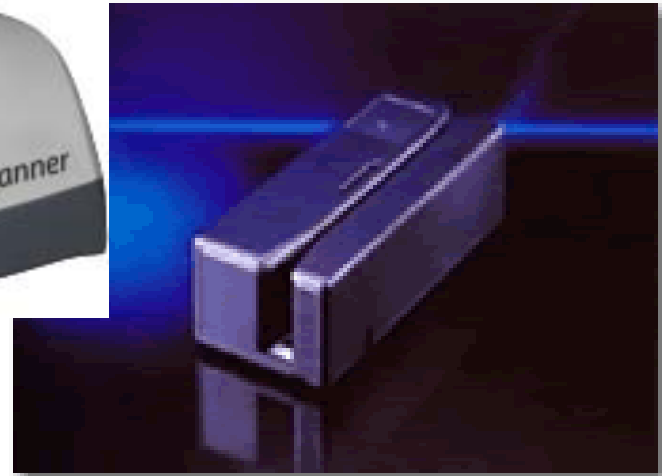
Start thinking about it



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Start thinking about it

Situation Identification



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Start thinking about it

WHOSE IS WHOSE



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Thinking and Symbol/Icon Design Practice

20-25 minutes:

Divide into groups of 5. Discuss situations where portable information-driven medical appliances may have valuable applications, drawing upon personal observations, articles you have read, or stories that you have heard about. Be sensitive to privacy issues.

10-15 minutes:

As a group pick 5 different, promising situations. Prepare a single page overview of each situation, providing a scenario name, identification of the key issue, and gestural symbol/icon depicting the situation. Each person in your group should prepare one situation.

15 minutes:

Have a representative briefly describe two scenarios from your group. Each group will have approximately 90 seconds. Show scenarios that have not yet been presented by another group.

Hand in the prepared scenarios at the end of the class. They will be scanned and put on the course website as a resource for the class.

2.744 Project Introduction

Drawing Kit Homework

Due Monday, Feb 19

Details online

<http://web.mit.edu/2.744/www/CourseInformation/Assignment.htm>