UMLet Tools

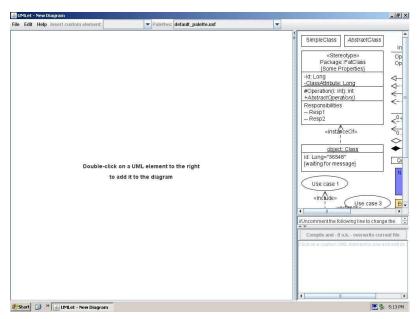
Umlet is an executable Java jar file that lets you do basic UML diagrams. It can be found at: http://www.umlet.com/

After you unzip the zip file, you can run umlet by going to the com.unlet.plugin directory and running umlet.jar (you may want to make a desktop shortcut to this).

Start Up

When you start up the program, there are four sections. The largest section is the workspace. To the right, you will see the list of UML elements (with scrollbars), the editor (to edit the UML content), and a place to edit custom UML elements. We won't cover custom UML elements in this document.

There are various "palettes" or sets of UML elements. To add a UML element into your workspace, simply double click it.



Example of initial startup of Umlet

The Menu Options

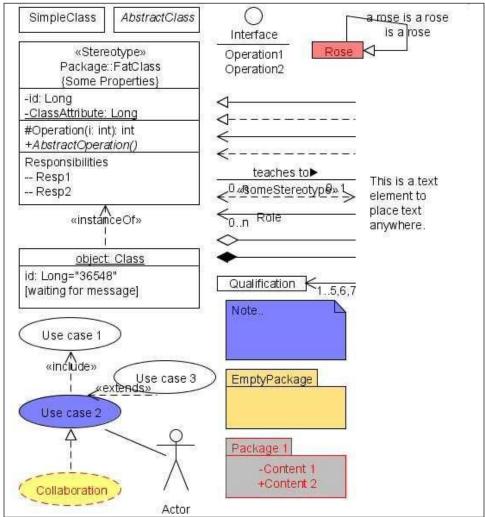
File – Lets you create new diagrams, open, and save. The files can be saved as JPG, SVG, PDF, EPS as well as the umlet format.

Edit – Lets you undo, redo, delete objects, select all, group/ungroup, find and copy to clipboard.

Help – Links to an online help

Palettes

There are 13 palettes. The default palette has most of the standard diagram objects.



Default diagram objects

The Editor

There is a simple text style editor for editing the UML elements. We'll go more into how to use it in the jump start.

The Custom UML editor

This is for editing any custom UML elements you create. We will not go into custom elements in this document, so the custom UML editor won't be covered in this document.

Jump Start

Most likely you'll be creating class diagrams, so let's start there.

Creating a Class

Double click the class element (it's the one that says << StereoType>>)

Now click the class in your workspace. You will notice that the editor will display the underlying editing. You can modify the class here.

To see the following in the class element	Type the following in the editor
Operation	Operation
Operation	/Operation/
<u>Operation</u>	_Operation_

Note: In UML, italics is used for abstract methods and underline is used for static data members.

You can resize the class going to any end or corner, holding down the left mouse button, and dragging.

Shape2D
-center
translate() getCenter() rotate() changeScale() getArea() getPerimeterLength() getBoundingRect()

Example of a finished class

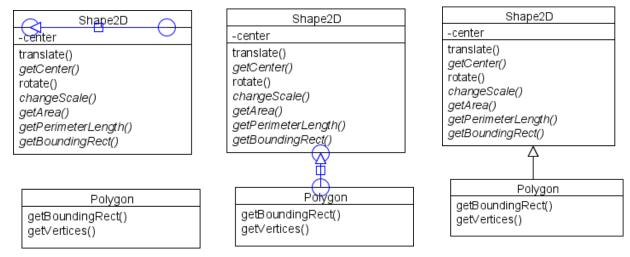
Note: When you create new UML elements, they appear in the top left corner. If the new element overlaps one that's there, you can simply drag it over to a new place by holding the left mouse button over the new object.

Creating a relationship

If you want to do inheritance, implements, or other relationships of classes, you will need two classes.

To set up the relationship, double click the appropriate element. We're using the arrow for inheritance. You will see a purple line as you do this. When you let go of the left mouse button, you will see the inheritance (or whatever relationship you chose).

There will be two circles. Go to the circle with the arrow, hold the left mouse button and drag it to the bottom of the base class. Do the same with the other circle, placing it to the top of the new class. Then click anywhere else on the workspace to make the circles disappear.



Creating a relationship (inheritance)

If you want to move a class, click on select from the diagram tools, hold down the left mouse button while selecting the class and move it where you want.

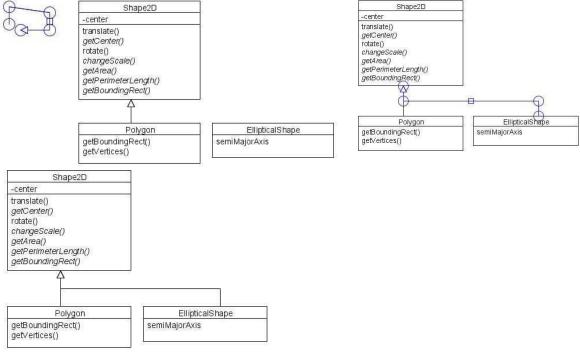
Two (or more) classes with the same base for inheritance

To have two or more classes with the same base inheritance, you use the arrow next to "rose is a rose".

Then go to the text editor and remove "a rose is a rose". If you accidentally removed the trianglar arrow, add: 1t=>>

Note: If you want a regular arrow, you would add lt=>(that's <u>one</u> greater than sign)

Drag all circles as you did before. See the diagram on the next page for the steps and finished result.



Creating multiple classes with the same inheritance

Adding Text to a Relationship

You can add text to any relationship. If the line is horizontal:

€>	Below relationship, left adjusted	m1=text
test	Below relationship, right adjusted	m2=text
	Above relationship, centered	text

If the line is vertical:

^	Centered at top of the relationship	m1=text
test	Centered at bottom of the relationship	m2=text
V	Centered at the middle of the relationship	text

Adding Color to the Background of Elements

You can add color by typing the following in the editor: bg=color

Colors recognized: orange, blue, red, green, black, yellow, pink, gray

Copying an Element

You can copy an element by double clicking the element in the workspace. The new element will be positioned slightly below and to the left of the old element, highlighted in blue. This can save you a lot of typing.

Removing a Relationship

To remove an relationship, click "Select" from the diagram tools and click the relationship path that you want to remove. You'll see it highlighted in blue. Then hit delete.

Additional Resource Information

For information on UML, I found this website to be very useful:

https://en.wikipedia.org/wiki/Unified_Modeling_Language

About the Author:

Ken Cooney is a professional programmer, amateur cartoonist, avid boardgamer, music fanatic, zealous book reader, and a Yankee from New England. I'm current living in Northern Kentucky, trying to adjust, and working towards my MSCS.

You can visit my website at http://www.kencooney.com for other fun and useless facts about me and my interests.

Page 6