Computers Essay, Research Paper

Computers

This paper is about the computer. Today computers are used by hundreds of millions of people. There have been many advances in the computer. The computer used to weigh 30 tons and filled warehouse size rooms, but today can be as light as 3 pounds and fit in a persons pocket.

There were basically three times the computer was mentioned. One as a mechanical computing device, in about 500 BC The other as a concept in 1833, and the third as the modern day computer in 1946. The first mechanical calculator was called the abacus. The abacus is a is a string of moving beads.

The first concept of the modern computer was first outlined in 1833 by the British mathematician Charles Babbage. His outline contained all of todays features in a computer today. Those features are memory, a control unit, and output devices. Even though Babbage worked on the machine for over 40 years he never actual saw it work. The modern computer grew out of intense research efforts mounted during World War II. The military needed faster ballistics calculators, and British cryptographers needed machines to help break the German secret codes.

Early as the 1940’s the German Inventor, Konrad Zuse, produced the first operational computer. It was used in aircraft and missile designs, but the German government would not let him improve the machine so it never reached its maximum capability. Two engineers called John W. Mauchly and J. Presper Eckert Jr. from the University of Pennsylvania constructed a calculator. Its construction was an enormous feat of engineering. The 30-ton machine was 18 feet high and 80 feet long, and contained 17,468 vacuum tubes linked by 500 miles of wiring. This calculator performed 100,000 operations per second, and its first operational test included calculations that helped determine the feasibility of the hydrogen bomb.

Computers were finally made to a smaller size in 1958 by Jack Kilby. He used less expensive silicon chips, this made it possible to cram as many as 10 million components on 1 chip. Another big step in the computer chip was made by American Engineer Marcian E. Hoff. He combined the uses of a computer into 1 tiny silicon chip which he called the microprocessor. This microprocessor was called the Intel 4004. By the mid 1970’s the microprocessor or microchip reduced the cost of computers. The first affordable desktop computer designed specifically for personal use was called the Altair 8800 and was sold by Micro Instrumentation Telemetry Systems in 1974. In 1977 Tandy Corporation became the first major electronics firm to produce a personal computer. They added a keyboard to their computer and offered a way of storing programs on a cassette recorder.

Later on companies started creating added features to the computer like the CD-ROM disc, encyclopedias, almanacs, collections of reference books, interactive games using movie footage, educational programs, movies. Also a great invention was the Internet and e-mail. There will be many many advancements in the near future. And who knows what computers will be like in 40-50 years.