

# HCI: REVIEW / PROJECT

HCI COMP341

Review of previous lectures and project

# REVIEW

- Users need
- Analyzing Data
- Good Requirement
- Demo

# OVERVIEW

- Review of past lectures
- project ideas

# PROJECT IDEAS

# SOME IDEAS

- Interface for KU website
- Media Player Interface
- KU mobile site
- User Survey
- Some Interesting webpages

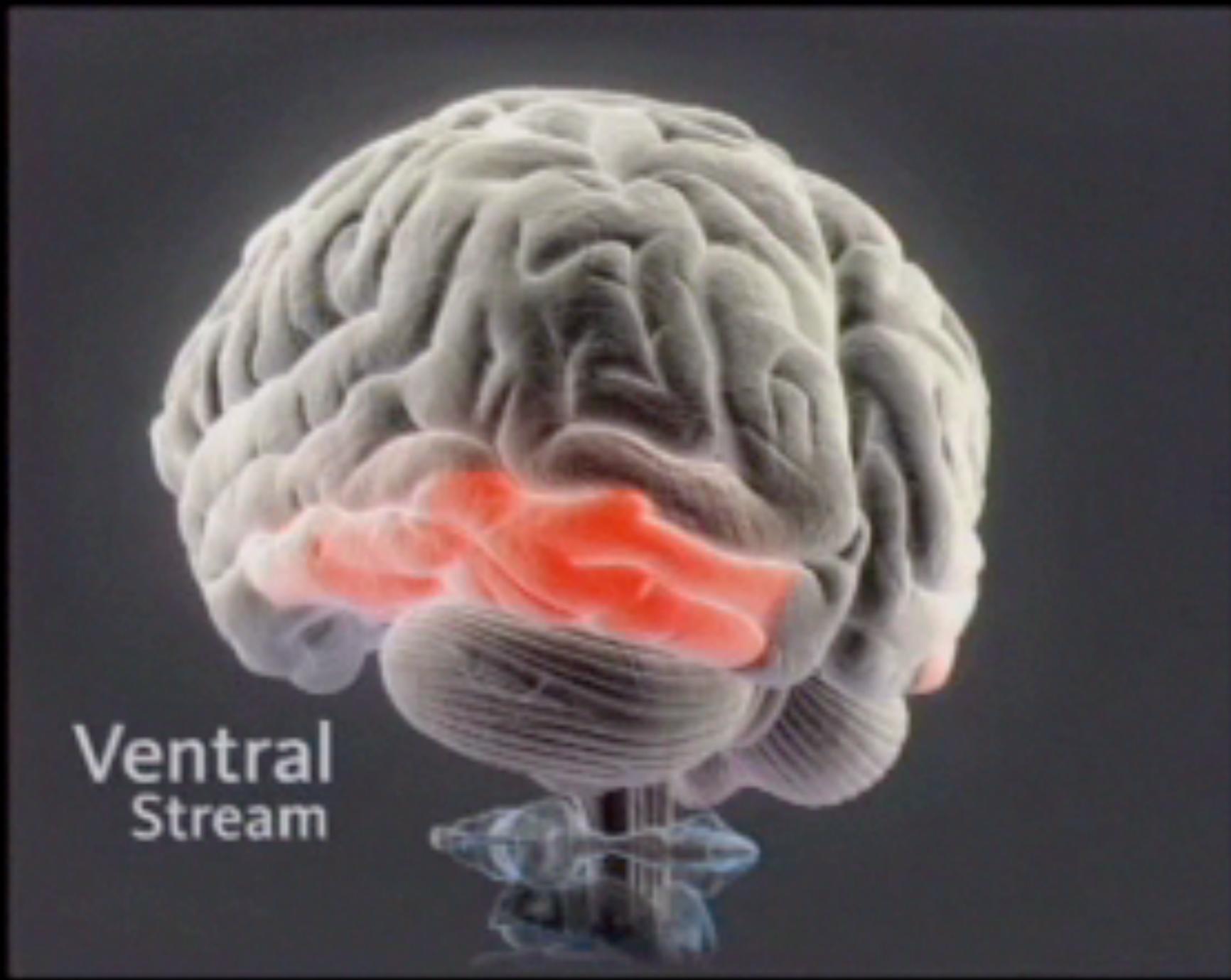
<http://tinyurl.com/miniprojectform>



# ENVIRONMENT

how to consider them while designing interaction?

WHAT IS HCI?



**HCI=PSYCHOLOGY+ENGINEERING**

ERROR!! ERROR!! ERROR!!

# **WANTED**

## **Web page required**

Desperately seeking HTML. Must not be missing, lost or broken.

Straight web site (28) seeks long lost web page for good times.

Must have GSOH, HTML, PHP.

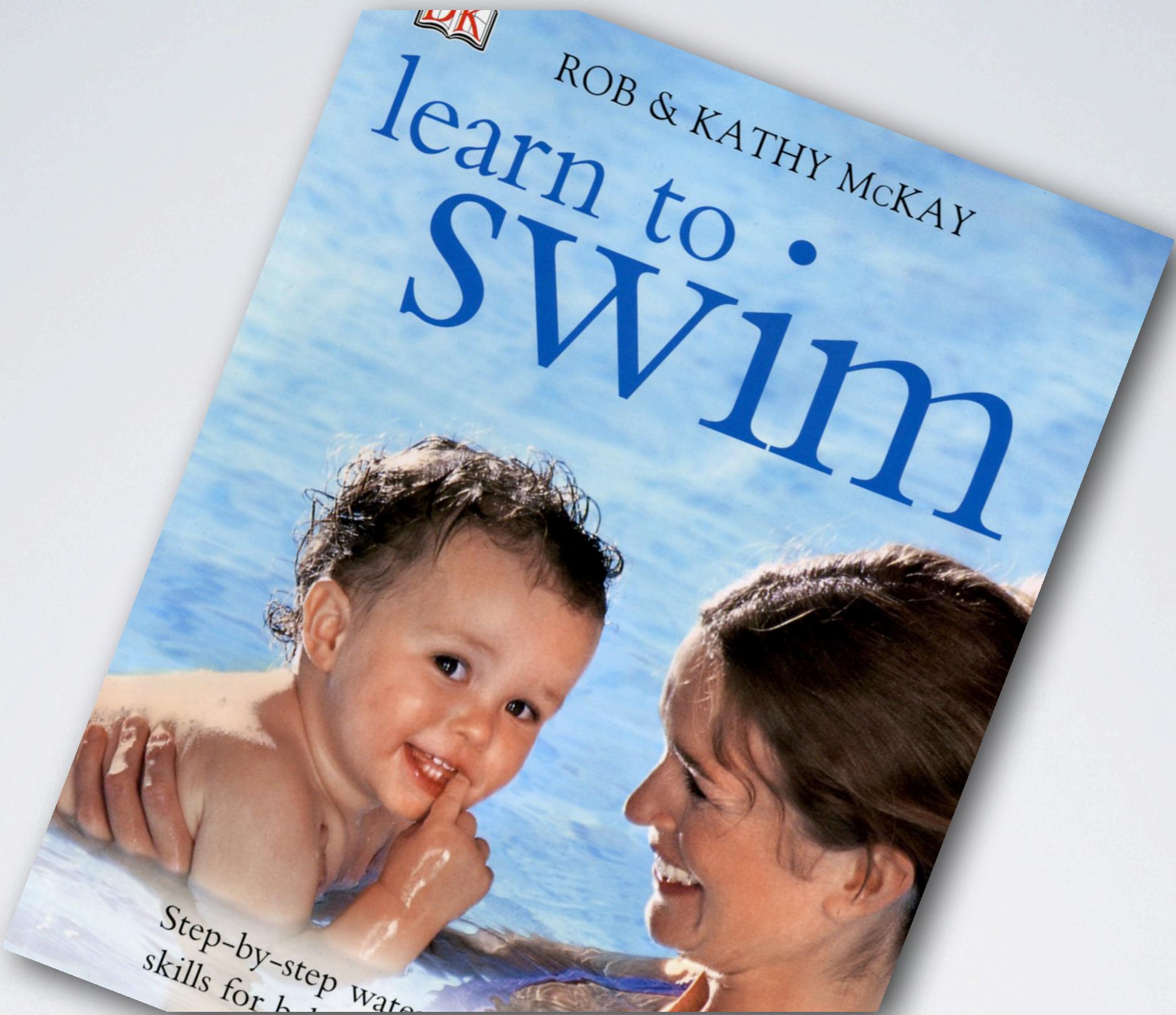
Photo please.

**To apply call: 404-File not found**

# DESIGNING FOR ERROR

even error can be experience

# BASIC WORKFLOW



**THINK, PLAN & WORK**

failing to plan is planning to fail.

# 7 STAGES OF ACTION

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- Forming the goal
  - Forming the intention
  - Specifying an action
  - Executing the action
  - Perceiving state of world
  - Interpreting state of world
  - Evaluating the outcome
- 
- The diagram illustrates the 7 Stages of Action as follows:
- Forming the goal, • Forming the intention, • Specifying an action, and • Executing the action are grouped under the heading "Activity design".
  - Perceiving state of world, • Interpreting state of world, and • Evaluating the outcome are grouped under the heading "Information design".
  - Specifying an action, • Executing the action, and • Evaluating the outcome are also grouped under the heading "Interaction design".

## NORMAN'S STAGES

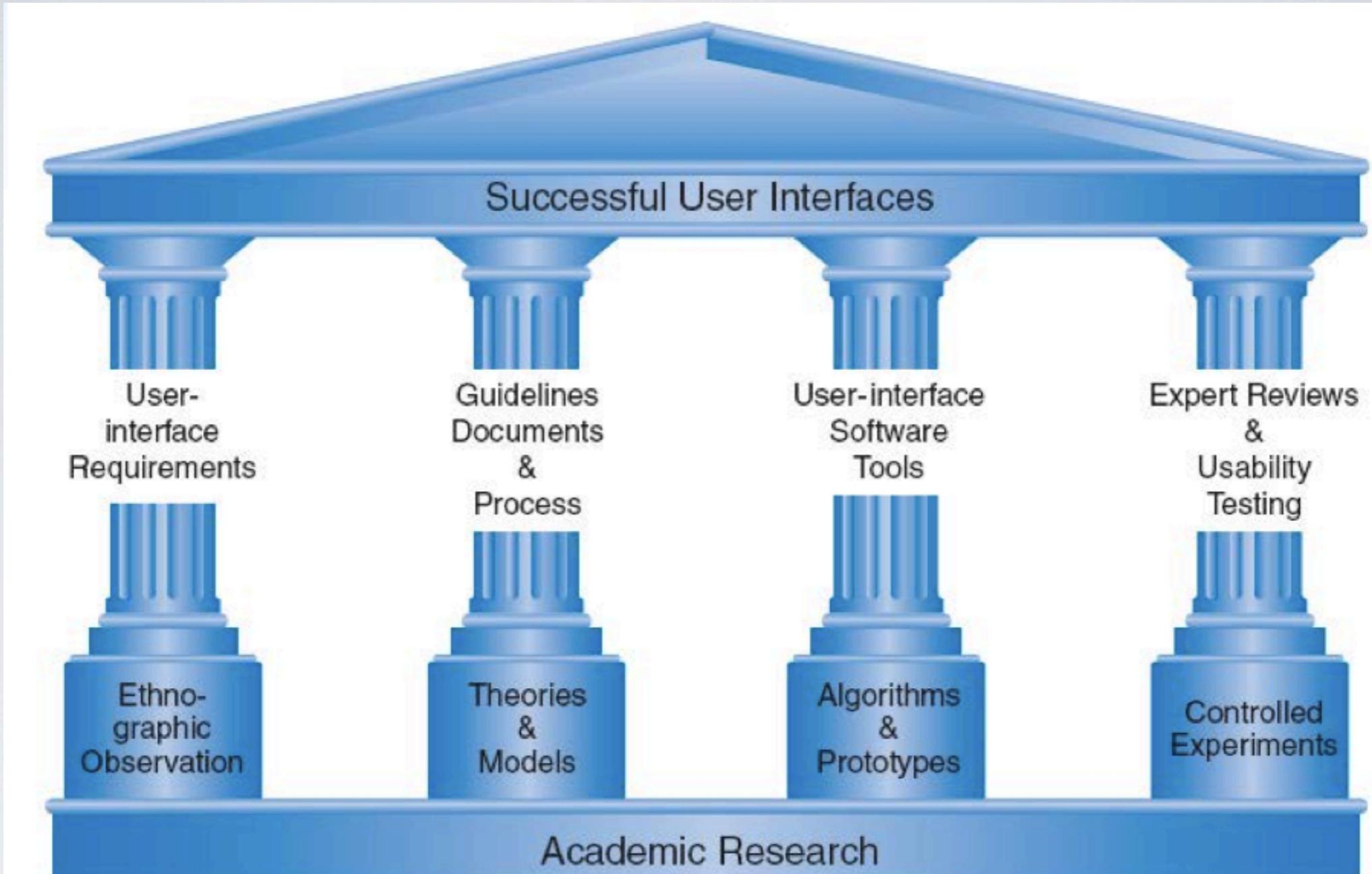
activity, interaction and information

# 8 GOLDEN RULES

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- Strive for Consistency
- Enable frequent users to use shortcuts
- Offer informative feedback
- Design dialogues to yield closure
- Offer error prevention and simple error handling
- Permit easy reversal of action
- Support internal locus of control
- Reduce short term memory load

# 4 PILLARS OF UI DESIGN



# THE FOUR PILLARS

Success of UI is constrained science, too!

# 7 CRITERIA



# AFFORDANCES

When you see it you will know it.



# CONSTRAINTS

restrict user interaction to reduce error



# CONCEPTUAL MODEL

mental image of how system works, more closer to functionality  
the better.

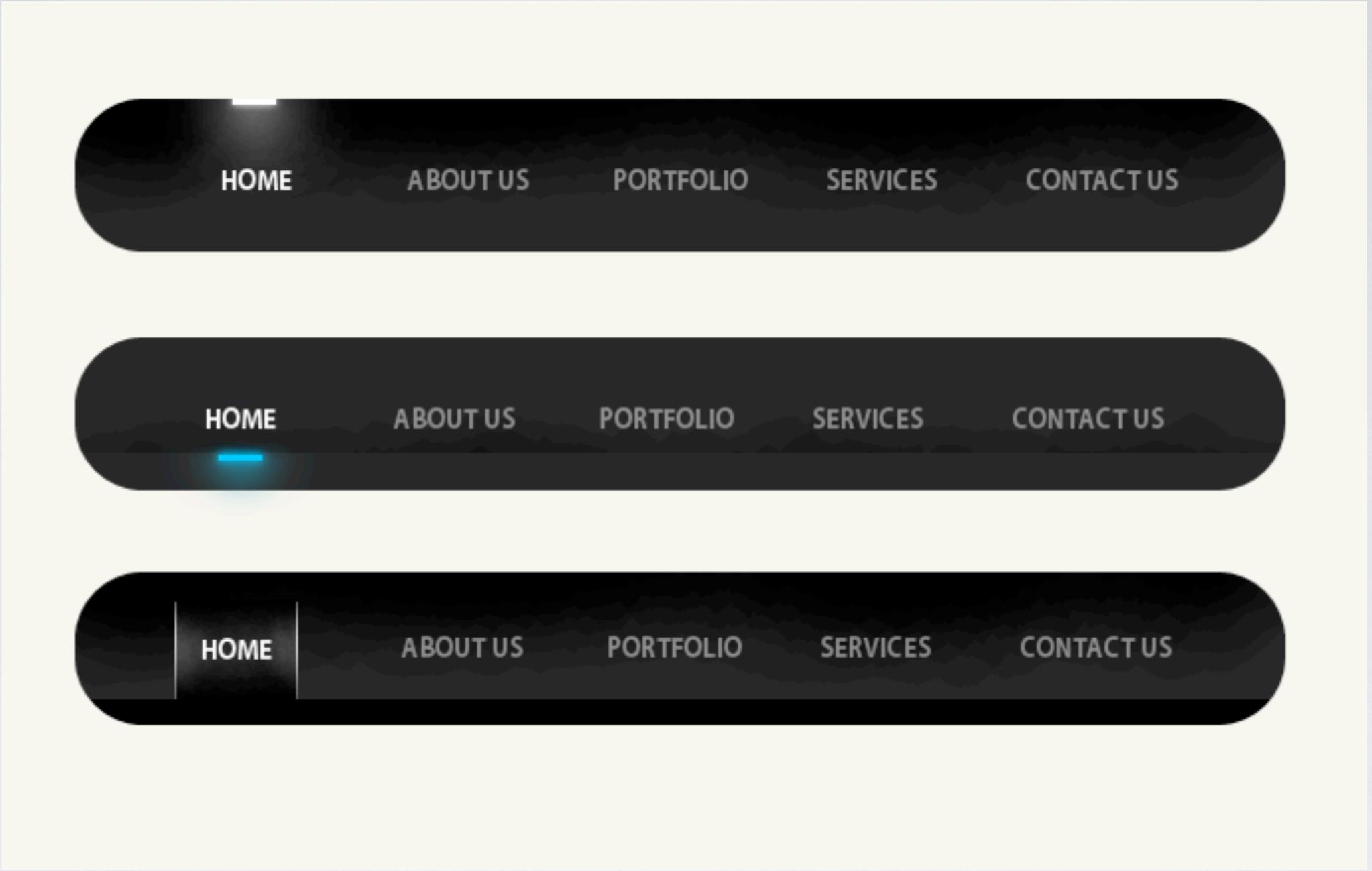


# MAPPING

relationship between control parameters and it's effect

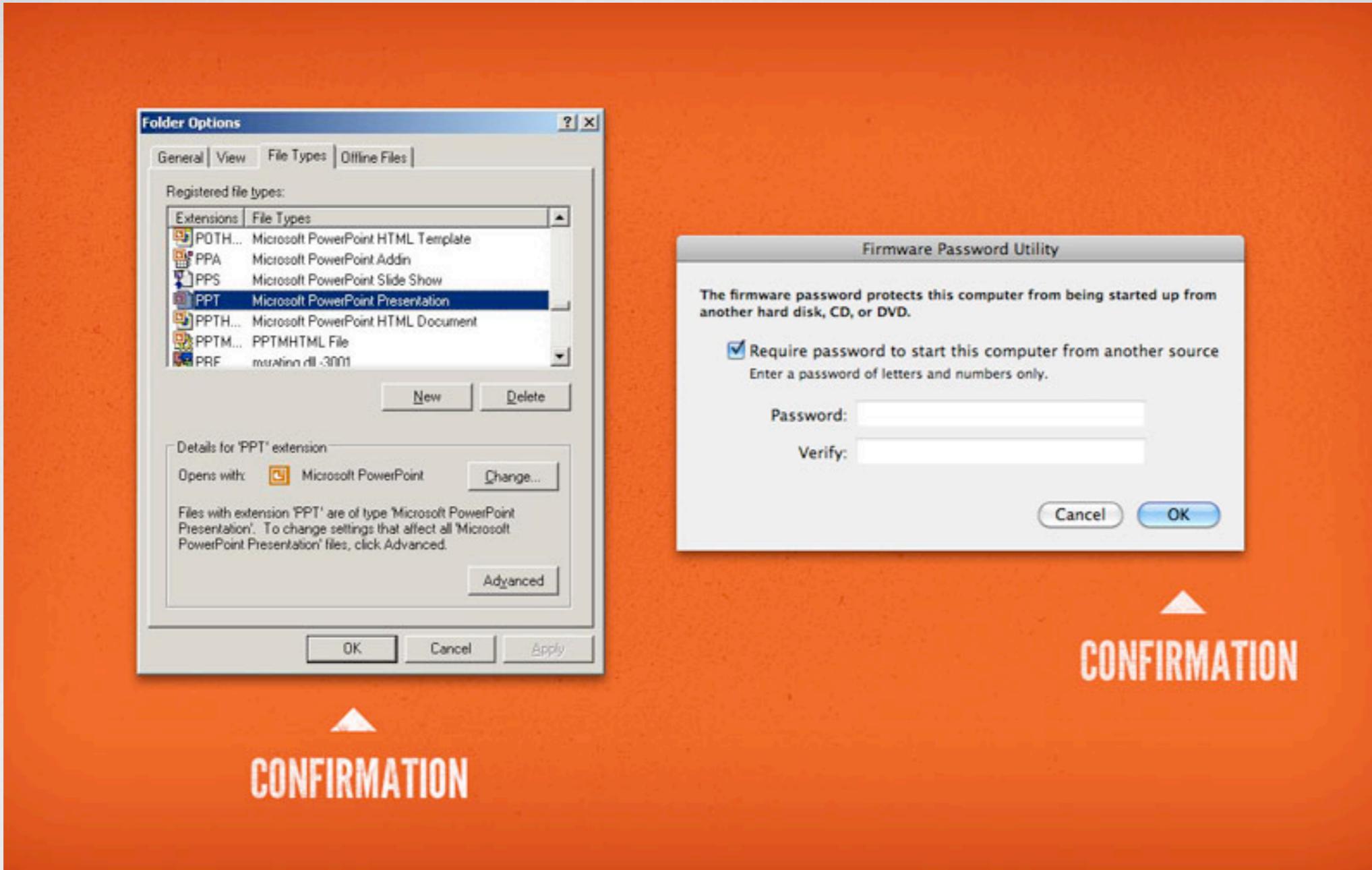
# VISIBILITY

make sure the available controls are obvious and visible



# FEEDBACK

let user know what is happening



CONFIRMATION

CONFIRMATION

# CONSISTENCY

similarity in similar function and identical way to perform them

# TYPE OF REQUIREMENT

# GAS STATION

- **Functional:** The system will dispense and calculate the total cost of gas
- **Data:** The system must have access to current gas price costs
- **Environmental:** Systems will be used in gas station forecourt. Physical environment will be noisy and busy. Users will be in a hurry.
- **User:** Anyone of legal driving age with a fair understanding of technology.
- **Usability:** System needs to be simple. Next steps need to be clearly indicated.



# ENVIRONMENT

High-tech art (with a sense of humor) - Aparna Rao (2011)

MANY THANKS