

Developing Using JavaBeans

Building programs by assembling software
components

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Developing Using JavaBeans

Save a tree... This talk is available on-line at
www.ibm.com/java/education/javabeans_building.html

*Thank you,
Gennaro (Jerry) Cuomo
and Michael Fraenkel*



Contents...

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- Summary



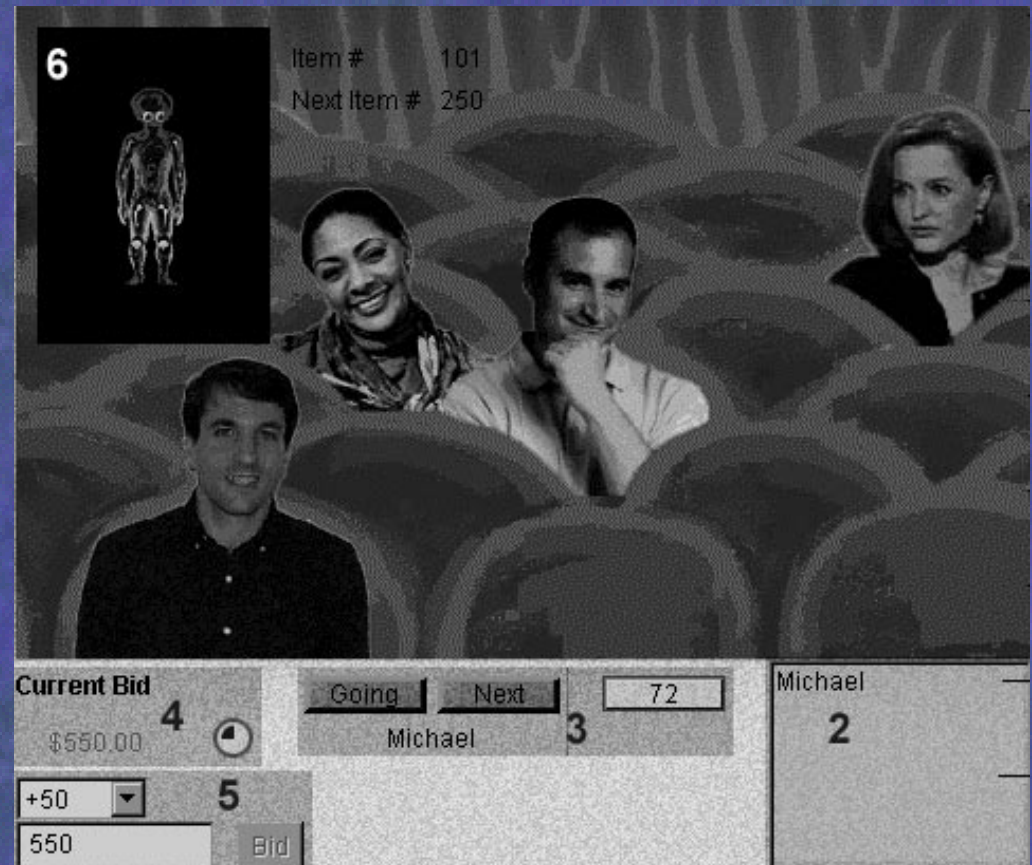
The Auction application

- Built from JavaBeans
 - ▶ Using Visual Age for Java
- Auction theme



The Auction application

- Beans found in the Auction Application...
 1. Catalog bean
 2. Bidder bean
 3. Auctioneer bean
 4. Current bid bean
 5. Bid submission bean
 6. Current auction item bean



JavaBeans...

JavaBeans allow...
yadda, yadda, yadda...
using visual
application
builder tools.



JavaBeans...

JavaBeans allows developers to create reusable software components that can then be assembled together using visual application builder tools...

- Sybase's PowerJ™
- Borland's JBuilder™,
- Lotus BeanMachine
- IBM's Visual Age™ for Java,
- SunSoft's Java Workshop™
- and Symantec's Visual Cafe,
- and many, many others.

JavaBeans...

In Short...

- ▶ Beans are for Builders
- ▶ Builders are for "developers"

Truisms

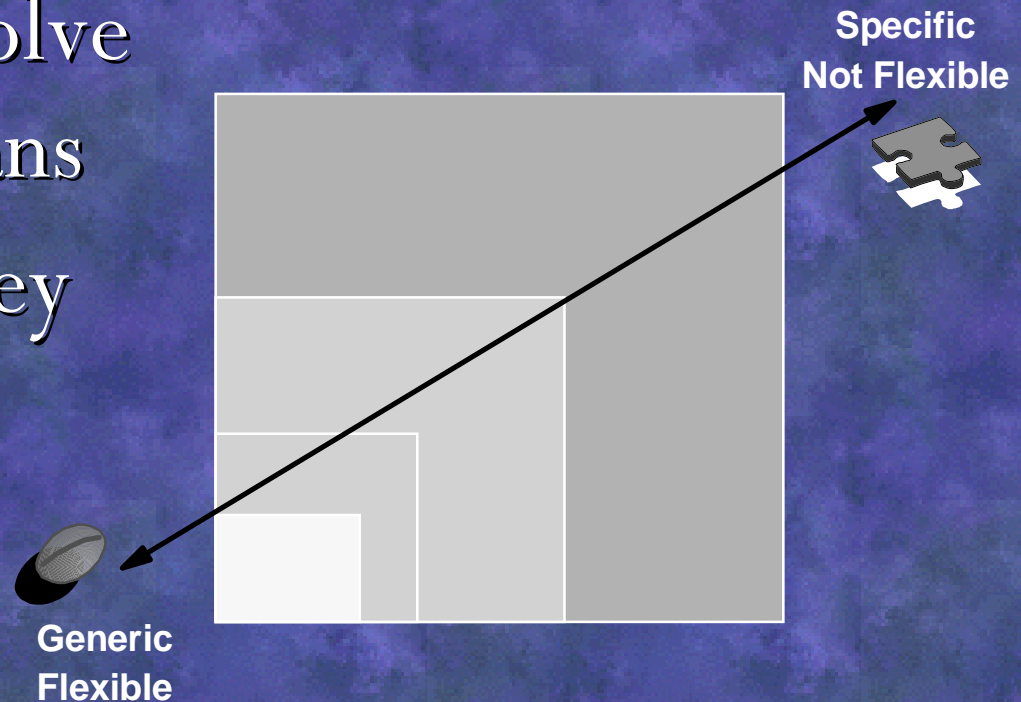
Just because it's a Bean...

- ▶ A Bean doesn't guarantee "goodness".
- ▶ Your application will be as "good" as the beans you pick.
- ▶ The less "usable" the more code you end up writing.
- ▶ What makes a bean "useable"?
 - Tailored for your needs
 - How well does your bean collection work together

Truisms

Evolution of a Bean

- Specific Beans evolve from Generic Beans
- As they evolve they lose flexibility



Categories of Builders

Wiring is the act of visually manipulating a JavaBean in order to...

- ▶ Adjusting properties
- ▶ Connecting Events to Methods

P.E.M. equals...

- ▶ Properties/Events/Methods



Categories of Builders

- Integrated Development Environment (IDE)
 - ▶ Do it all... Especially Debug
- Bean Box
 - ▶ Drop/Wire/Serialize bean state
- Component Assemblers
 - ▶ Drop/Wire/Generate Code



Categories of Builders

Who uses these builders?

- ▶ IDE

Software Engineers

- ▶ Bean Box

Software Engineers

- ▶ Component Assemblers

Software Engineers

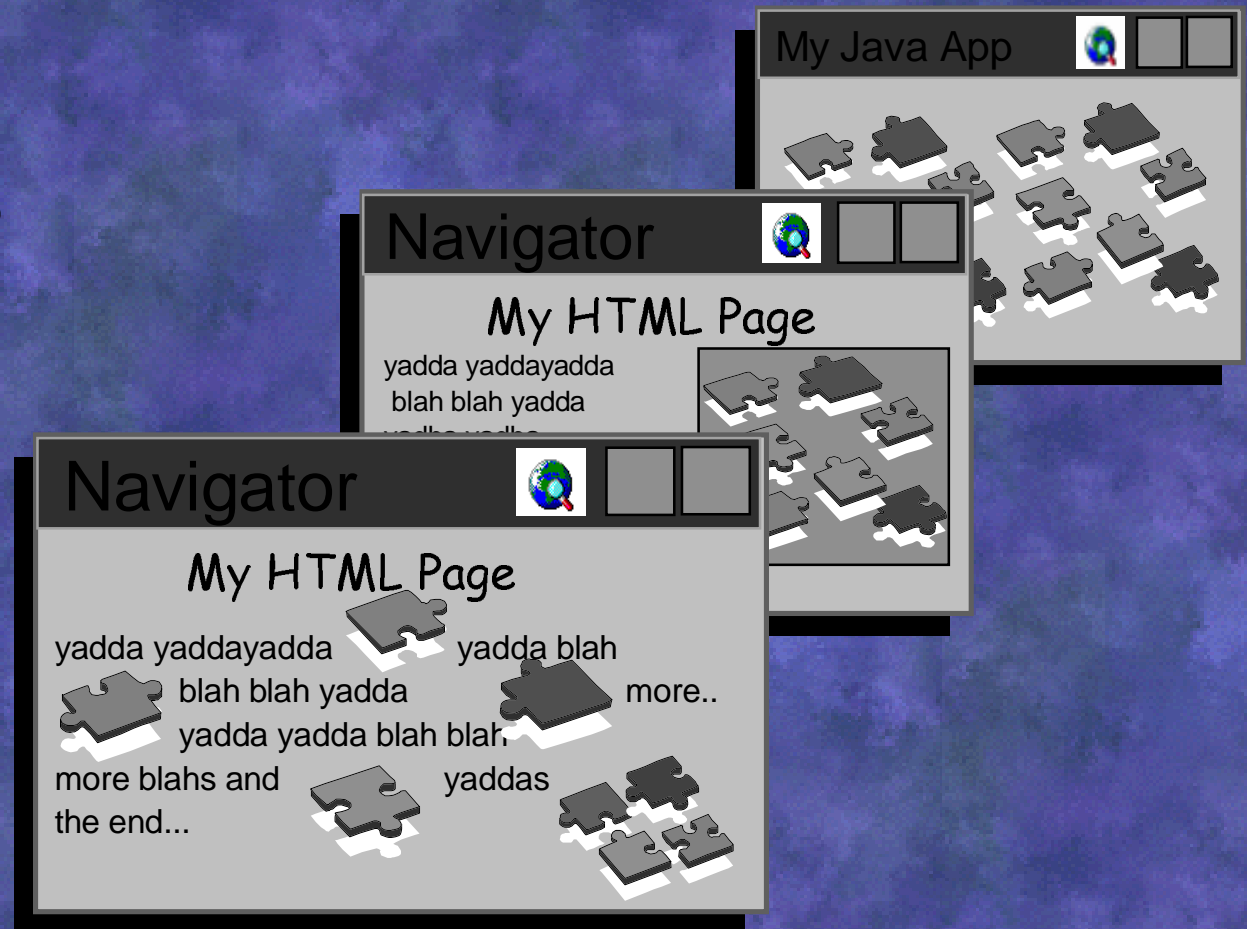
Visual Designers

WebMasters



JavaBeans Containers

- Stand-alone Applications
- Monolithic Web Applications
- Componentized Web Pages



JavaBeans Containers

Componentized Web Pages

- ▶ Lotus InfoBus
 - Connecting applets in WebPages
 - Subscribe and Publish model
 - as opposed to wiring model



JavaBeans Containers

Beans as Native Controls

► ActiveX Bridge

- Embed Java Components in OLE, COM and ActiveX containers
 - Eg. VB and Word
- Tight Integration
 - Eg. Bean props as VB prop sheets
 - OLE type lib info
 - Win32 registry info

