

Digital Media Portfolio

**Year 9 2013
Semester 1
By Jordan Lewis**



About Me

Who am I and what do I enjoy doing?

My name is Jordan Lewis. I enjoy working on my computer (especially the Mac side). I especially like writing applications for the iPhone on Xcode. I usually spend my free time after school working on my iPhone applications projects.

What do I hope to do when I leave school?

When I leave school I hope to work in the Information Technologies Industry. I hope to become a software developer (preferably for Apple). Before all of this I hope to go to a University and learn more about software development (languages) and computers.

What did I think of the digital media topic?

I think that this topic was rather boring and was slightly under my expectations of IST in general. I think that there might be something more interesting to do rather than make posters in InDesign. I did though find making the computer hardware website a fun and interesting task to do.

CONTENTS

TASK 1	4
What is the purpose of this product?	5
How did my product achieve this purpose?	5
What software and hardware did I use to create this product?	5
What improvements could I make to this product?	5
TASK 2	6
What is the purpose of this product?	7
How did my product achieve this purpose?	7
What software and hardware did I use to create this product?	7
What improvements could I make to this product?	7
TASK 3	8
What is the purpose of this product?	9
How did my product achieve this purpose?	9
What software and hardware did I use to create this product?	9
What improvements could I make to this product?	9
TASK 4	10
What is the purpose of this product?	11
How did my product achieve this purpose?	11
What software and hardware did I use to create this product?	11
What improvements could I make to this product?	11

TASK 1

DIGITAL MAGAZINES

What are Digital Magazines ?

Digital magazines are magazines that are in a digital format that is available for download via a subscription or for free. Digital magazines are a great alternative to traditional prints because they are cheaper and more eco-friendly. This is because they do not have to be printed to be published using far more energy than the energy used to produce prints.

Digital magazines may just be a replica of the print, but many publishers add interactive objects, such as hyperlinks, videos, and animations. These are the things that make some people want to get digital copies instead of prints.

Some issues with selling digital media is piracy and/or copyright infringement the free or cheaper distribution of the pirated material. It is sometime very simple for a thief to copy the file and upload it to a P2P network or bit-torrent.

Tablets and viewing digital media



Tablets have changed the way we view digital magazines by making them more portable and easy to view and use. Tablets such as the iPad, iPad mini, Samsung Note 10.1, Nexus 7 tablet are portable and have plenty of space for digital magazines and other multimedia. Some people may take their tablets to work or school. People can use these devices on the train, taxi, or plane because most of the content is downloadable. Software such as newstand or dedicated apps make it even easier to download and/or subscribe to content.



What is the purpose of this product?

This task was our first and was a “Show us what you can do” task. In this task we were told to use any form available to produce an A3 poster in PDF form.

How did my product achieve this purpose?

I have 2 distinctive headers “What are Digital Magazines?” and “Tablets and viewing digital media”. Under the “What are Digital Magazines” header I wrote about what digital magazines are, what they may contain and issues with selling Digital Magazines. Under the “Tablets and viewing digital media” header I wrote how tablets have changed the digital magazines industry. I also wrote where and when and how people use their tablet devices. I added on how easy tablets make viewing digital magazines on the fly.

What software and hardware did I use to create this product?

To create this product I used Adobe Photoshop CS 5.1 on Mac OSX 10.6.8 Snow Leopard. Mac OSX ran on a MacBook 7,1 with an Intel Core 2 Duo CPU running at 2.4 GHz. This computer has two 2 GB of DDR3 1067MHz RAM.

What improvements could I make to this product?

To improve this product I think that I could organize the images in a better way and give them frames. I think that I can also make the captions on the images better and easier to read. I think that I could also make the large headers more uniform instead of one being slightly darker than the other. I also think that I could have made the three text boxes more equal, as in the inset spacing because the first set of information is closer to the edges than the other ones.

TASK 2

ANIMATION BY JORDAN LEWIS

How is animation different from video?

Animation is different from video because animations are made and videos are captured.

How were animations traditionally done?

Animations were traditionally done by drawing on glass panels and layering them on top of each other, these glass panels are called cells. There are cells for the background, the character, and many other elements of the animation. These cells are layered then a photo is taken from above, this process is repeated for every frame of the animation.

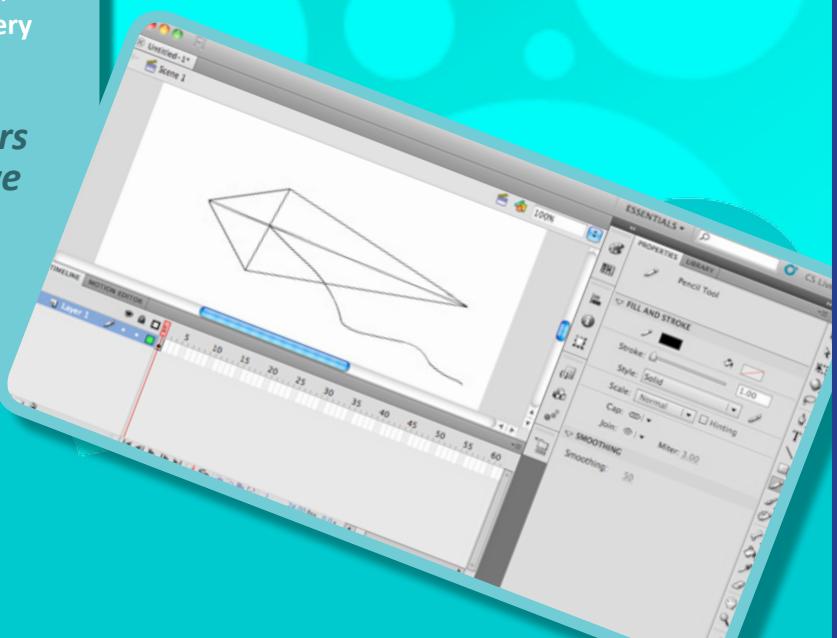
How have computers changed the way we create animations?

Computers have changed the way animations are created by

automating some key processes such as the frame by frame photography. Today anybody with a computer can do some basic animating with software such as Stickz.

What is tweening?

Tweening is a shortened term for inbetweening. Tweening is when two key frames are set by the user and the computer does the rest automatically. Some specific elements in the process can be changed manually by the user. Frame by frame animation is when the user edits each separate frame of the animation to make the illusion that the object is moving.



What is the purpose of this product?

This task was our second and in this one we had to research information on Animations and Animation Concepts such as how animations are different from videos, how traditional animations were done, tweening and how computers have changed the way we create animations. In this poster we had to use a monochromatic colour scheme where black and white do not count as colours. We had to produce a A3 poster using Adobe InDesign and submit it as a pdf document.

How did my product achieve this purpose?

In my poster I used two columns with a screen shot of Adobe Flash making an animation. I used cyan as my main colour and altered it to make it darker or lighter to suit my needs. I used white text, which stands out, so is easy to read. I had a darker cyan for subheadings in my text. In my text I contained everything required to get an “excellent” mark. I have four subheadings “How are animations different from video?”, “How were animations traditionally done?”, “How have computers changed the way we create animations?” and “What is tweening?”.

What software and hardware did I use to create this product?

To create this product I used Adobe InDesign CS 5.5 on Mac OSX 10.6.8 Snow Leopard. Mac OSX ran on a MacBook 7,1 with an Intel Core 2 Duo CPU running at 2.4 GHz. This computer has two 2 GB of DDR3 1067MHz RAM.

What improvements could I make to this product?

To improve this product I think that I could fix the background on this poster to something more Hi-Res, because for some reason (I set the image size to International Paper A3 in Photoshop) the background seems blurred/pixelated. Another Improvement that I think I could make is the title text/font, I think it seems too complicated for something so simple and I think it does not fit in well.

ANALOG VS DIGITAL

Below is ASCII Binary (American Standard Code for Information Interchange). It reads "By, Jordan Lewis".

01000010 01011001 10010100 00100000 01001010 01001111 0100100001 01000110 00100000 01000101 01010111 01001001 01001001

What is analogue? What is digital?

Digital signals are binary (1s and 0s) and are made of a sequence of discrete values. Analog signals are electrical waves. Analog signals are prone to getting noise (distortion) as it is copied and recopied or transmitted over long distances.

Analog

In analog technology, a wave is recorded or used in its original form. So, for example, in an analogue tape recording, a signal is taken straight from the microphone and laid onto tape. The wave from the microphone is an analog wave, and therefore the wave on the tape is analog as well. That wave on the tape can be read, amplified and sent to a speaker to produce the sound.

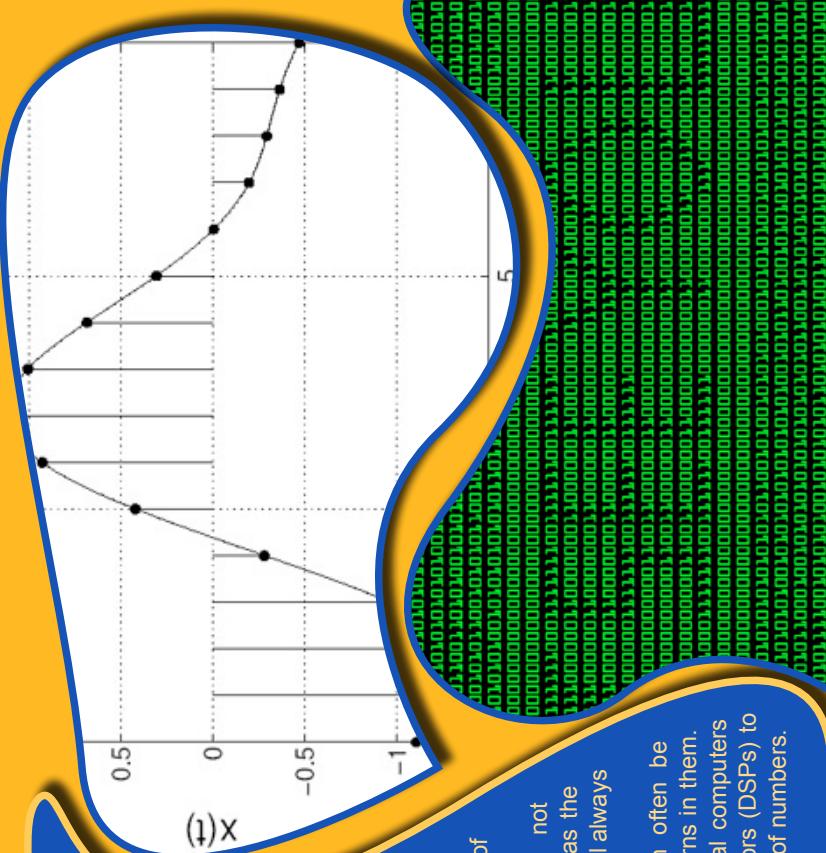
Digital

In digital technology, the analog wave is sampled at some interval, and then

turned into numbers that are stored in the digital device. On a CD, the sampling rate is 44,000 samples per second. So on a CD, there are 44,000 numbers stored per second of music. To hear the music, the numbers are turned into a voltage wave that approximates the original wave.

The two big advantages of digital technology are:

- The recording does not degrade over time. As long as the numbers can be read, you will always get exactly the same wave.
- Groups of numbers can often be compressed by finding patterns in them. It is also easy to use special computers called digital signal processors (DSPs) to process and modify streams of numbers.



What is the purpose of this product?

This task was our third and in this one we had to research information on Analogue signals and Digital signals. We had to make a poster displaying the difference between Analogue and Digital signals. We had to place two images; one should show what an Analogue signal is and what a digital signal looks like. This poster also had to have curvy objects and be in landscape to achieve an “excellent” mark.

How did my product achieve this purpose?

In this poster I used a light orange and dark blue colour scheme. I used one main text box with two columns to fit a lot of text. I also chose two images, one a visual representation of Analogue signals and the other for a digital signal. I placed the images near the text to try fit as much into the document. I them made the objects curvy to try to make it look as though they fit together like a puzzle. At the top of the poster I put “By Jordan Lewis” in binary form to display what digital signals are like.

What software and hardware did I use to create this product?

To create this product I used Adobe InDesign CS 5.5 on Mac OSX 10.6.8 Snow Leopard. Mac OSX ran on a MacBook 7,1 with an Intel Core 2 Duo CPU running at 2.4 GHz. This computer has two 2 GB of DDR3 1067MHz RAM.

What improvements could I make to this product?

I think to improve on this poster I could redo the curvy text box and image frames to make them look more like they fit together better. I also thing that I may have been able to use another colour scheme that may fit/suit better than the one I used. I think that I could have picked better, more suited images because the images I chose seem to be cut out; or I could have fitted them better into the image frames. I also noticed that I made a careless spelling mistake for the title “Analog VS Digital” should have been “Analogue VS Digital”.

TASK 4

[site map | search:](#)

Custom Builds

GEFORCE GTX

Home Input Processing Control Storage Output

Input

An input device collects data from the outside world and changes it into a form that the computer can work with. The keyboard and mouse are probably the most commonly used input devices. Keyboards convert the press of a key into a electrical signal which is sent via cable or wireless transmitters and receivers such as bluetooth. Different signals will indicate which key has been pressed. This data is stored in memory until it can be processed by the cpu. Some examples of other input devices are microphones, scanners, digital cameras and graphics tablets.

Output

An output device conveys information from the computer to the user. Information may be output as a display on a monitor or printer, or it may be output as sounds from a speaker. The monitor converts digital electrical signals from the systems box into patterns of light on the screen, which can be interpreted by the human brain as text or images. Similarly, speakers convert electrical signals into sound waves, which may be speech, music or just noise.

Storage

Storage devices have become very powerful in recent times. You will already understand the need to save your files to a hard disk as you are working with them. To transfer or backup large graphic and sound files, we often use external storage devices such as USB sticks, portable hard drives and networked file servers. Networked file servers are designed to allow fast and secure storage of data and are often accessible across the internet. This reduces the risk involved in physically carrying around portable devices, such as accidental loss or damage, and also offers the advantage that the data may be accessed by many people from various locations.

Processing / Control

The main item inside a systems box is called the motherboard and this house the CPU for processing and control, RAM (Random Access Memory), and ROM (Read-Only Memory), for storage of data and many other minor components which help with the efficient running of the system.

The CPU is often referred to as the brains of the computer. It can comprise a single integrated circuit (chip) or a number of chips working in parallel. It is responsible for the processing and control of all the data flowing into, out of, and around the system. It is the main processor of the whole system, and it communicates with other chips inside the box and with other devices on the outside of the systems box.

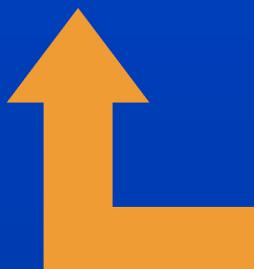
Computer chips are made of millions of tiny electronic components called transistors or switches. By connecting these switches in complex circuits, microprocessors are able to perform a variety of complex tasks. Some of these chips, for example RAM chips, are classed as storage devices, as they store programs and data that need to be instantly accessible to the CPU. Other chips act as processors to carry out routine tasks, such as audio and video processing.

There are other types of devices which do not easily fit in any of the five function groups mentioned above, and they belong to the function of data transfer. Bus lines, Copper and Fibre Optic Cables all play their part by transferring data from one place to another. Switches, routers and modems also act to control the data transfer.

Home Input Processing Control Storage Output

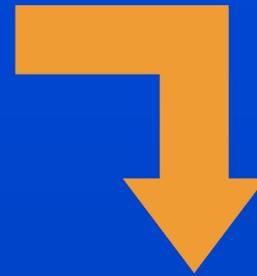
Disclaimer & Copyright information should go here

Page 1



Click:
Home
In Navigation Bar

Click:
GeForceGTX Titan
In Dropdown Menu



Page 2

[site map | search:](#)

Custom Builds

GEFORCE GTX

Home Input Processing Control Storage Output

NVIDIA GeForce GTX Titan

Graphics Card

A graphics card's job is complex, but its principles and components are easy to understand. In this article, we will look at the basic parts of a video card and what they do. We'll also examine the factors that work together to make a fast, efficient graphics card.

Think of a computer as a company with its own art department. When people in the company want a piece of artwork, they send a request to the art department. The art department decides how to create the image and then puts it on paper. The end result is that someone's idea becomes an actual, viewable picture.

A graphics card works along the same principles. The CPU, working in conjunction with software applications, sends information about the image to the graphics card. The graphics card decides how to use the pixels on the screen to create the image. It then sends that information to the monitor through a cable.

Creating an image out of binary data is a demanding process. To make a 3-D image, the graphics card first creates a wire frame out of straight lines. Then, it rasterizes the image (fills in the remaining pixels). It also adds lighting, texture and color. All of these demanding tasks, the computer has to go through this process at the same time. Without a fast graphics card to perform the necessary calculations, the workload would be too much for the computer to handle.

The graphics card accomplishes this task using four main components:

- A motherboard connection for data and power
- A video card to draw the image pixels on the screen
- Memory to hold information about each pixel and to temporarily store completed pictures
- A monitor connection so you can see the final result

Graphics cards connect to the computer through the motherboard. The motherboard supplies power to the card and lets it communicate with the CPU. Newer graphics cards often require more power than the motherboard can provide, so they also have a direct connection to the computer's power supply. Computer manufacturers usually connect the graphics card to the power supply through one of three interfaces:

- Peripheral Component Interconnect (PCI)
- Advanced Graphics Port (AGP)
- PCI Express (PCIe)

PCI Express is the newest of the three and provides the fastest transfer rates between the graphics card and the motherboard. PCIe also supports the use of two graphics cards in the same computer.

Home Input Processing Control Storage Output



Home Input Processing Control Storage Output

Disclaimer & Copyright information should go here

What is the purpose of this product?

This task was our fourth and in this one we had to research one of the following computer hardware items Input, Processing, Control, Storage and Output. With this information we had to make a two page website using Adobe Fireworks and Adobe Dreamweaver. For the first page we had to summarise the information in our textbook (Page 16-17) on the main functions of computer hardware. On the second page we had to place the information on the computer hardware component we chose and use CSS formatting to make the website look nice. In addition to this we had to embed a YouTube video of the type of computer hardware that we chose. We also had to make an Adobe Flash animation advertisement and embed it into a side bar of the website.

How did my product achieve this purpose?

In this website I placed everything where they are supposed to be and made my website actually like a website. I placed all of my information in placeholders that make it very easy to read with the contrasting colours. I placed both the YouTube video and the Flash ad in dedicated slices in Fireworks. In this website I even went a step further and linked the two pages together by adding pop-up menus.

What software and hardware did I use to create this product?

To create this product I used Adobe Fireworks CS 5.1 and Adobe Dreamweaver CS 5.5 on Mac OSX 10.6.8 Snow Leopard. Mac OSX ran on a MacBook 7,1 with an Intel Core 2 Duo CPU running at 2.4 GHz. This computer has two 2 GB of DDR3 1067MHz RAM.

What improvements could I make to this product?

I can definitely improve on the bottom pop-up menus because they appear very offset when scrolled over; it appears at the top of the screen instead of where the navigation button is. I think that I can improve on the four images at the bottom of Page 2 by making them all the same size. I also think that I can improve on the Flash Ad placing and not have it letter boxed like in the image.

