Text
• Words can convey meanings. Choose carefully what words you place in your program.

• Not everyone will respond the same way to the words you use. Try to pick words and phrases that work across different cultures, and text that will not offend people.

• The grammar that you use such as "Go Back" compared with "Previous". See if people can easily understand what you are saying.
• **Typeface** is a family of graphic characters that are of various sizes and styles. A font is a particular subset of a typeface.

A **glyph** is an element of writing: an individual mark on a written medium that contributes to the meaning of what is written.

Various glyphs representing the lower case letter “a"
• Font sizes are expressed in points. 1 point is about 1/72 of an inch. Original Macs had a display that was truly 72 DPI, and could see true sized text. When printed you got what you saw. Now machines are not of a fixed size and fonts look larger or smaller depending on the monitor's size and resolution.
• Fonts have *metrics*, that define their size. Page 251 a figure explaining various measurements. *Kerning* defines the spacing between characters. X-Height is how tall the letter lowercase x is. But to see how tall a letter is, you must also add it's Ascender and Descender value. It's point size contains the whole height of a letter. A point it 1/72 of an inch when printed.

• Page 261 has adjustments in Photoshop
Font Metrics

Glyph Metrics

Internal leading

Area used for vertical centering of text

Descender

External leading

Ascender

Font height
In Windows specified with a positive height value

Point size (in 1/72 inch units)
In Windows specified with a negative height value

xMin xMax
width
bearingX
bearingY
height
yMax
yMin
advance
origin
baseline

ÅAągjadiM
• Fonts define the mathematical way to display the characters. Once they are defined, the monitor (or printer) must display them using pixels (picture elements, dots). The conversion process is called rasterizing (because computer monitors are sometimes called a raster display).
• Some fonts are proportional spaced, meaning wide letters like m and w take up more space than i or l. *Proportional* fonts are easier to read than *monospaced* fonts. Use monospaced fonts where you need text to line up, such as in a spreadsheet.
Hello World
123
ABC

Hello World
123
ABC

Left, proportional - Right, Mono

Arial is used on left, while Courier is used on the right.
• **Serif** Typeface - Slanted lines at the tops of letters. Serif is a line or curve extension from the end of a letter.

• **Sans Serif** Typeface - No slants. Sans is French for "without".

• San Serif fonts are designed to be legible in smaller sized fonts. Serifs fonts are good for titles or headlines.
Emphasis

• *Italics*
• **Bold**
• *Bold Italic*
• **ALL CAPS!**
Don't use decorative fonts for small text, it will be difficult to read.
• It is easier to read, than to have to listen and pay attention to a lot of audio.

• Depending on your program, have a balance of space on the screen and text. Too little text, will require many screens, too much text will overwhelm them.

• If you are making a slideshow to a presentation, have a series of bullet points, to allow the audience to focus on the presenter.
• Symbols & Icons convey means without words. Make sure the means are understood by your audience and don't offend people.

• Make sure the fonts you use will be installed on the user's machine.

• Use standard system fonts in your application. Try to stick to a few fonts, but vary the sizes.

http://webdesign.about.com/od/fonts/l/bl_compare_fonts.htm
If you create a program and a user does not have the font installed on their machine that you used, they will end up with a default font. This may look fine, or it may cause your text to be displayed illegible. You can sometimes specify a font substation with your program to help aid the operating system in determining what font to use instead.
If you have a lot of text to be displayed on the screen at one time you have the following options:

• Scrolling text field
• Scrolling screen
• Multiple screens
• Use a special formatted screen. Such as in a standard page ratio (more taller, than wider).
• *Adobe PostScript* defines a mathematical way of expressing the characters using bezier curves. This helps fonts scale smoothly. Previously fonts had to be defined for each size of the character (using bitmaps). PostScript allows for both text and images to be drawing on the printer.

• Apple and Microsoft worked on something better than Adobe's PostScript and came up with *TrueType* fonts. Not only is it used for printing, but are also used to help display text on a monitor.

• Then Adobe & Microsoft worked on combining features from PostScript and TrueType fonts into OpenType. It became a free and publically available international standard and is available on most operating systems today.
• PDFs (Portable Document Format) - Details
  (For your own info)
• Anti-Aliasing the edges of text helps remove any "jaggies" of the text.
• **ASCII** text has 7 bits to represent 128 characters (including newlines, tabs, etc.)

• *Extended Character Set*: ISO-Latin-1 character set is 8 bit, and more characters to include the copyright symbol, and accent marks. The HTML code in web pages typically uses this standard. You mark up your text with codes.

• **Unicode** is 16 bits and all the characters from all the alphabets in the world.
• *Localization*: Time/Date, Currency, etc.
• Special Symbols
• Webdings
• Color that is easy to read with contrast to the background
Bad color choices below

• Can you read this?
• Underline
• Strikethrough
• Superscript 1<sup>st</sup>
• Subscript H<sub>2</sub>O
• Drop Shadow

TEXT TRANSFORMATIONS