CE94930 — Introduction to Visual BASIC

- **Debriefing**
- **Develop an application**
  - Development environment
  - Language syntax
  - Application structure
  - Controls (GUI elements)

1

Last week...

- case sensitivity
- saving new projects
- "option explicit"
- renaming objects
- launching VB (Windows techniques)
- creating executables

Saving new projects (source-code organization)

- one project per directory
- ".mak" file -- one per project (choose useful name)
- ".frm" files -- one per form (event code and non-event code for that form)
- ".bas" files -- non-event code available globally
- "save as text" -- more reliable/secure

"Option Explicit"

- generated automatically when "Require Variable Declaration" is on (set to yes)

- can be removed

- can be added by hand

Renaming objects

- change "name" property
- existing code disappears!
- moved to "(general)" -- non-object code
- cut/paste contents back to desired event code
- delete general routine
- change the object's name first!

Renaming objects, alternate

- change name of event procedure first
- procedure moves to "general"
- change name of object to match existing general code

Launching VB

- start VB from program group, use "old"
- alternative: object-oriented technique
- create unique VB program items for each application

Creating an EXE

- File menu: "Make EXE file..."
- assign an icon
- form's "icon" property

Application de jour

- Icon viewer

- Stepwise refinement

- Small changes; run often and observe

- Five or six iterations

- The end result:

Step 1

- basic outline
  - form with name and caption
  - two image boxes, fixed and scaled; set picture at design-time; stretch property
  - one hscroll bar, adjust_size
    - design-time: large-change = 100, small=1
- run and observe
- adjust_size.change sets scalable height and width to adjust_size.value
- run and observe

10

Step 2

- adjust_size large=10, small=3
- run and observe
- adjust_size large=25, small=5
- run and observe

Step 3

- set width & height limits to fit in form

Step 4

- add a vertical scroll bar to control scaled-image height
- set large and small changes at design-time
- set min and max at run-time

Step 5

- to control aspect ratio: add checkbox to restrict # dimensions of change
- simple: in vertical, if not checked, ignore
- bad UI
- improved UI: disable scroll-bar
- simplifies scrollbar code

Step 6

- icon specified at design-time -- prefer run-time

- add filename textbox and load button

- add clear button

- factor out clear and call from load

- horrible UI -- should be choosing action from dialogues