

Human Interface Design

Design Principles

- Metaphors
- Direct manipulation
- Feedback
- User control
- Aesthetic integrity
- Consistency
- Perceived stability
- Managing complexity
- Modelessness
- Discoverability

Characteristics

- High performance
- Ease of use
- Attractive appearance
- Reliability
- Adaptability
- Interoperability
- Mobility
- Focus
- Communication

Downsides

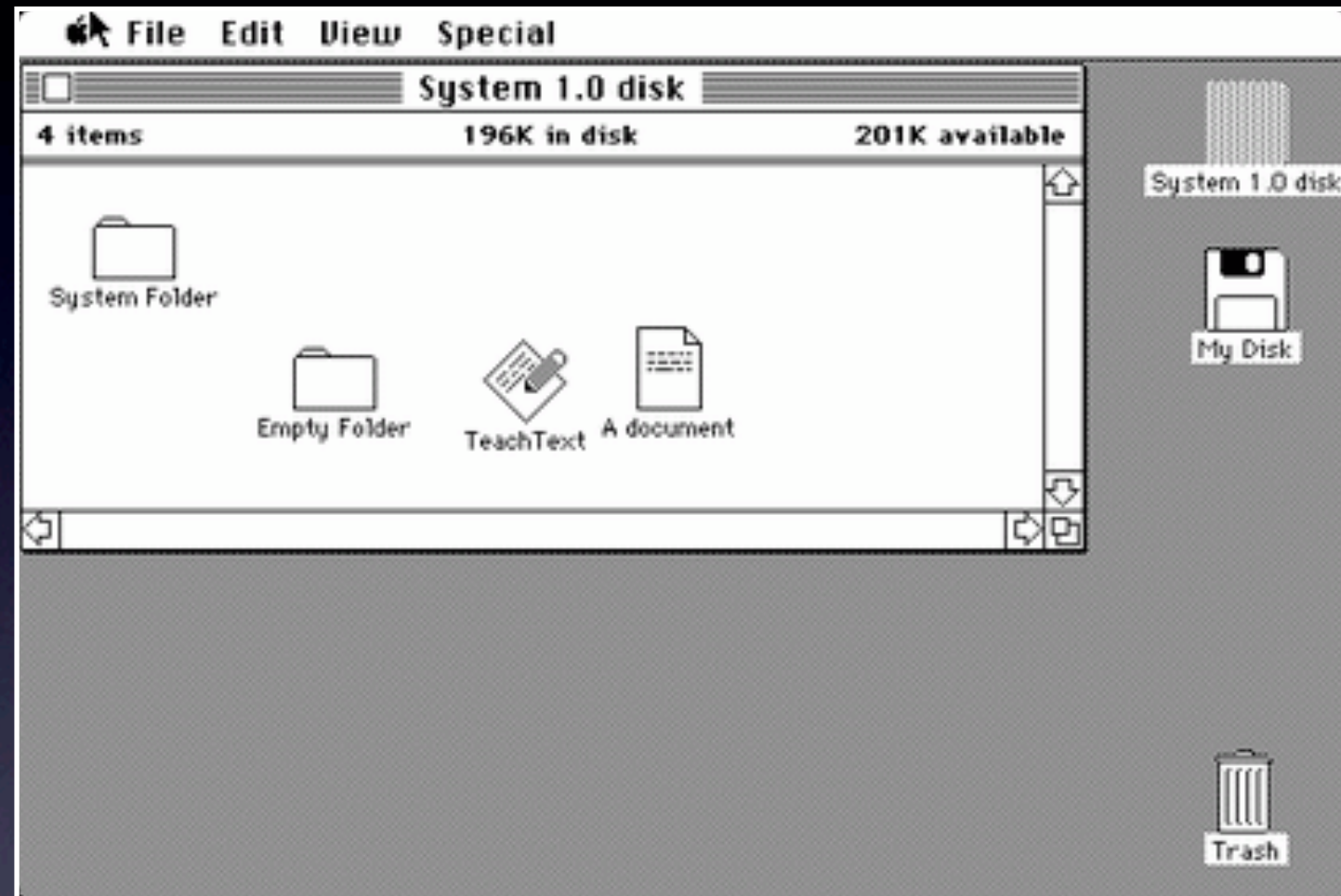
- Screen
- Pointer
- Text input
- Processor, memory
- Graphics
- Mobile device
- Storage
- New API

Advantages

- Multi-Touch
- Multi-Touch
- Multi-Touch

Advantages

- Exclusivity (modality)
- Simplicity, uniformity
- Hardware
- New API



Metaphors

Metaphors

- Instructions for free
- Makes users happy
- Consistency

App Styles

- Productivity
- Utility
- Immersive (the iPhone metaphor)

Hardware

- Use it creatively
- Realize the difference between “creative” and “gimmicky”
- Get it right

iPhone-like

- Standard controls and icons
- Table views
- Custom views for new controls only

The screenshot shows a mobile application interface with a light blue background. At the top, there are three tabs: 'Today', 'Yesterday', and 'Other', with 'Today' selected. To the right of these tabs is a button labeled 'Car #1'. Below the tabs, the 'Distance:' label is followed by a digital odometer display showing '000.0' miles. Underneath the odometer are four buttons: 'Business' (blue), 'Charity' (green), 'Medical' (red), and 'Other' (blue). The 'Charity' button is currently selected. Below these buttons are two text input fields: 'Destination:' with the value 'Apple Cupertino' and 'Purpose:' with the value 'Consulting'. Below the input fields is a section titled 'Frequent Trips:' which contains a list of four items: 'Post Office (3.2)', 'FedEx (4.4)', 'Fry's Electronics (20.7)', and 'Santa Clara Valley Audubon (6.7)'. To the left of this list are two buttons: a '+' button and an 'Edit' button. Below the 'Frequent Trips' section are three buttons: '\$ Spent' (green), 'Save Data' (red), and 'Clear' (blue). At the bottom of the screen is a table view with three columns: 'Date', 'Dist.', and 'Destination / Purpose'. The table contains three rows of data. A blue arrow button is located to the right of the table.

Date	Dist.	Destination / Purpose
6/18/08	20.7	Fry's Electronics
6/19/08	5.5	Dentist
6/20/08	3.2	Post Office

Consideration

- Reasonable tap targets
- Small footprint
- Forgiving
- Obey the mute switch
- Internationalization & localization

Homework

- Read Part I of the Apple Human Interface Guidelines (not the iPhone HIG)