

INTRODUCTION TO HCI

**HCI & WEB DESIGN
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OVERVIEW

- What is HCI/Interaction Design?
- Why is it important?
- What are the goals of interaction design?
- Good vs. bad designs

WHAT IS HCI/INTERACTION DESIGN?

- HCI (Human Computer Interaction) seeks to provide an understanding of the human user and the computer system, in an effort to make the interactions between the two easier, more efficient and more satisfying
- Designing interactive products to support the way people communicate and interact in their everyday and working lives
 - Sharp, Rogers and Preece (2011)

WHY IS IT IMPORTANT?

- Increased productivity
 - For example:

20 users

x 240 days (5 days a week, 48 weeks a year)

x 100 screens per day

x 10 seconds per screen savings

= 1278 hours or 32 weeks saved each year

WHY IS IT IMPORTANT?

- Reduced training costs

- For example:

- 20 employees

- x 2 systems/applications per year

- x 2.5 days per application (saved)

- = 100 days or 20 working weeks saved each year

WHY IS IT IMPORTANT?

- Preventable user errors
 - For example:

500 users

x 20 errors per year

x 15 minutes per error

= 2500 hours lost (or 63 weeks)

GOALS OF INTERACTION DESIGN

- Develop usable products
 - Usability means easy to learn, effective to use and provide an enjoyable experience
- Involve users in the design process
- Need to take into account:
 - Who the users are
 - What activities are being carried out
 - Where the interaction is taking place

GOOD VS. BAD DESIGN

- Can you think of some examples of good design?
- How about some examples of bad design?

GOOD VS. BAD DESIGNS



BAD DESIGNS

- Elevator controls and labels on the bottom row all look the same, so it is easy to push a label by mistake instead of a control button



- People do not make same mistake for the labels and buttons on the top row. Why not?

From: www.baddesigns.com

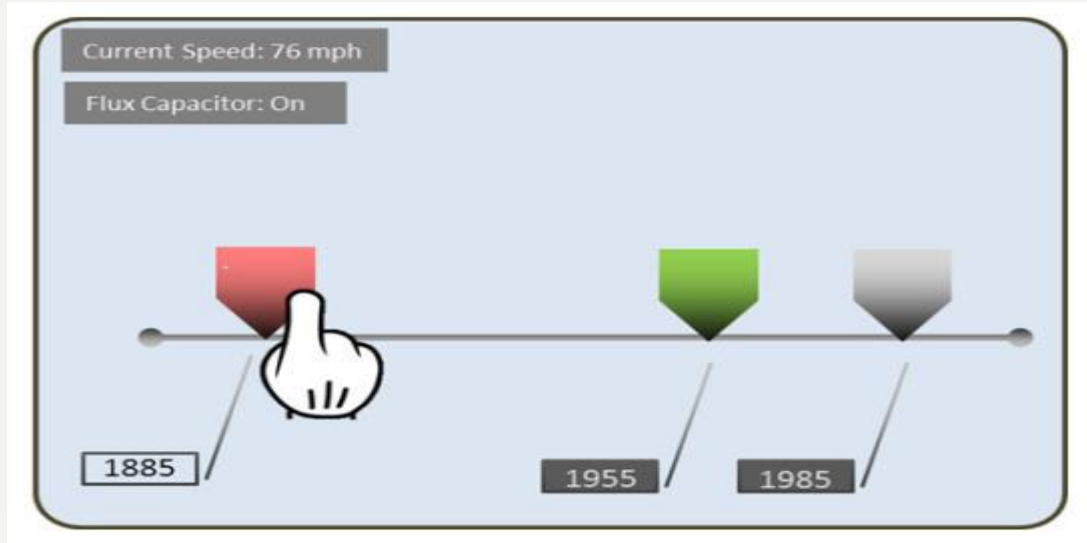
DESIGN PROBLEM: DISPLAYS THAT ARE TOO SIMILAR

- Can you think of a better design for this dashboard?
- Need to show:
 - Current date/time
 - Destination date/time (where you are going)
 - Last date/time departed (where you have come from)



DESIGN PROBLEM: (POSSIBLE SOLUTION) DISPLAYS THAT ARE TOO SIMILAR

- Use a touchscreen with sliders for different points in time:
 - Red = destination
 - Green = current date/time
 - Grey = last departed date/time



Source: <https://jackskchang.wordpress.com/2012/11/30/re-designing-the-time-machine-in-back-to-the-future/>

GOOD VS. BAD WEBSITE DESIGN

- In groups of 2/3, compare two websites:
 - Choose one example of good design, and another that is an example of bad design – or compare two competing websites
 - List the characteristics of the well-designed website
 - Also, list the reasons that the other website has a poor design