El-Oued University

Faculty of exact science

Department of computer science Module of English

Computer Science

Computer Science is the study of computers, including their design, operation, and use in processing information. Computer science combines both theoretical and practical aspects of engineering, electronics, information theory, mathematics, logic and human behaviour. Aspects of computer science range from the design of programs and computer hardware to artificial intelligence and robotics.

The origins of computer science as a formal discipline go back as the 1920s. In the early days, the focus was very much on the mathematical aspects of computation. Pioneers, such as John Von Neumann, who described a viable architecture for practical computers that is still used today, and Alan Turing, who developed methods for solving complex problems, laid much of the groundwork for modern computing.

Computer science was not introduced as an academic subject until the 1970s. Interest in the subject grew quickly with the rapid advance in computer technology and most universities now offer degree courses in computer science.

(Microsoft ® Encarta ® Premium Suite 2005)

Vocabulary:

- **Computer science: study of computers**: the study of the mathematics and technology of computers and their applications. (*F. informatique*)
- **Design: way something is made:** the way in which something is planned and made. The elegant design of the aircraft's wings (*Fr. conception, plan, modèle*)
- Processing information: use program on data: to use a computer program to work on data in some way, for example to sort a database or recalculate a spreadsheet (*Fr. traitement de l'information*)
- **Behaviour:** (to behave) to act in a particular way that expresses general character, state of mind or response to a situation or other people (*Fr. comportement*)
- Hardware: computer equipment and peripherals (Fr. hardware, materiel)
- **Pioneer: inventor:** a person or group that is the first to do something or that is a forerunner in creating or developing something new (*Fr. pionnier*)
- Solve: deal with a problem successfully, to find the answer to a question or puzzle (*Fr. résoudre*)
- **Groundwork: preparation:** basic preparatory tasks that form a foundation for something else (*Fr. fondement*)

Understanding the text:

- 1) Give another title to the text.
- 2) Put a title to each paragraph.
- 3) Pick up all the nouns and the verbs in the text.
- 4) Questions:
 - What does computer science study?
 - What was the primary interest of computer science in the early days?
 - How did each pioneer contribute to the field?
 - Why has it developed so quickly nowadays?
- 5) Tell your friend about the importance of computer science in modern life.

Chourouk Guettas