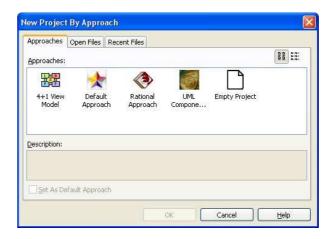
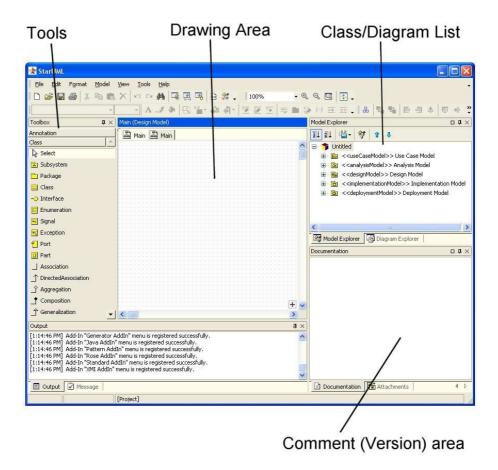
# This is for staruml-5.0-with-cm. This version is sufficient for this unit/module. See the software folder.

# Using StarUML

- StarUML can be downloaded free from http://staruml.sourceforge.net/en/
- StarUML's startup screen gives you the choice of starting a new project, opening a project or choosing a recent project:



- If you are starting a new project choose 'Default Project' as that is the basic UML Diagram project.
- The StarUML work area looks like this:



# • Adding a class

- Click on the 
  □ closs button and then click on the drawing pane.
- The class will be automatically named with a random name, presumably of one of the authors! Type in the name you want to give the class.

# • Adding the First Attribute to a Class

- Double click on the class name and then click on the cyan rectangle to the left of the class.
- OR, right click on the class, then choose [Add] and then [Attribute].

# • Adding more Attributes to a Class

- Double click on the class name and then click on the cyan rectangle to the left of the class.
- **OR**, right click on the class, then choose [Add] and then [Attribute].
- OR, double click on an existing attribute, then click the [+] sign on the left.

# • Adding Methods

- For high-level diagrams we do not show details of methods on our class diagrams - too complicated when many classes are shown. Methods shown in detail class diagrams.

## • Moving Classes Around

- Classes can be dragged around the drawing pane using the mouse in a normal drag and drop manner.
- OR, you can align classes using the [Format]-[Alignment] menu item.
- OR, you can use [Ctrl] and the arrow buttons to move the selected classes.
- Connections between classes are automatically kept when the classes are moved.

#### • Selected Objects

- A single object is selected by clicking on it in a normal manner.
- Multiple objects are selected by clicking on the first one and then holding down [Shift] while clicking on the others.
- **OR**, by using the mouse to select a region containing the objects you wish to select.

# • Adding Associations

- Choose the association from the list in the toolbar on the left.
- Move the mouse from the class that has the non-symbol end of the relationship, to the other class.

# • Adding Corner Points to an Association

- Select the association.
- Move the mouse to a place on the association line.
- Drag the association line to the position for the new corner.

# • Deleting Corner Points of an Association

Simply drag the corner point so that it forms a straight line with the points on either side of it.

## • Adding a Comment

- Above the "Tools" area you will see the label [Annotations].
- Select this and then choose the □Note button.
- You can return to the general toolbox by selecting [Class] label below the list of available Annotations.

# • Formatting Classes and Notes

- Right click on the object.
- Choose [Format].