Interface Design

Easy to learn?
Easy to use?
Easy to understand?
Interface Design

Typical Design Errors

- lack of consistency
- too much memorization
- no guidance / help
- no context sensitivity
- poor response
- Arcane/unfriendly
Golden Rules

- Place the user in control
- Reduce the user’s memory load
- Make the interface consistent
Place the User in Control

Define interaction modes in a way that does not force a user into unnecessary or undesired actions.

Provide for flexible interaction.

Allow user interaction to be interruptible and undoable.

Streamline interaction as skill levels advance and allow the interaction to be customized.

Hide technical internals from the casual user.

Design for direct interaction with objects that appear on the screen.
Reduce the User’s Memory Load

Reduce demand on short-term memory.

Establish meaningful defaults.

Define shortcuts that are intuitive.

The visual layout of the interface should be based on a real world metaphor.

Disclose information in a progressive fashion.
Make the Interface Consistent

Allow the user to put the current task into a meaningful context.

Maintain consistency across a family of applications.

If past interactive models have created user expectations, do not make changes unless there is a compelling reason to do so.
Interface Design Patterns

- Patterns are available for
  - The complete UI
  - Page layout
  - Forms and input
  - Tables
  - Direct data manipulation
  - Navigation
  - Searching
  - Page elements
  - e-Commerce