CE94930—Introduction to Visual BASIC

- Review

- Working with the Clipboard

- DDE -- Dynamic Data Exchange

Clipboard

- Standard component of Windows
- Temporary/transient storage
- Different types of data
- Clipboard viewer

The VB Clipboard

- Invisible object
- No properties or events
- Methods:
  - Clear
  - GetFormat, GetData, GetText
  - SetData, SetText

An "Edit" menu

- Edit: cut, copy and paste to/from clipboard
- Typically work on selected text

Text selection

- Text and Combo controls
- Select portion of text with mouse
- Properties:
  - SelStart
  - SelLength
  - SelText
- Read/write: can be used to change contents

An "Edit" menu

- Use text selection together with Clipboard methods
- Example
- Problem: too specific

ActiveControl

- Property of Screen built-in object
- Typical use: Form1.ActiveControl.Text
- Can declare object variables:
  dim target as control
  set target = form1.ActiveControl
  target.text = "this is text"
- Also Screen.ActiveForm

Clipboard data format

- Clipboard supports various data formats
- How to generalize code?
- Use "TypeOf":
  ```
  if TypeOf screen.ActiveControl IsTextBox then
      clipboard.SetText screen.ActiveControl.SelText
  elseif TypeOf screen.ActiveControl Is PictureBox then
      clipboard.SetData screen.ActiveControl.Picture
  end if
  ```
- Example

DDE -- Dynamic Data Exchange

- Move data directly between applications
- Update is (usually) automatic
- Source: where the data comes from
- Destination: where the data goes
- Destination initiates a *conversation*, requesting data from the source
- Not supported by all applications

DDE conversations

- Initiated by destination
- Specify name of source and topic of conversation
- Exchange items of information
- Can create both source and destination with VB

Sources

- DDE source is application-name
- DDE topic is form LinkTopic property
- Conversation items are names of text, label or picturebox controls

Destinations

- Destination of conversation is any text, label or picturebox control

- Destination properties:
  - LinkMode: none, automatic, manual, notify
  - LinkTopic: "*application|topic*" of source
  - LinkItem: "*control-name*" of control on source