

a) Whilst both LCD and CRT screens are used to produce images, they are different technologies. LCD screens - Liquid Crystal Display, use crystals which undergo chemical reactions ~~when~~ to display colour. Cathode Ray Tubes (CRT) on the other hand has a coating of phosphor ~~dot~~ dots on the glass screen, which fluoresce. ~~These phosphors~~ An electron gun is used to produce an electron beam, which is ~~used~~ passed through a metal grid. The contact between the electrons and the phosphor dots causes them to fluoresce. Three electron guns are used, one for each colour (R, G, B). LCD's, however, use electrical signals to cause chemical reactions causing the

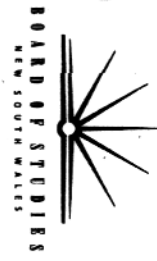
Liquid crystals to change colour.

~~A CRT~~ Because a CRT has an electron gun, it can only make one dot fluorescent, and ~~as~~ such must scan the screen [Rastor scan]. This causes a flicker and a refresh rate is the time it takes for the screen to be passed by the electron beam. On the other hand, LCD's do not have the need to refresh (b/c of use of electrical signals), and thus has no flicker. LCD's are also 'flat' and do not protrude ~~into~~ outwards, ~~as~~ like CRT's do due to the placement of the electron gun. As such, CRT's are also much heavier than LCD screens

ii) Path based animation is a form of animation which stores a key frame in memory (the background), and simply redraws the object which is moving on ~~every~~ <sup>each</sup> new frame.

The consecutive frame will only draw the new position of the ball. Cell-based animation, however, will redraw every frame. Generally, cell-based animation have greater storage requirements, as each frame is redrawn. However, path-based can be inappropriately used if ~~the~~ the images are constantly changing, and there is no constant background.

b) (PTO)



WELCOME TO SUNNY  
PAGE!!  
my page about AUS success

Steven  
Bradbury  
link

Jacqui  
Looper  
link

page 1

Alisa  
Campbell  
link

### ST EVEN BRADBURY

Biography

Photo of  
Bradbury

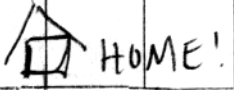
click on the  
icons for  
special features



= link  
to audio  
interviews (new  
window)



- link to  
video  
footage (new  
window)



link to  
home page

### ALISA CAMPBELL

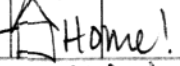
Biography

photo  
of  
Campbell

click on links  
for special  
features



= see  
Bradbury



link home

### JACQUI LOOPER

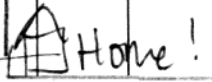
Biography

photo  
of  
Looper

click on buttons



= see  
Bradbury



link  
home!

02/01/02

ii) The Image size = 400 pixels by 600 pixels

∴ Total number of pixels = Area = 400 × 600

each pixel has 16 colours

=  $2^4$  = 4 bits per pixel.

∴ total size of image =

$400 \times 600 \times 4$  bits  
area (no. of pixels) ← colours

=  $400 \times 600 \times 4$  bytes  
8 ← 8 bits in byte

=  $400 \times 600 \times 4$  Kilobytes  
8 × 1024 ← 1024 bytes in Kb

c) ~~Data D~~

Data is collected in this system using fax, email or post. Because the system is computerised, both the fax and post must be digitised. This can be achieved by <sup>scanning &</sup> OCR or manually typing up the documents. All photos and graphics can be emailed already in digital format, or they can be scanned in by the regional classified staff.

~~Regarding the data related to~~

~~data~~ Data which needs to be collected includes customer name, address, phone number, credit card details (for payment), the advertisement text and/or graphics etc. This can create security issues if the data transmissible methods are not secure through encryption or such as PGP or DES.

~~They may use~~ Organising the data involves selecting the appropriate text types to store the data, and the classifications which they go under. For example all builders advertisements can go under topic 'Construction'

This multimedia system which exists on the internet ~~must~~ must have appropriate user interface ~~to~~ for the user. An excellent user interface must be presented, with the ability to submit any type of media as an advertisement. However considering that a large proportion of users have dial up connection and have low bandwidth, it is important that there is a reasonable limit to file sizes. This will overcome the problem

of long downloads for dial up connection users. The system must present a facility for customers to print download and print authentic certificates/receipts for their purchase. Similarly, ~~they should be able to select where~~ the user interface should provide a facility of viewing how long the advertisement is to be online for. The website must be cautious of the design, as the lack of judicious use of colour could affect users. There must be plenty of white space available for the viewing. On the server side of the system, a ~~the~~ printout on a dot matrix printer should print a full copy of every ~~the~~ transaction.





which occurred as a back up  
procedure. ~~the~~