

2.3 Computers and Text

Hypertext

- Hypertext is text stored in a computer, allowing the computer's powerful processing capabilities to make the text more accessible and meaningful.
- Since it allows words, sections and thoughts to be linked, the user can navigate in a nonlinear way, quickly and intuitively.

Managing your fonts

- Attractive rare fonts in headings, buttons, etc. should be bitmapped, otherwise if the user's computer does not have those fonts, they will be replaced by unattractive default fonts (unwanted font substitution) when he/she views your product on his/her machine.

ASCII

- American Standard Code for Information Interchange
- A 7bit character code (a 7 bit space)
- **$2^7=128$** characters are there to assign values
- Eg. Input Y →

ASCII “Y”
value in CPU

 → Output Y
- ASCII is a common code for many computers and peripheral devices even in Analog.

The extended character sets

- ANSI standard characters (also called ISO-Latin-1) character set – 256 possible values (by extending the 7 bit ASCII character set using the extra 8th bit of the byte)
- ANSI (American National Standards Institution)
- Used for HTML coding of Web pages

Unicode

- ANSI is still limited, so 16 bits architecture used.
- 2^{16} or about 65,000 characters
- It can represent symbols of non-Roman scripts (eg.:- Kanji scripts of Japanese writers, etc.)
- Collections of similar groups of Symbols are called Scripts.

Mapping text across platforms

- Mapping fonts (and symbol characters) displayed in one OS to be displayed in another OS is necessary to prevent unwanted font substitution during the cross-platform distribution of your products.
- Bitmapping the fonts is one solution to this problem. But once bitmapped, the fonts are not editable without an image editing tool.

Font editing and designing tools

- Allow you to make your own font type.
- Eg. Fontographer, COOL 3D, TypeCaster, HotTEXT
- Newly created typeface designs are patentable industrial design.
- New fonts can also include special symbols and logos needed by you and your client.