A concepção em projectos multimédia
Directrizes para a condução de projectos

Os aspectos referidos quanto à condução de projectos com recurso a tecnologias multimédia e de comunicação deve ser realizado tanto quando se efectua o início de um projecto como durante a sua condução. Importa ter em linha de conta estes aspectos de forma a conseguir assegurar o bom sucesso e concretização deste tipo de projectos de forma a aproveitar as vantagens da utilização do multimédia.

Resumo dos aspectos a ter em conta:

- decidir quem são os utilizadores (audiência)
- decidir o que é assunto do projecto e o que não faz parte deste (âmbito)
- decidir como será apresentado o assunto aos utilizadores (estratégia de apresentação)
- tornar o projecto fácil de navegar (facilidade de utilização)
- introduzir as pessoas ao projecto (sensibilização)
- integrar os diferentes media utilizador, tais como textom gráficos e som (sincronização)
- planear como incorporar sucessivas mudanças no projecto (evolução)
- testar cedo, testar frequentemente e ter em conta os revisores do projecto (testar)
- no final, verificar o projecto uma última vez (recapitular e aprender!)

Guias para a concepção de um projecto multimédia

1. Who will be using your Project?

- Users:
  will they share many characteristics? (what are these?)
  were they widely varied?
  describe a typical user (describe two, if your audience has extremes).
- Previous experience:
  computers, both software and hardware
  subject matter expertise.
- Context in which user will be using the Project:
  alone
  with other software
  with other hardware
  over a network
  as part of a training class.
- Special markets:
  international considerations (and for which countries)
  disability audiences (and for which disabilities).

2. What's your subject matter?

- What's the general purpose of your Project? (in brief)
  What will your Project cover?
  What won't it cover?
  How much space do you have to work with? (high-density disk, hard disk (what size?), 1 CD-ROM disk (656 megabytes), other (list possibilities…).
- What resources do you have to build it with?
  time
  developers, graphic designers, sound composers, other
  money
  machines and equipment.
- What is the specific purpose of your Project, given the subject matter's scope, size, space limitations, and your development resources of time, people and money? Be detailed and explicit.

3. How is it most appropriate to present the subject matter to these users?

- What natural sections does your Project divide into?
- What functions must it perform?
- What's the Project's style?
- What presentation method seems best for these users and this subject matter?
  slide show
  demo, with rolling continuous animation
  training piece, structured and guided

desktop presentation, to use while giving a talk
game
tool, application, or utility
other (specify…)

- To the user, will the Project be identifiable as SuperCard? Will the Project's look and feel resemble the Macintosh interface? Will it simulate another kind of software for training purposes? Will it have a completely unique look?
- Is there an overall real-world metaphor that describes the Project?
  list the things your Project can do
  look at that list; is there some real-world object that can also do those things? (Examples: Slide projector, movie, television with channels, supermarket, bank).

4. Is your Project easy to navigate?

- Does your Project have navigation buttons on every screen, in the same place on the screen?
- Are buttons common to every card and separated from card-specific buttons?
- Have you provided the user with information about Project structure?
  context (Project maps, menus, diagrams)
  location ("You are here" indicators, card names, Project name)
  options and destinations
  overall Project structure and layout (metaphor, map, or explicit text)
  a way to tell how much of the Project they've seen (map, menu, progress indicators such as dials or page numbers).
- Is there a metaphor that would help the user comprehend your Project's navigation more easily?
  a metaphor with parts, such as a notebook with tabbed sections
  a metaphor that implies your Project's structure and navigation, such as a slide projector, cassette recorder, customised control panel.

5. Does your Project have a proper introduction?

- Does your Project include the following introductory elements?
  initial screen stating name and purpose
  introduction or opening
  Project-specific help
  something for the user to do right away
  a home base or reference point, such as a menu or Project map.
- Can the users learn about the Project?
  purpose
  content
  structure and extent
  options
  assumptions.
- When you test the Project, do people use it correctly?
  use the help function (instead of ignoring it)
  use the Project correctly (instead of overlooking options or functions)
  comment positively (instead of muttering in frustration)
  use the Project right away (instead of spending visible learning time)
  go through the Project smoothly (instead of all making the same error).

6. Graphics

- What is your visual look? (Some examples are businesslike, medieval, art-deco, childlike, Macintosh or other software simulation, future tech.)
- Is your design best suited to one Project or several? One background or several?
- How have you planned your card layout?
  underlying grid pattern
  allowance made for text, illustrations, background graphics, and visible buttons
  edges of the grid used for permanent buttons.
- Have you put elements common to most or all cards in the background?
- Which of the following will you need to design?
  buttons and icons
  fields
  backgrounds
  illustrations

scanned images
animation sequences
screen titles.

- Have you tested graphics completely?
  on all intended machines with all possible configurations of RAM and disk space
  with and without a hard disk, if appropriate.
- How have you planned your textual elements?
  font styles that visually match the style of your Project
  fonts big enough and dark enough to be easily readable
  text laid out in a grid
  line width and line spacing that make text readable.

7. Writing

- How polished and appropriate is your writing?
  good grammar and correct spelling
  concise expression
  works with graphics to convey meaning
  works with sound to convey meaning
  flows well from screen to screen; sounds good if read aloud
  is sufficiently independent on each screen so that users can tell what's meant
  has the right tone for your audience (not condescending)
  has been checked for accuracy and editorial correctness.

8. Sound

- Do you tell the user how to deal with sound?
  instructions for turning sound down in Control Panel
  instructions (and button) for turning sound off completely
  instructions to install resources on user's hard disk (if this is necessary for your Project's sounds).
- Are sounds associated with the Project's operation in a consistent way?
  visual effects
  major navigation transitions
  the Project's content
  user feedback
  progress indicators
  a running sound track.
- Have you tested sounds completely?
  on all intended machines with all possible configurations of RAM and disk space
  with and without a hard disk, if appropriate
  at different volume levels
  with several repetitions, to make sure sounds are not annoying.

9. Testing

- Test several times during the design and development of your Project.
- Don't tell testers how to do the thing you're testing for, however tempting it is.
- Guidelines for formal testing:
  set an objective
  design the specific tasks that use the things you want to test:
    navigation
    use of Project
    interaction
    entire Project: how do they use it?
  decide how to record user trials
  determine the settings (microphones, recorders, videotape, no distractions)
  find representative users that are like your target audience.
- Ten steps for conducting a formal test:
  1. Introduce yourself.
  2. Describe the purpose of the test, in general terms.
  3. Tell the participants it's all right to quit at any time.
  4. Talk about the equipment in the room.
  5. Explain how to "think aloud". Tell them if they forget, you'll remind them.
  6. Explain that you will not provide help.

7. Describe the tasks and introduce the Project. Tell them how to start it up, unless start-up is something you're testing.
8. Ask if the user has any questions before you start. Then begin.
9. Run the test and finish it.
10. Swallow your pride and use the results!

- Test to see that the following situations don't occur:
  - user gets to a screen without buttons or textual navigation reminders
  - user can't tell which objects are buttons
  - user can't tell what buttons do
  - user gets lost
  - user misses large portions of the Project
  - user is confused early or often
  - user breaks Project
  - user develops clumsy way to use Project instead of the intended way
  - several users make mistakes at same spot or miss the same point
  - you give user verbal hints, and so never discover how a lone user would fare
  - a Project to which yours connects, can't be found
  - an external file, needed by the Project, can't be found.
- Test the Project yourself by intentionally doing things that a first-time user might do wrong:
  - type at random on the keyboard
  - do the opposite of the Project's purpose
  - go to random places from various cards
  - click and type ahead
  - click several times in the same spot on one button.

10. Checking your Project

- Check your Project on all intended machines with all possible memory configurations.
- Check animation:
  - speed and appearance on slowest and fastest intended machines
  - smoothness
  - visual impact
  - co-ordination with sound.
- Check visual effects for consistency.
- Check sound:
  - volume
  - pace
  - smoothness
  - pleasantness even with repetition
  - adherence to the Project's style and mood.
- Check writing:
  - flow
  - typographical and grammatical correctness
  - consistent font usage
  - accuracy.
- Check that buttons are where they should be and do what they're supposed to do.
- Check logical sequential order.
- Compact the Project.