#### EBU5305

# Interactive Media Design and Production

The Design Process (overview)

# Agenda

- What does an interactive media designer do?
- A design process in three phases:
  - The information phase
  - The interaction phase
  - The presentation phase

EBU5305

# What does an interactive media designer do?

- An interactive media designer is concerned with:
  - Aesthetic value
  - Planning the creation of a new thing
- Often, this new thing is a communication
  - The designer is using audio-visual elements to make something that can convey an idea to other people
- Design can be looked at as:
  - A work in progress
  - Solving a problem to meet a need

3

#### Interactive Media Design

If **interactive media** is the integration of digital media including combinations of electronic text, graphics, moving images, and sound, into a structured digital computerised environment that allows people to interact with the data for appropriate purposes...

Then interactive media design is about:

- Choosing and creating the media
- Putting them together (giving them a structure)
- Deciding how to interact with them
- Making sure we are creating something useful

EBU5305

## Multimedia Specialists

- job description found on:

http://www.prospects.ac.uk/ -

- Multimedia specialists combine creative flair and technical skills to design information and communication technology (ICT) based products that entertain, educate or inform the user
- Common multimedia products include: computer games, DVDs, websites, mobile apps, etc.

Ę

## Typical work activities

- meeting with clients to establish their expectations and needs;
- advising clients on what is technically possible and producing a proposal including, for example, the range and scope of the work and realistic timescales and costs;
- assembling a development team and keeping them updated on the project;
- creating design ideas using computer-based design packages;
- collaborating with other specialists, writers, animators, artists, sound engineers and programmers;
- · authoring files into a single program;
- testing and adjusting final programs;
- producing finished design work and presenting final designs to clients;
- observing company policy in terms of producing and archiving product documentation, as well as any reports and recommendations;
- agreeing on the upgrading of the product or website with the client.

# Main points so far ...

- Multimedia design = creating a new thing
- The new thing must satisfy users' needs
- The designer accomplishes various tasks (within a team)

EBU5305

# Agenda

- What does a multimedia designer do?
- A design process in three phases:
  - The information phase
  - The interaction phase
  - The presentation phase

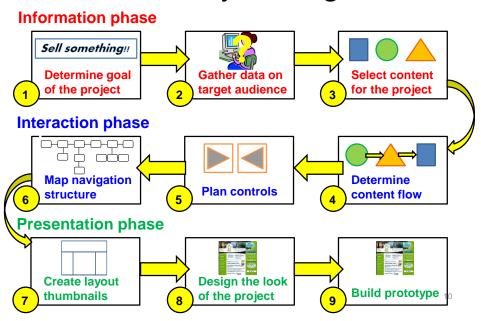
EBU5305

#### A process in three phases

- The information phase
  - Information is gathered about the web site / interactive media application
- The interaction phase
  - How users will interact with and navigate in the application
- The presentation phase
  - How the application will look

ć

# Multimedia Project Design Process



## The information phase



- 1. Determining the purpose of the site / application
  - What is the interactive media application supposed to do?
- 2. Determining who will be using the application
  - Know your audience!
- 3. Determining the content of the application
  - What information will be given?

11



- ▶ The answer to the question "what is the application or website supposed to do?" will influence the design more than any other part of the process.
  - For example, if the purpose of a website is to sell a product online, then the information and navigation should lead viewers to purchase items from an on-line shopping cart.
  - If the purpose of an interactive media application is to teach programming, then the information and navigation should lead users to do all the recommended exercises and submit a completed program for evaluation.

# Question 2





If your interactive media application's purpose is to promote an undergraduate program (say the QM/BUPT Joint Programme)

... at the end of the user interaction, what do you expect to have achieved?

# Question





If your interactive media application's purpose is to teach Newton's third law

... at the end of the user interaction, what do you expect to have achieved? (for a learning object, we talk about "learning objectives")



The second step is to determine who will be using the application or website.

This is important because an application that appeals to teenagers will be different from one intended for business executives.

Knowing your audience will influence everything from what information will be given to what it will look like.

- For example, if you want to promote a new line of software to software vendors, you will focus on how popular the product will be and how much profit will be made by selling it.
- o If the presentation is intended for **end users**, you will focus on how much they will benefit from the software and how easy it is to use.

15

## Questions





- If your target users are prospective students
- ... what should be the focus of your undergraduate programme promotional application?
- How about if your target users are the students' parents?
- And how about if your target users are academic staff that you want to recruit for teaching on the programme?

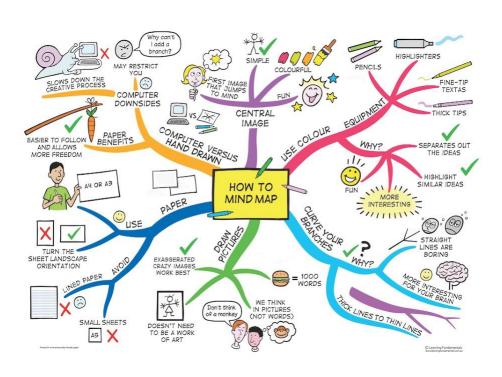


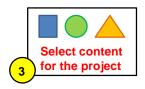
- You should also give some thought about how the targeted audience will access the information (on line, DVD, etc.)
- You should think about the environment where the intended audience will use the application (large screen, individual PC, tablet, phone, etc.)



- ▶ The last step of the information phase is to determine the content of the application: scope and depth.
  - o What information will be given?
  - o Will there be text, images, videos, sound? If so, of what?
  - o How will the information be grouped?
- ▶ One of the best ways to work out this part of the design is to conduct brainstorming sessions and then draw a mind map.

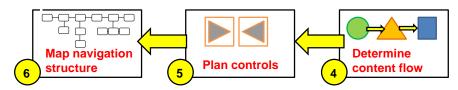




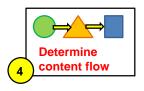


- Once you have determined the content, ask yourself:
  - O Does the content help achieve the goal?
  - Can this information be presented in a way that is easily understood by the intended audience?
  - Can this information be made easily accessible on the users' devices?

# The interaction phase

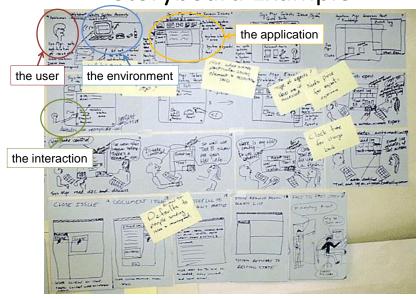


- 4. Determining how a user will receive the application's content
  - In what order will the information be presented?
- 5. Determining what kind of controls will be used by users
  - How will the use interact wit the content?
- 6. Map out the entire application

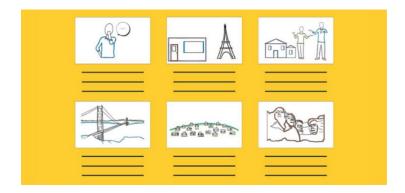


- The first step of the interaction phase should be to determine how a viewer will receive the application's content.
- In what order will the information be presented?
- Will the users proceed through the application step by step, or will they be free to surf around the entire application?
- One of the best ways to work out this part of the design is to group the content by subject and work out a storyboard of how the information will be presented.

# Storyboard Example



# Storyboard Example



25

# Storyboard Example



# Storyboard Example





- ▶ The second part of the interaction phase is to plan what kind of interaction will be allowed and what kind of controls will be used by users.
- ▶ This is more concerned with what navigational elements are available on each page than with how they look.
- Where can a visitor go from each point on a page and how?
- ► How do users interact with / modify the content (e.g. how do they provide inputs)?

#### **User Interface Controls**







## Designing navigation

#### Make it understandable

- Users should be able to quickly understand which elements are the interactive controls and how they work.
- The navigation design should also clearly indicate what the controls do or where they take the user.

#### Give feedback

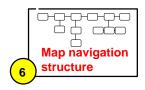
- Let the users know when they have activated some control (sound, colour change, etc.)
- Include mouse-over effects on controls.

#### Make it easy

Keep the controls close together and in the same areas from page to page.

#### Make it forgiving

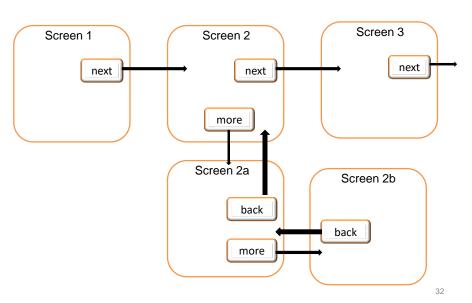
- Users who made a mistake should be able to get back quickly and easily to where they want to be.
- Allow users to change their minds.



- ▶ The final step of the interaction phase is to map out the entire application or website.
- It serves as an overview of the content of the storyboard and a quick reference to navigation flow.
- To do this, a designer will already have determined how the content will be grouped (what content goes on which page), in what order the content will be presented, and how visitors will navigate the site.

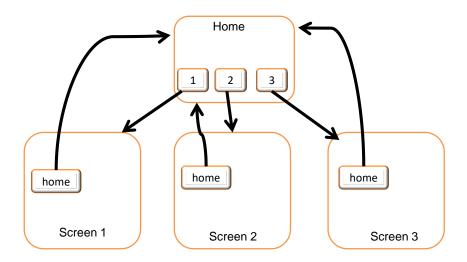
# Designing navigation structure 2°





# Designing navigation structure

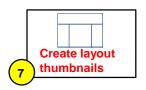




# The presentation phase



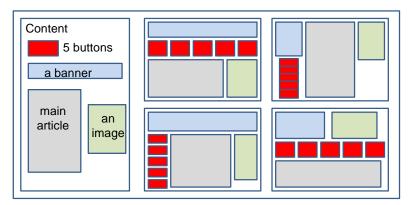
- 7. Determining the general layout of each screen
  - How the content and the navigation will be arranged on each screen / page?
- 8. Determining the style of the application
  - How the application will look?
- 9. Producing a prototype
  - Functional example of the application

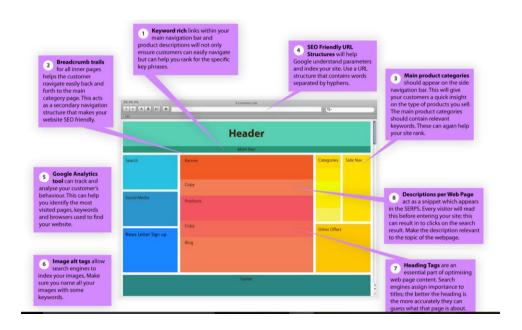


- ▶ The first step of the presentation phase is to design the general layout for each page of the application.
- ▶ This includes how the navigation and the content will be arranged on each page.
- ▶ The layout should be attractive and reflect both the purpose of the application and its target audience.
- ▶ The traditional way of working through the issues of layout is to make a series of thumbnails. This allows for experimentation and brainstorming.

#### What are thumbnails?

- Thumbnails are small drawings of individual elements in a page.
- They allow the designer to test out several layout arrangements and decide the one that works best for the requirements of the project.









## Consistency in layout

- An important part of effective layout is to use a design that appear consistent from one section of the project to another.
- A consistent layout allows users to know what to expect. They will already know:
  - where the navigation is located,
  - where the content is,
  - how to find what they are looking for.



- ▶ The next step in the presentation phase is to design the style of the site, or how the site will look.
- ▶ The layout and navigation structure will play an important part in the style, but the purpose of the site and the target audience should also have a significant amount of influence on the design during this step.



- ▶ The last step in the presentation phase is to produce a prototype.
- This should be a functional example of the application that can be taken out for a "test drive".
- It is during that step that overlooked issues may surface.
- After this has been completed, the bugs can be worked out, and the finished application can be produced.

# Design process: summary (9 steps)

- The information phase
  - Determine goal of the project
  - Gather data on target audience
  - Select content for the project
- The interaction phase
  - Determine content flow
  - Plan controls
  - Map navigation structure
- The presentation phase
  - Create layout thumbnails
  - Design the look of the project
  - Build prototype