COMPUTER HISTORY NOTE OUTLINE

Student Note Outline

A REVIEW OF THE HISTORY OF COMPUTERS

Decade	Point in History
1946-1964	1946-
	1950-U.S. Census Bureau receives the UNIVAC1 and completes the census.
	1958—Integrated Circuit is invented.
1960	1960-The minicomputer is introduced by DEC.
	1964—IBM announces its System 360 computers which eventually sweep industry.
1970	1971-
	1972-Personal computing begins with the Intel 8008 microprocessor.
	1976-Jobs and Wazinak create the Apple 1.
1980	1981-IBM introduces its personal computer. (Use photo)
	1986—
1990	1990—Pocket computers are introduced.
	1993—Intel releases the Pentium processor. Apple releases the first PDA, the Message Pad.
2000	2000-Intel develops the Pentium 4 chip.
	2001-Dell becomes the largest PC maker of computers.
	2002-1 billion PC's are shipped worldwide since 1970's.

2003– MySpace founded. (It was the most popular social networking site until 2007.)	
2004--	(As of 2011, it had 750 million users.)
2005-YouTube founded. (Google purchases it in 2007 for $1.6 billion)	
2006-Sony creates BluRay Technology for High-Definition DVD. Intel releases the CORE 2 Duo processor.	
2007–Apple introduces the iPhone.	
2009--Intel releases the Xeon processor.	
2010--	

TYPES OF COMPUTERS

There are four basic types of computers:

	Size	Instructions Executed Per Second	Number of Users	Price Range
	Fits in hand or on a desktop.	500 million +	A single user or part of a network	$100-$1,000
	About the size of a file cabinet.	Millions	Hundreds of users at the same time.	$1,000-$10,000 or more
	Occupies a full or partial room.		Hundreds of users at the same time.	$1,000,000
	Occupies a full room	Billions	_____ of users at the same time.	$2,000,000 or more

Personal Computers

Define a personal computer:

_____

Four types of Personal Computers
1. Desktops
2. Portable (laptops or notebooks)
3. Tablet PC's
    a. Table PC's are portable computers that can recognize handwriting on the screen or allow someone to do specialized tasks such as search the _____
4. Hand-held also known as _____
    a. PDA—_____
    b. Common examples are:

    _____

COMPUTER STORAGE

How Storage Has Changed
1. Summarize how storage has changed over the years.

2. Explain cloud technology.

Classifying Storage
1. Internal Memory
    a. ROM
        i. _____
        ii. Permanently stored memory chips located inside the CPU
        iii. It is not writable memory.
    b. RAM
        i. _____
        ii. _____ in which the programs and data are stored while the computer is in use.
        iii. Holds program instructions until it can be sent to an output storage device.
        iv. _____

2. External Memory
    a. Secondary Storage
        i. An external way to store programs, data, and information.
        ii. Can be permanent storage
        iii. Examples would be:
            1. Floppy Disks
            2. CD
            3. DVD
            4. Flash Drives
            5. _____

MEASURING RAM

__RAM__ is measured in _____ . __A byte is one alphabetic letter, number or special character.__

__Storage Capacity__

Storage Capacity	Number of Bytes	Other Info
Kilobytes	1000 bytes	
Megabytes	1 million bytes	
Gigabytes	1 billion bytes	
	1 trillion bytes	
Petabyte	Quadrillion bytes (1000 terabytes)	1 petabyte = 20 million four-drawer filing cabinets filled with text. 1.5 petabytes = size of the 10 billion photos on Facebook.
	Quintillion bytes (1 billion gigabytes)	One exabyte of hard drive storage in 2008 would have cost more than _____ million. To give you an idea of the size of this, a stack of CDs storing 295 exabytes of information would reach beyond the moon.
Zettabyte	Sextillion bytes (1 billion Gigabytes)	As of 2010, it is estimated that all of the combined space of all the computer hard drives in the world would equal one zettabyte.
	Septillion bytes	No computer as of 2010 has achieved this much storage space.

TRENDS

Social Networking

- In 2011, 63.7% of US internet users will use social networks on a regular basis, amounting to nearly 148 million people.
- **Future trends:**
- **Social Networking becomes more of a feature on websites.**
  - More marketing designed specifically for social networking sites.
    - Tight budgets will force more companies to turn to free social networking sites to build their businesses and client base.
  - Expect more websites to be "social" in context.
    - Users expect that if you're on a commerce site that you know your friends are also on, you can see what your friends bought there and if they liked it.
    - Websites that just have user content are out of date.
- _____
  - Social Discovery built into websites and social networking sites
    - Social Discovery—Allows people to discover on their own terms, when and where they want.
    - Google's Social Search will change the way we interact with search engines by pushing relevant content from our personal networks to the front of search results
  - Web publishers putting modules on their sites that allow cross-site sharing.
  - More public communication rather than private communication. ("Like")
  - Users over the age of 35 will continue to expand.
- _____
  - More mobile apps for social networking.
  - The concept of a friend network will be a portable experience.
- **Real Time Dating Experiences**

Hardware Trends
Smart phones
- **3-D Technology**
  - Sharp has already announced two Android-based smart phones on which users will be able to play games and watch movies in 3D without the need of special glasses.
- **Increased use of _____**
  - You will be able to make payments including buying tickets
  - NFC compatible window stickers, which allows users to touch their phones to the sticker and find out more about the business.
  - NFC technology can make credit card payments, serve as a keycard, or ID card.
  - NFC can share a contact, photo, song, application, or videos.
Smaller, Faster, More Mobile
- Currently, more than _____ of users are leaving their computer laptops at home and opting for more mobile, smaller devices.
- _____
  - Integration of all hardware on to one device.

Scent Technology
- Entertainment platforms are looking into ways to combine viewing with scent type products.
- Scent generators could release _____

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- _____
  - Could capture and playback the smells in digitized format. These are on the on the verge of becoming a commercial reality
  - Could be used in the food, beverage, home theater, medical, and environmental applications
  - So, next time a chef's cooking a meal on TV, you know how it smells if not how it tastes.
- **Other uses**
  - _____
    - Researchers at UCLA have patented a project that would allow US Army officers to use coded smells to give orders.
    - These can be delivered silently, in the dark, and when loud noise is drowning out speech.
  - Odor Recorder
    - Engineers in Tokyo have developed an odor recorder that can analyze scents and reproduce them by combining the 96 chemicals packed inside the device.

Social Uses
No walls!
- Attending parties, games, city hall, and courts through _____
- Increased use of students and workers meeting in multiple places

Medical Uses
- Use of computers/web cams to do medical exams at home.
- _____
  - Use of nanorobots to be injected into people's blood streams to remove cancer cells, etc.

Denser, Faster, More Powerful
Shrinking size, growing capabilities
- Nano-engineered carbon tubes
  - Only _____ atoms in width
  - These can conduct an amount of information that is actually 50,000 times smaller than a human hair.
  - Current silicon chips are built at 1,000 times thinner than a human hair.
- Portability
  - Computer jewelry
- Expanded use of _____ to operate computers
- Artificial Intelligence
  - Smarter, More Capable robots and robotic devices

Storage
- _____
- Less need for flash drives or external storage devices

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