eGraphic Design Process

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ABSTRACT

Students studying in a computer related field do not have proper design skills for designing internet websites or multimedia applications. Six years ago subject areas within the computer field mainly consisted of computer programming, networking, number systems, systems analysis, systems design, project management and helpdesk support, all left brain activities. In recent years the internet and multimedia applications have widened the scope of the computer specialist to encompass these new fields. These new fields have also bought a demand for new skills, namely the visual arts.

1. BACKGROUND

1.1 GRAPHIC DESIGN

Graphic design is the arrangement of images, photos and typography to communicate a message. Graphic design endeavours to visually enhance the communication of graphic design composition used in a variety of marketing strategies e.g. advertising and other print related media. The graphic design medium is normally print related (Ervin A Dennis, John D Jenkins, 1979).

1.2 EGRAPHIC DESIGN

Logically eGraphic Design is the arrangement of electronic media (graphics and text).

The medium for eGraphic Design is developed and presented in electronic form using the computer.

eGraphic Design applications usually involve creating software for websites or multimedia applications. For these software applications, especially multimedia, graphic designs essential for communicating information effectively.

1.3 EGRAPHIC DESIGN PROCESS

We created this process to bridge the gap between computing students design skill and the design skills needed we provide computing students a process to follow (computing students like systematic processes) for designing software graphics and interfaces for internet websites and multimedia applications (Deborah Morley, 2000).

The eGraphic Design Process has the following Steps:-

1. Conceptual Design
2. Sketch Design
3. Acquisition of Graphical Elements
4. Modification of Graphical elements
5. Create Design
6. Extending the Design.

2. CONCEPTUAL DESIGN

To start the process we establish a few questions to help identify the scope of our design in terms of the software that is being developed. Questions to be asked, 'What is the topic, subject area?' and 'What is the objective of the application?'

Once the designer has the objectives completed then targeting graphical elements is easier. If graphical elements are relevant this will enhance the visual communication to the software (Deborah Morley, 2000).

3. SKETCH DESIGN

This is the hardest steps of the process as it combines lateral thinking plus an appreciation of art and design. It is always a good idea to sketch a design on paper first. Annotations may be added to the sketch to clarify components.

A design has the following basic components; background, interest graphic, text and colour. These components follow some basics rules for the design. These are; backgrounds should be subtle and not over power the foreground content. Be careful with background colours and patterns as backgrounds may be too busy for any foreground text to be read.

Interest Graphics may be added to add visual interest to the design. Guidelines for interest graphics maybe used to enhance or support the topic. This could be as simple as a number of lines or circles as in a company's logo or as complex as a photograph with complex patterns and colours. Generally the interest graphic should not occupy more than 1/3 of a design.

Text/Typography should be chosen according to the application. With text there are five main important factors to consider; legibility; readability; appropriateness; size; and orientation, for example a children's composition may involve using a appropriate font to enhance the fun and excitement, whereas a company's composition may use a more conservative and formal font (Ervin A Dennis, John D Jenkins, 1979).

Colours can be obtained from company printed material and company logos should be included in the design. Interest graphics can also be obtained from company printed material. Colours can be rated as Fun/Energetic, Red, Yellow and Orange or Conservative, Brown, Blue and Green (Ervin A Dennis, John D Jenkins, 1979).

Next we need to have a look at component balance and structure to communicate our idea effectively. Balance is important. Generally text/ typography should occupy 1/3 of the design, 1/3 for graphics, and the final 1/3 for space. Text and graphics may overlap. A good design will have components overlapping.

This design can be established further by applying more detail as needed to enhance the message more clearly. Once completed, the composition can be created and used as a design basis for our software application.

4. ACQUISITION OF GRAPHICAL ELEMENTS

The design sketch has now been completed. We now need to acquire the graphical elements. Graphical elements can be acquired through several techniques Internet Image searches, scanning printed material/objects, digital cameras, creating graphics and screen captures.

Images are acquired from the above sources keeping the application topic and objectives in focus. The point of image acquisition is to build a general library of relevant images for the composition (Digital Publishing, Issue 25).

This step can be likened to a 'brainstorming' session where ideas are 'thrown' around and not judged until later. All images may not be used but at least there is a wide selection to utilise in the composition.

Images and interest graphics can also be created from scratch for example arranging a number of straight lines can add interest to the final design (figure 1).

Figure 1: Rearranging Straight Lines

5. MODIFICATION OF GRAPHICAL ELEMENTS

Once images are acquired they are arranged or modified to comply with the sketched design. This can be done in several ways; recolourising images to suit a colour scheme; cropping images, i.e. only 'part' of an image; adding special effects, e.g. drop shadows, ripples embossing etc; distorting an image; reshaping the image; adding other objects/pictures to an image; enhancing photographs; and resizing images (scaling) (Gary Olsen, 1989).

6. CREATE DESIGN

Once our library of images have been modified to comply with our design, composing the Design is easy. Most graphic design software comes with a variety of tools that can be used to create any design (Robin Landa, 2000).

This is far as we will go in the composition. We can use the composition as the design basis for our software application whether it be for a Internet website or a multimedia application.

7. EXTENDING THE DESIGN

By rearranging or modifying elements in the original design we can extend our theme for other layouts for example main menu, content page. Because we are using elements from our original design, this creates design continuity for the website or multimedia application (Figure 2).

8. CONCLUSION

By the end of this process computing students will be able to design more effective, relevant, aesthetic and interesting internet websites and multimedia applications.

Effective, because all the preparation work focussing on the objectives will lead to a better understanding of the project from a visual perspective.

Relevant, because all acquired images will be gathered around the central theme of the project, i.e. the objectives.

Aesthetic and interesting, because once a design has been composed then coming up with other content pages layouts and design will be as easy as arranging you original design.

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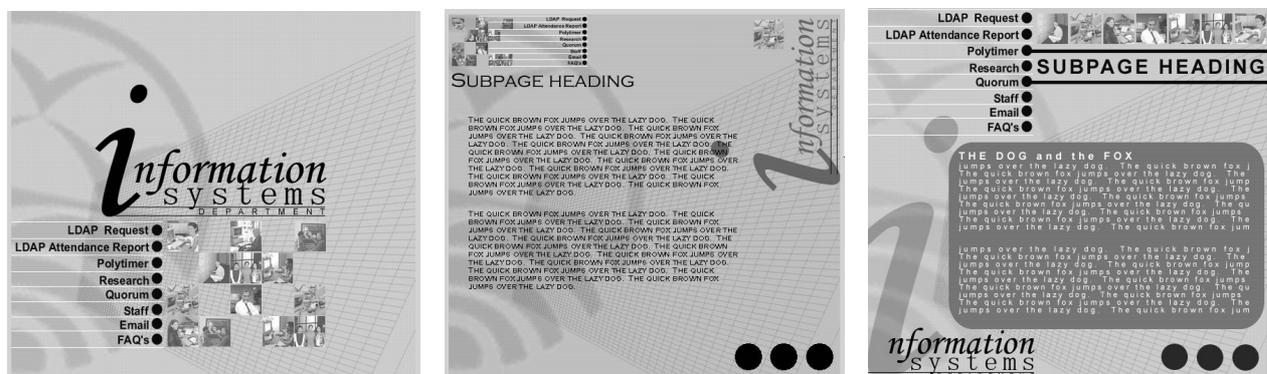
Figure 2: "The numbers of ways you can rearrange the original is only limited by the imagination" (Rob Freeman, 1998).