

HTML and neighborhood



Encoding information



Man-computer interactions

Encoding information: the file format as the man-computer interface

- ◆ coding information into well-defined formatted file permits interaction between man and computer
 - ◆ file.txt, file.doc, file.pdf, file.ods, ASCII and UNICODE tables.
- ◆ The importance of industrial standards (why are computers so messy?)
- ◆ Why is all down to binary sequences of fixed length?

The importance of industrial standards

(why are computers so messy?)

- ◆ People write programs in order to manipulate information
- ◆ People interact with each other by exchanging information in order to cooperate on common tasks.
- ◆ The correct understanding of information and thus the ability to cooperate with each other depends strongly on a well-defined and shared format for code information itself.

0,1, 00, 01, 10, 11, ... and so on

(Why is all down to binary sequences of fixed length?)

- ◆ The "atom" of a CPU is the binary logic port, an object that computes some very basic functions which input and output consists of binary values, values that can assume only one of two possible values, a very poor powerness)
- ◆ All became more interesting when we pack a lot of logic port in order to obtain more powerness.

Bit, nibble, byte, word ...

- ◆ On data storage and managing, the canonical size for this packing has fixed to 8bit = 1 **byte** = a value from 256 possible values and its multiples, for ex. 1Mbytes.
- ◆ When informations is trasmitted on a digital chanel, it is preferred to mantains the bit (and its multiples) as unit, for ex. 100 Mbit/second.
- ◆ On data processing inside calculators, the canonical size is often fixed as the size of the information the CPU can process for each time, called **word**, usually 2 or 4 bytes.

Hyper Text Mark-up Languages

aka HTML



Coding page for the Web

- ◆ Hyper Text Mark-up Languages (HTML):
 - ◆ platform independent format
 - ◆ based on mark-up
 - ◆ separates content from style (somewhat)
 - ◆ supports human editing, typography and page curation
 - ◆ easy to publish on the Web with HTTP(S) protocol