



# DESIGNING AND PRODUCING

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# OVERVIEW

- Designing structure for a multimedia project
- Designing the interface for a multimedia project
- How to produce a successful multimedia project



# DESIGNING IN A MULTIMEDIA PROJECT

- Designing a multimedia project requires knowledge and skill with computers, talents in graphics, arts, video and music and the ability to conceptualize logical pathways.
- Designing involves thinking, choosing, making and doing
- Designing includes: design the structure and design the user interface



# DESIGNING THE STRUCTURE

Never begin a multimedia project without first outlining its structure and content.



# DESIGNING THE STRUCTURE

- A multimedia project is no more than an arrangement of text, graphic, sound, and video elements (or objects).
- The way you compose these elements into interactive experiences is shaped by your purpose and messages
- How you organize your material for a project will have just as great an impact on the viewer as the content itself



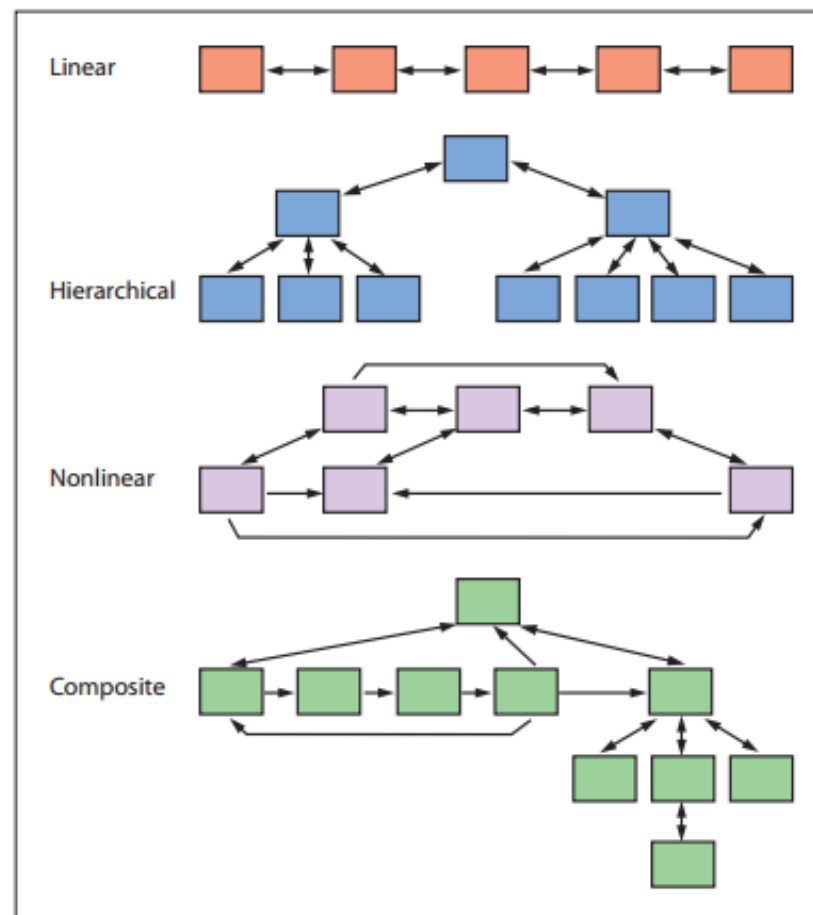
# DESIGNING THE STRUCTURE

- Navigation
  - Navigation maps outline the connections or links among various areas of your content
  - Help you organize your content and messages
  - Basic structures of navigation: linear navigation, hierarchical navigation, nonlinear navigation, and composite navigation

# DESIGNING THE STRUCTURE



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# NAVIGATION

- Linear: Users navigate sequentially, from one frame or bite of information to another.
- Hierarchical: Also called “linear with branching,” since users navigate along the branches of a tree structure that is shaped by the natural logic of the content.
- Nonlinear: Users navigate freely through the content of the project, unbound by predetermined routes.
- Composite: Users may navigate freely (nonlinearly) but are occasionally constrained to linear presentations of movies or critical information and/or to data that is most logically organized in a hierarchy





# NAVIGATION

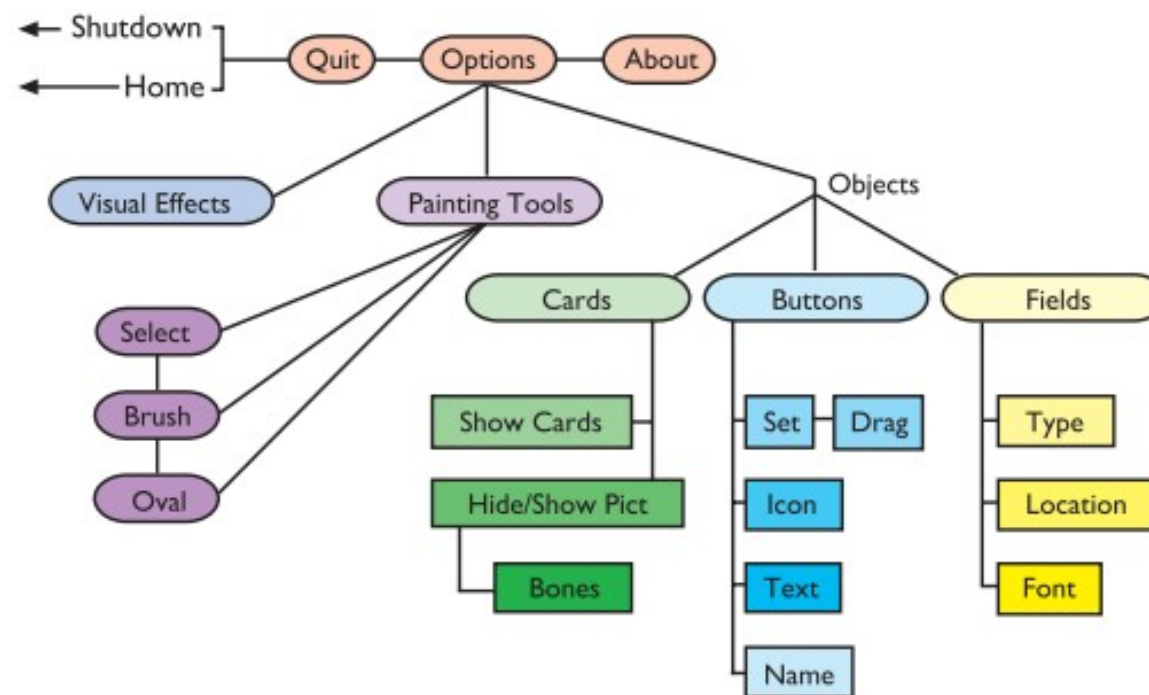
- The navigation system should be designed in such a manner that viewers are given free choice
- Providing consistent clues about the importance by varying typeface size and look, colorizing, indenting, or using special icons
- The architectural drawings for a multimedia project are storyboards and navigation maps
- Storyboards are linked to navigation maps during the design process, and help to visualize the information architecture

# NAVIGATION



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## ■ Navigation map

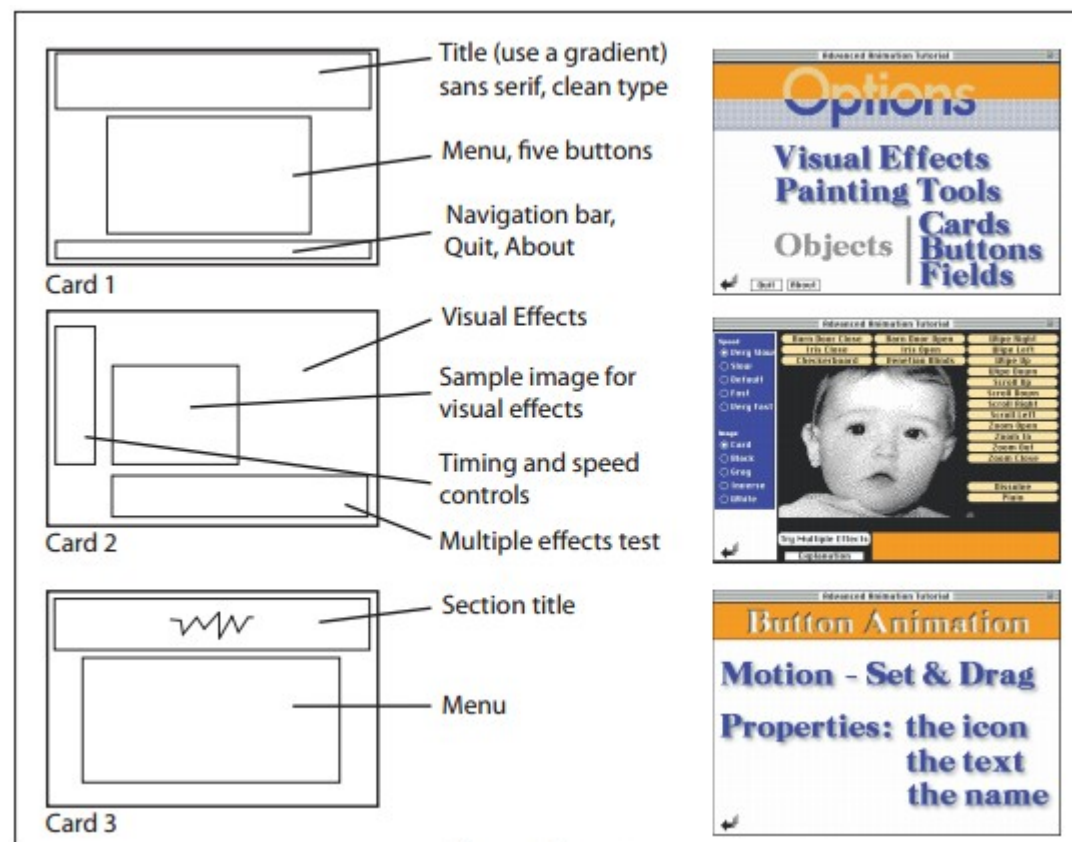


# NAVIGATION



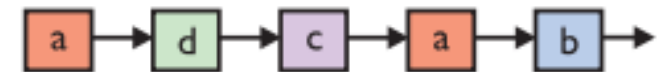
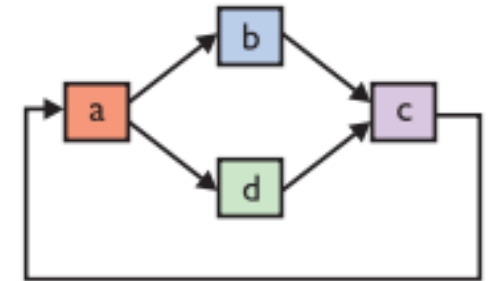
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## ■ Storyboard



# DESIGNING THE STRUCTURE

- Structural Depth:
  - Depth structure represents the complete navigation map and describes all the links between all the components of your project
  - Surface structure, on the other hand, represents the structures actually realized by a user while navigating the depth structure. Thus the following depth structure





# DESIGNING THE STRUCTURE

- Surface structure
  - Allows designers to view the product from a user's perspective
  - Helps track users' routes through a web site to determine the effectiveness of the site's design
  - Profiles a user's preferences in order to deliver dynamic website experience

# DESIGNING THE STRUCTURE

- Hot Spots:
  - are defined as meaningful graphic images or texts that you click or “touch” to make something happen.
  - Make multimedia not just interactive, but also exciting
  - Example: <https://www.bookwidgets.com/play/WBQWTZ>
- Hot spots can be: hyperlinks, buttons, or icons
- If you use buttons or icons, make sure that they make sense. Avoid using many new or special icon.



# DESIGN THE INTERFACE

- The user interface of your multimedia product is a blend of its graphic elements and its navigation system
- Poor navigational aids can make viewers feel lost and unconnected to the content
- Poor graphics can cause boredom.

# DESIGNING THE INTERFACE

- Two types of users: those who are computer literate and those who are not
- Users like to be in control
- Users do not like to have to remember keywords or special codes
- Users do make mistakes







# DESIGNING THE INTERFACE

- To make an interface that suitable for a multimedia project:
  - Contain plenty of navigational power
  - Provide access to content and tasks for users at all levels
  - Provide a help system.
  - Use clear textual cues
  - Keep the interface simple



# DESIGNING THE INTERFACE

- <https://www.weather-forecast.com/locations/Hanoi/forecasts/latest>
- [https://weather.com  
/weather/today/l/5217c2dc73b218e291cd6b14caaf944821ea545970bf0  
c6bc393af8b56d793bb](https://weather.com/weather/today/l/5217c2dc73b218e291cd6b14caaf944821ea545970bf0c6bc393af8b56d793bb)
- <https://www.windy.com/-Temperature-temp?gfs,temp,17.885,107.666,7>



# DESIGNING THE INTERFACE

- To make an interface that suitable for a multimedia project (continue):
  - Consistence in designing both the look and the behavior of your human interface
  - Sticking with real-world metaphors that will be understood by the widest selection of potential users
  - Avoiding hidden commands and unusual keystroke/mouse click combinations to let users in control
  - Allow users a chance to escape from inadvertent or dangerous predicaments because they may make mistake
  - Provide suitable feedback



# VAUGHAN'S GENERAL RULE FOR INTERFACE DESIGN

***“The best user interface demands the least learning effort”***



# DESIGNING THE INTERFACES

- Graphical approaches that get good results:
  - Neatly executed contrasts: big/small, heavy/light, bright/dark, thin/thick, cheap/dear
  - Simple and clean screens with lots of white space(see Figure 10-9)
  - Eye-grabbers such as drop caps, or a single brightly colored object alone on a gray-scale screen



# DESIGNING THE INTERFACES

- Graphical approaches that get good results (continue):
  - Shadows and drop shadows in various shades
  - Gradients
  - Reversed graphics to emphasize important text or images
  - Shaded objects and text in 2-D and 3-D
  - Always provide a toggle switch to disable sound if you do include it

# DESIGNING THE INTERFACES

- Things to avoid in creating computer graphics:
  - Clashes of color
  - Busy screens (too much stuff )
  - Using a picture with a lot of contrast in color or brightness as a background
  - Clanging bells or squeaks when a button is clicked
  - Frilly pattern borders





# DESIGNING THE INTERFACES

- Things to avoid in creating computer graphics (continue):
  - Requiring more than two button clicks to quit
  - Too many numbers (limit charts to about 25 numbers; if you can, just show totals)
  - Too many words (don't crowd them; split your information into bite- sized chunks)
  - Too many substantive elements presented too quickly





# PRODUCING

- Production is the phase when your multimedia project is actually rendered
- It's important to start out on the right foot, with good organization, and to maintain detailed management oversight during the entire construction process



# DESIGNING THE INTERFACES



*Image source: [www.makeuseof.com](http://www.makeuseof.com)*

# PRODUCING



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- Starting up:
  - Check your development hardware and software and review your organizational and administrative setup





# PRODUCING

- Working with clients:
  - Maintain **good communication** between you and the client as well as among the development team.
  - Manage production so that your client **is continually informed and formally approves** by signing off on artwork and other elements as you build them
  - Specified specifies **the number and duration of client review/feedback cycles** and added a clause for cost overrun beyond that
  - Prepare means of transporting the project to distant clients



# PRODUCING

- Tracking:
  - Develop a file-naming convention
  - Store the files in directories or folders with logical names
  - Version control of your files (tracking editing changes) is critically important
  - Make sure that all members know what version is the latest and who has the current version

- Copyright
  - Insert a copyright statement in your project that clearly (and legally) designates the code as your intellectual property





# PRODUCING

## ■ Risks

- Expect problems beyond your control, and be prepared to accept them and solve them
- Be prepared to deal with some common irritants, for example:
  - Creative coworkers who don't take (or give) criticism well
  - Clients who cannot or are not authorized to make decisions
  - Too many meetings; off-site meetings
  - Missed deadlines



# PRODUCING

- Risks
  - If you are in a team:
    - Tolerate one another's differences
    - Pay attention to the mental health of all personnel involved in your project
    - Be aware of the dynamics of the group and whether people are being adversely affected by individual personalities.
    - If problems arise, deal with them before they become hazardous





# ADMISSION TICKET

- 2 things you learned
- 1 question you still have today





# REFERENCES

- *Multimedia: making it works* by Tay Vanghau, 8<sup>th</sup> edition