

## **Spec Bowers**

Bowers Development Corp. President



### **Prototyping Tools**

Beyond Prototyping Tool to Application Generator

#### Why Use Prototyping Tools?

- Quick way to see "look and feel"
- Try ideas without large time investment
- Get buy-in from management, others

#### **Problems with Prototyping Tools**

- Throwaway code
- Often inflexible
- Translation required from prototype to real implementation
- After implementation, tool doesn't help revise the real application

#### A Different Approach

#### AppMaker, The Application Generator

- One tool for both prototyping and implementation of user interface
- Drastically shortens cycle of idea to implementation
- Same tool used for enhancing application
- Customizable to your conventions

## **Build the Prototype Visually Using Familiar Macintosh Interface**

- Choose from menu what to work on:
  - Menus, Windows, Dialogs, or Alerts
- Use tool palette to create items

# **Build the Prototype Visually Using Familiar Macintosh Interface**

- AppMaker creates resources as you point and click
- Standard resources or THINK Class Library resources
- Make changes instantly by pointing, clicking, dragging

#### Create Standard Interface Elements

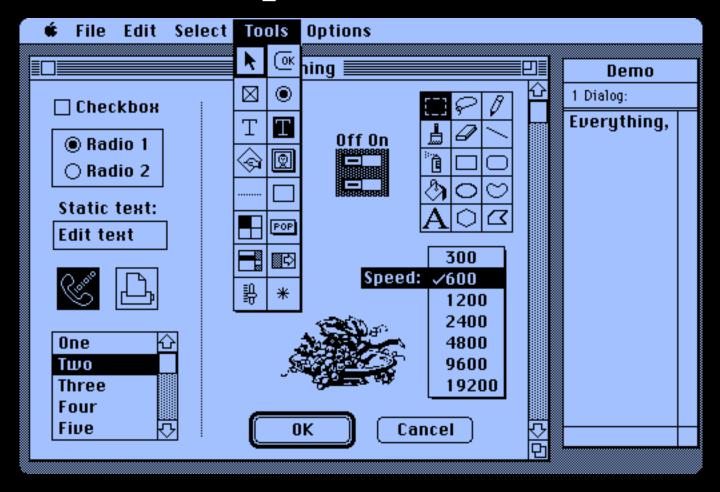
#### Without Programming a Line of Code

- Pull-down, hierarchical, and pop-up menus
- Windows, dialogs, alerts
- Buttons, check boxes, radio buttons, static text, edit text, scroll bars
- Rectangles, dividing lines

#### And More...

- Scrollable lists
- Icon buttons
- MacPaint-style palettes
- Picture menus
- Picture controls
- Custom sliders

### Some Examples



#### Macintosh User Interface is Key to Application's Success

- AppMaker uses Macintosh interface to create Macintosh interface
- Saves you from reinventing the wheel
- Helps ensure consistency with Apple's Human Interface Guidelines

#### AppMaker Does the Programming

- Source code generator automatically codes user interface
- Object-oriented or procedural code
- Pascal or C
- MPW or THINK
- Merges smoothly with your applicationspecific code

## Expert-Quality Code Gets Used, Not Thrown Out

- MultiFinder-aware
- Supports opening multiple documents
- Uses resources for coordinates
- Includes code for standard File menu
- Includes library of useful routines

#### A Customizable Tool

- Adapt code generator to your conventions
- Add languages (Fortran, Assembly language, other platforms, ...)
- Change standard resources that AppMaker produces

# With One "Prototype", Build Applications for Multiple Platforms

- Macintosh
- A/UX
- Apple IIGS
- Other platforms

#### **Development Cycle is Fast**

- From idea to working interface in minutes
- Change things easily without losing investment in existing code
- Enhance application just by opening it
  - Edit resources in place
  - Generate selected modules
- Concentrate on unique features of your application instead of standard parts

#### AppMaker is a Learning Tool

- Generated source code is consistent with Apple's source code examples
- Object-oriented programming using the THINK Class Library
- Macintosh programming techniques

#### Ideas for the Future

- Tools for generating entire application
- Visual interface that's completely WYSIWYG
- No more writing hundreds (or even dozens) of lines of code



The power to be your best