

Multi-modality



Old User Interfaces

- command line interface
- menus
- natural language
- question/answer and query dialogue
- form-fills and spreadsheets
- WIMP (Windows + Icons + Menus + Pointers)
- point and click
- three-dimensional interfaces

File Edit View Favorites Tools Help

- New
- Create Shortcut
- Delete
- Rename
- Properties
- Close



Go-faster Travel Agency Booking

Please enter details of journey:

Start from:

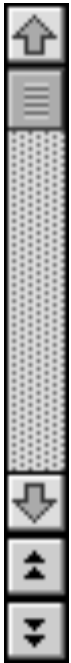
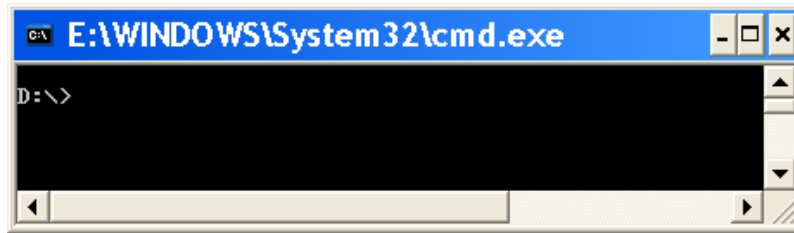
Destination:

Via:

First class / Second class / Bargain

Single / Return

Seat number:



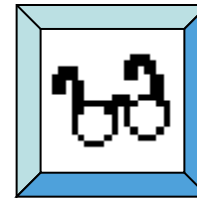
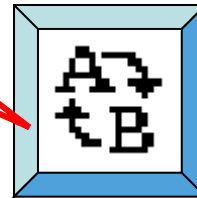
Copies

Number of copies:

1 2 3 1 2 3

Collate

click me!



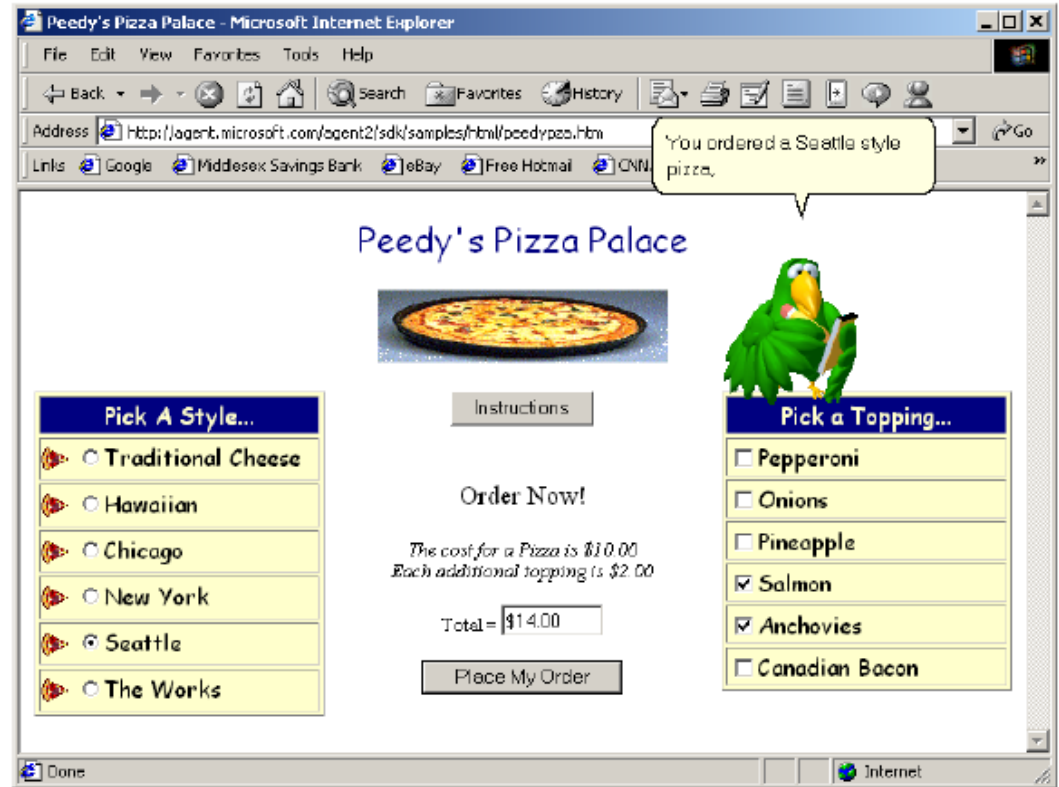
Microsoft Agent

Microsoft Agent technology

used to add interactive animated characters to Windows applications or Web pages.

Most common characters:

Genie (a genie),
Merlin (a wizard),
Peedy (a parrot) and
Robby (a robot).



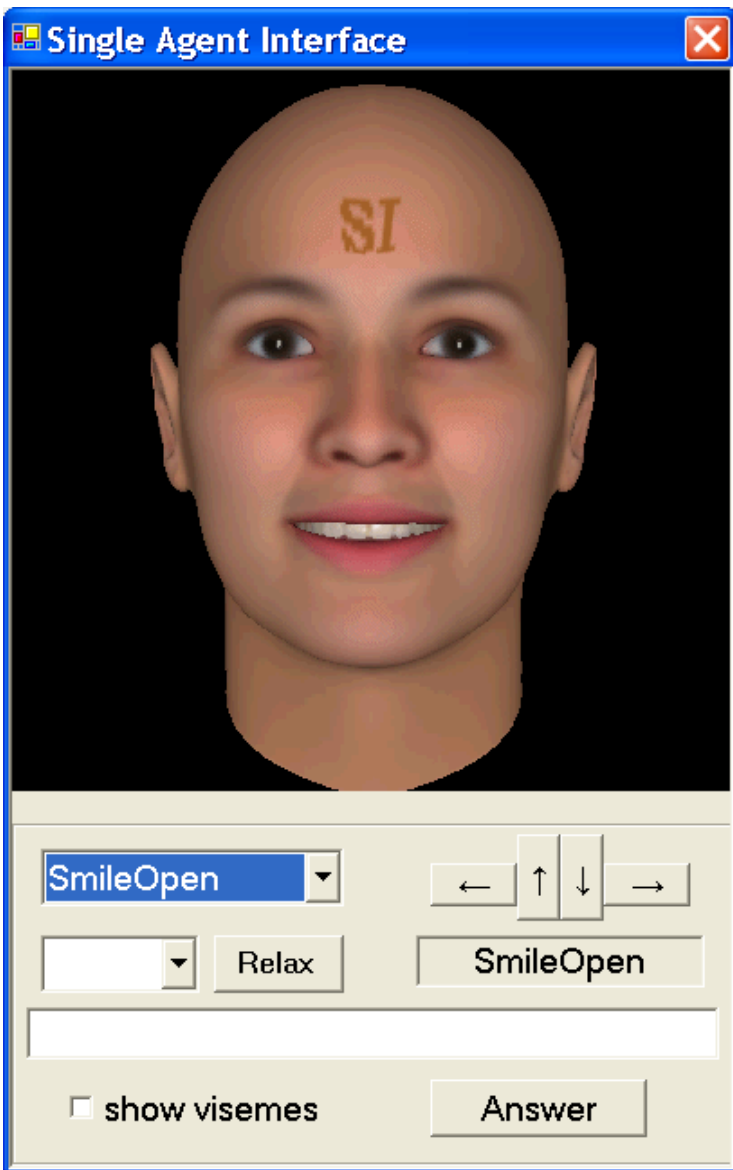
Productivity = 3D Agent



Microsoft Agent



Synthetic Agent



In 2005, Mohammed El-dosuky under supervision of Dr. Taher Hamza established an amazing synthetic agent under a project titled "Multi-modality Applied in Human-Computer Interaction"

Facial Expression: Anger, Disgust, Fear, Smile Closed, Smile Open, Sad, Surprise, Relaxed

Phonemes and visemes

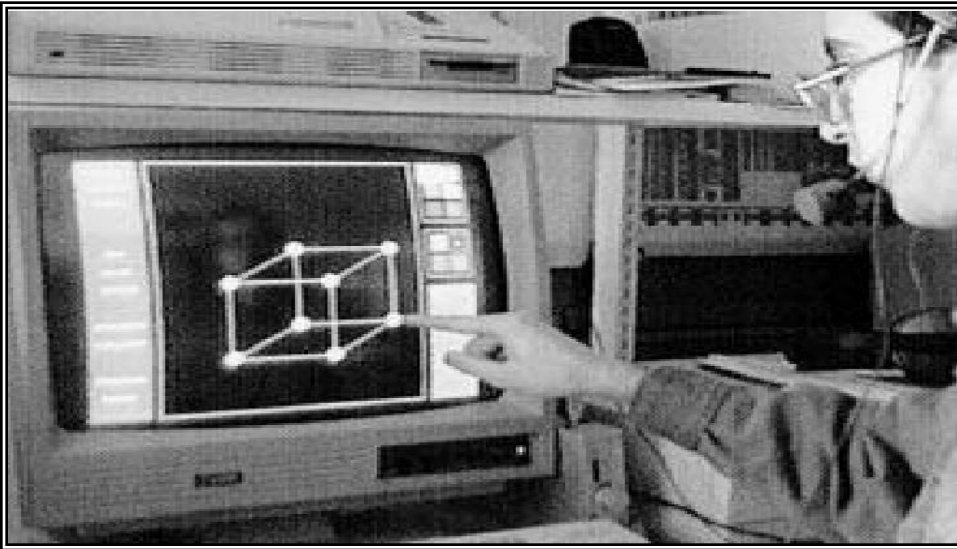
Responding to queries :pattern recognition

Graphics, speech, logic engines

Hardware



Data gloves



Touch screen

Virtual reality lab



Multi-modal vs. Multi-media

- *Multi-modal* systems use more than one sense (or mode) of interaction.
 - E.g. visual and aural senses: a text processor may speak the words
- *Multi-media* systems use a number of different media to communicate information.
 - E.g. a computer-based teaching system: may use video, animation, text and still images: different media all using the visual mode of interaction; may also use sounds, both speech and non-speech