VISUALIZATION OF OBJECT-ORIENTED CLASS LIBRARIES

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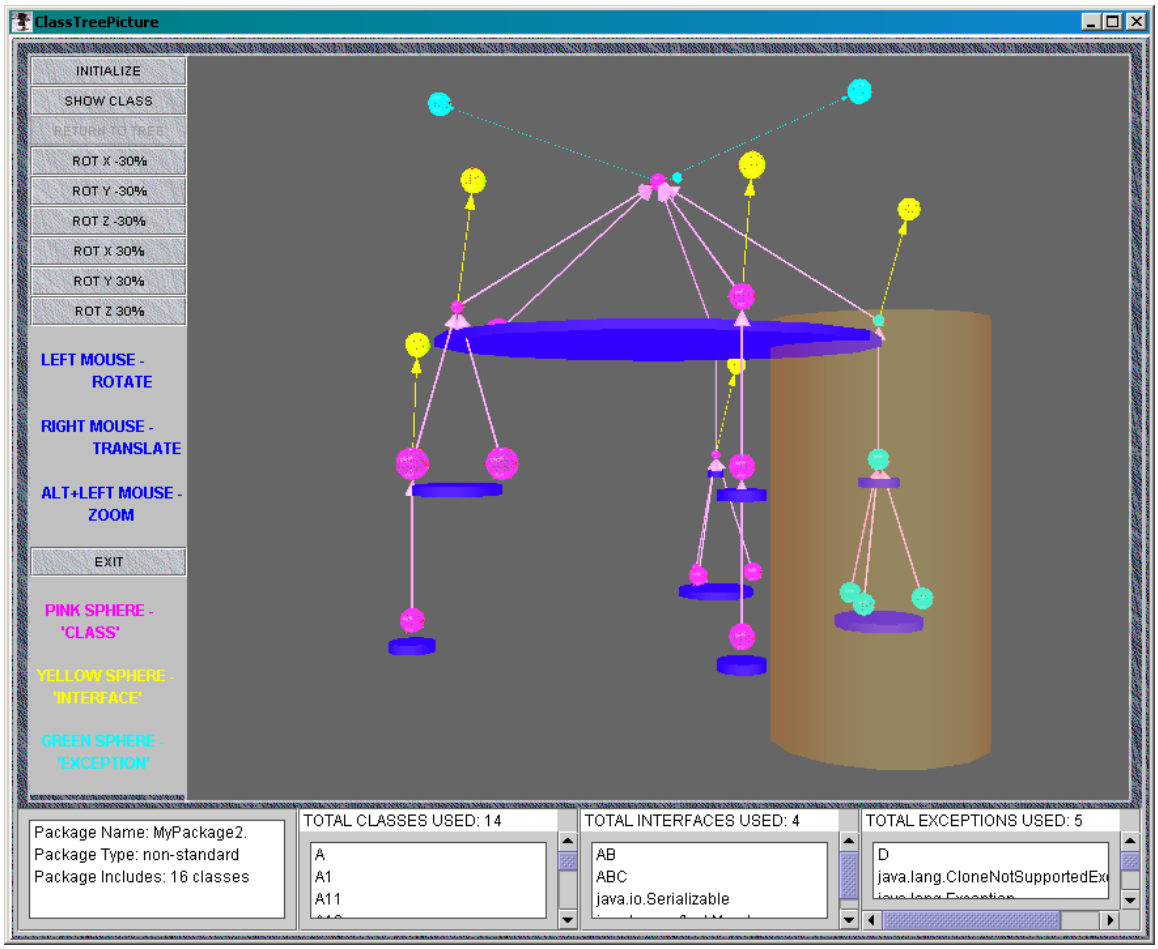
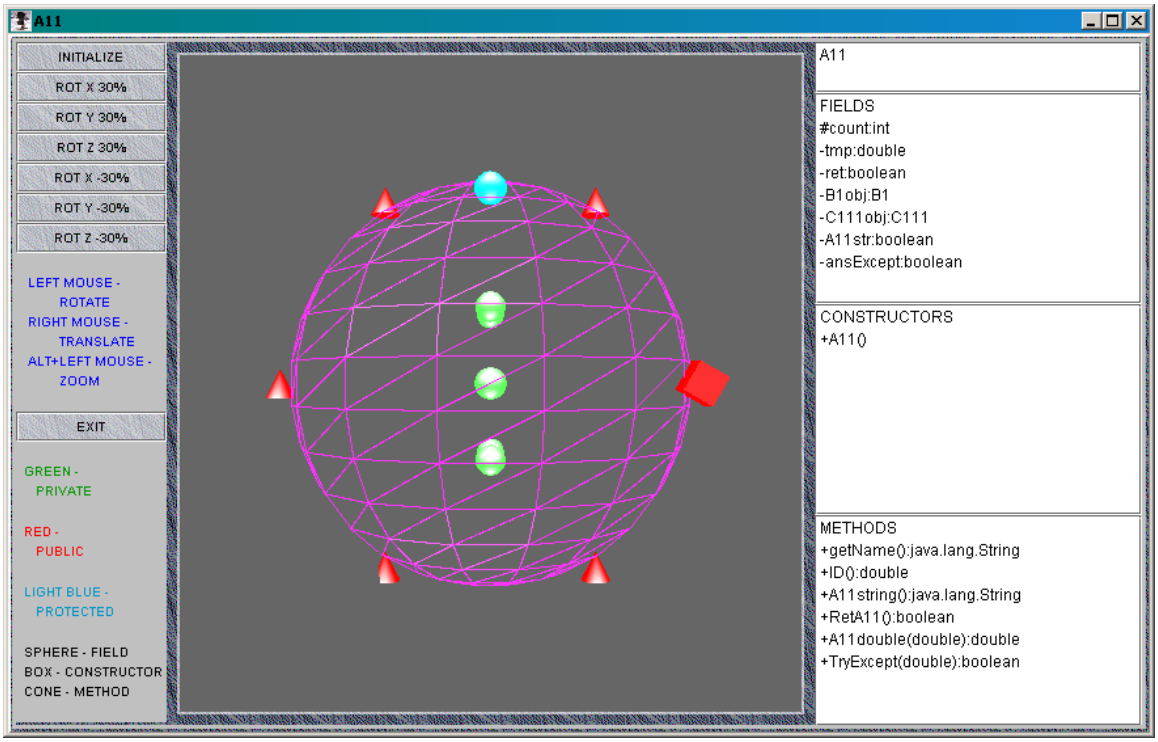
This graduate project represents the design and implemention of a prototype application for visualizing an Object Oriented Java class package (library). An inheritance tree of the classes is drawn in 3D. A graphic user interface allows the user to interact with the application; to navigate through the visualization, rotate the visualization, and to select individual classes for a more detailed visualization as well as a 2D UML object representation. The program is written using the Java 2 SDK and the Java 3D API. The Java reflection package is used to obtain information about the classes in the package. The effectiveness of this visualization prototype and possible enhancements are also presented. The prototype provides users a different perspective on Java packages that they are either studying or working on.




A11
INITIALIZE
ROT X 30%
ROT Y 30%
ROT Z 30%
ROT X -30%
ROT Y -30%
ROT Z -30%
LEFT MOUSE - ROTATE
RIGHT MOUSE - TRANSLATE
ALT+LEFT MOUSE - ZOOM
EXIT
GREEN - PRIVATE
RED - PUBLIC
LIGHT BLUE - PROTECTED
SPHERE - FIELD
BOX - CONSTRUCTOR
CONE - METHOD
A11
FIELDS
#count:int
-tmp:double
-ret:boolean
-B1obj:B1
-C111obj:C111
-A11str:boolean
-ansExcept:boolean
CONSTRUCTORS
+A11()
METHODS
+getName():java.lang.String
+ID():double
+A11string():java.lang.String
+RetA11():boolean
+A11double(double):double
+TryExcept(double):boolean