



chapter 3

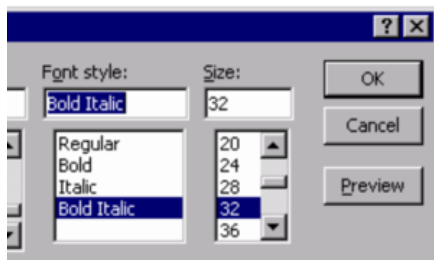
the interaction

extras ...

more about widgets

understanding and choosing widgets

widgets - bits that make the GUI
what do they do
what are they good for



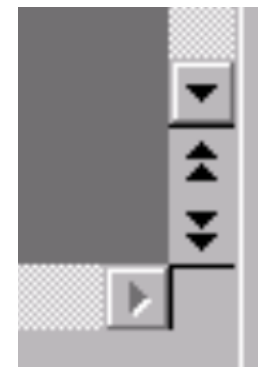
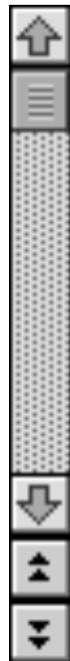
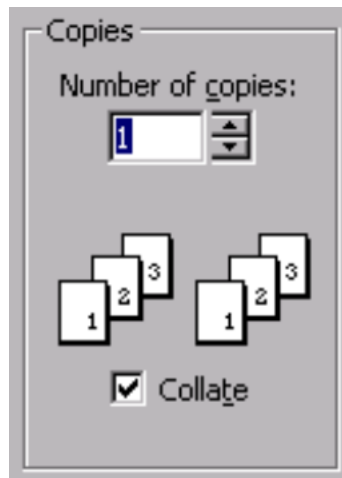
one-by-one - WIMP elements

- widgets - bits that make the GUI
- what do they do
- what are they good for

widgets?

- individual items on a GUI screen ...
 - checkboxes, menus, toolbars, buttons etc.
- three aspects:
 - appearance - what they look like
 - interaction - how they behave
 - semantics - what they mean

appearance



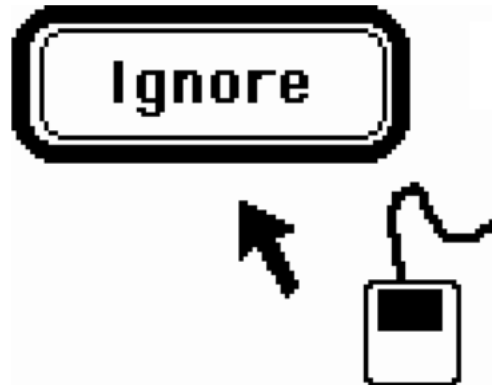
appearance includes words

- verbs - action words
 - quit, exit, embolden, italicise
- adjectives - description/state words
 - bold, italic
- nouns - usually as a form of description
 - Times New Roman, US Letter
- beware of mixes ...
 - embolden + italic !!?!

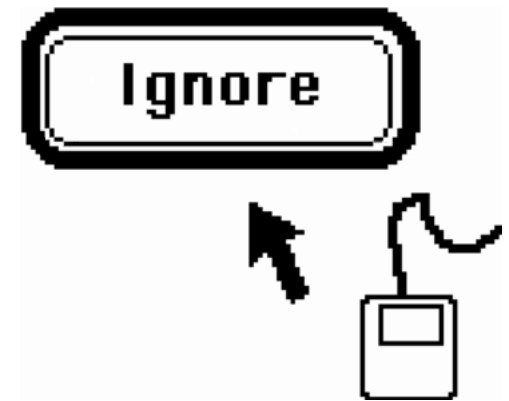
behaviour



Move mouse over button
– highlight



Move mouse off target with
button still down
– highlight removed



Release mouse
– nothing happens

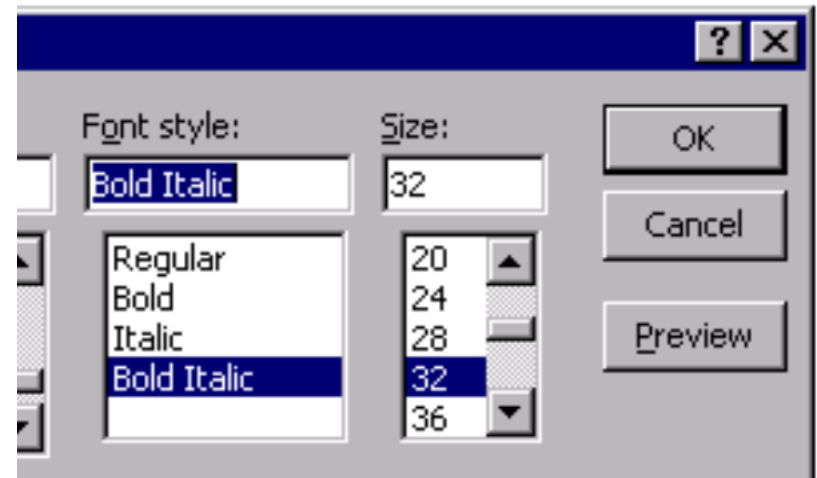
behaviour ... ctd.

- some bits the toolkit does for you
 - but is it right?
- some you control
 - e.g. drawing, interactions between widgets
- beware timing issues
 - e.g. large selections under Windows apps.

semantics

- menus, buttons, ..., etc.
- do things ...

it **bold italic**



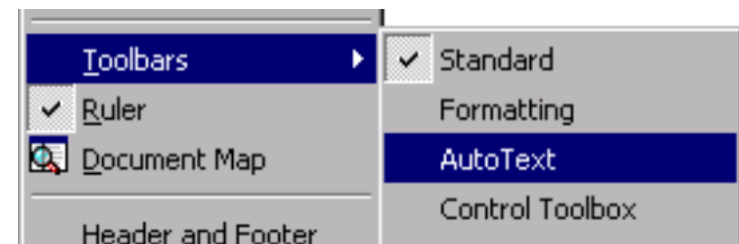
... lets make it ***bold italic***

YOU say what it means

- semantics usually up to you
 - although widgets may link direct to database
 - even then, you say what links
- think separately:
 - meaning first - what you want it to do
 - then appearance - how you do it
- choose the widget for the job

what do you want?

- actions
 - usually menu, buttons, or toolbar
- setting state/options
 - usually checkbox, radio button, combi-box
- but ...
 - menus can be used to set state etc. ...



how many?

- one of several options
 - radio buttons, selection menu
- zero, one or more options
 - checkbox, multi-choice menu
- free choice
 - offer recent/typical shortcuts
 - one line text boxes often terrible!

favourite colour?

red blue orange

- Word wrap text in autoshape
- Resize autoshape to fit text
- Rotate text within autoshape by 90°

and more ...

- number
 - fixed e.g. bold, italic, underline
 - variable e.g. font list
 - scrolling through telephone list ...
- liveness
 - grey out inactive options
- dynamic interactions
 - some choices dependent on others

