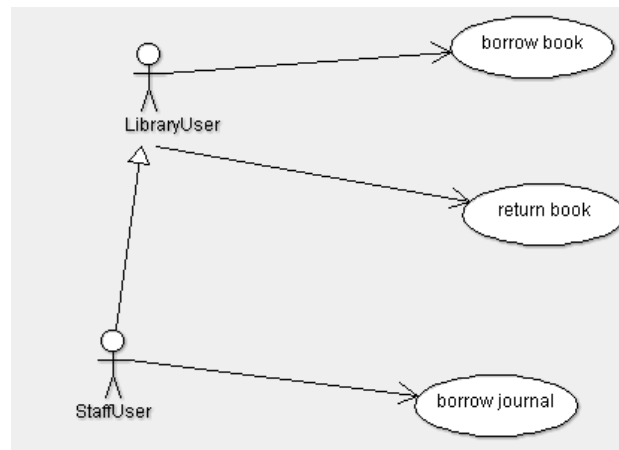


Library UML Modelling

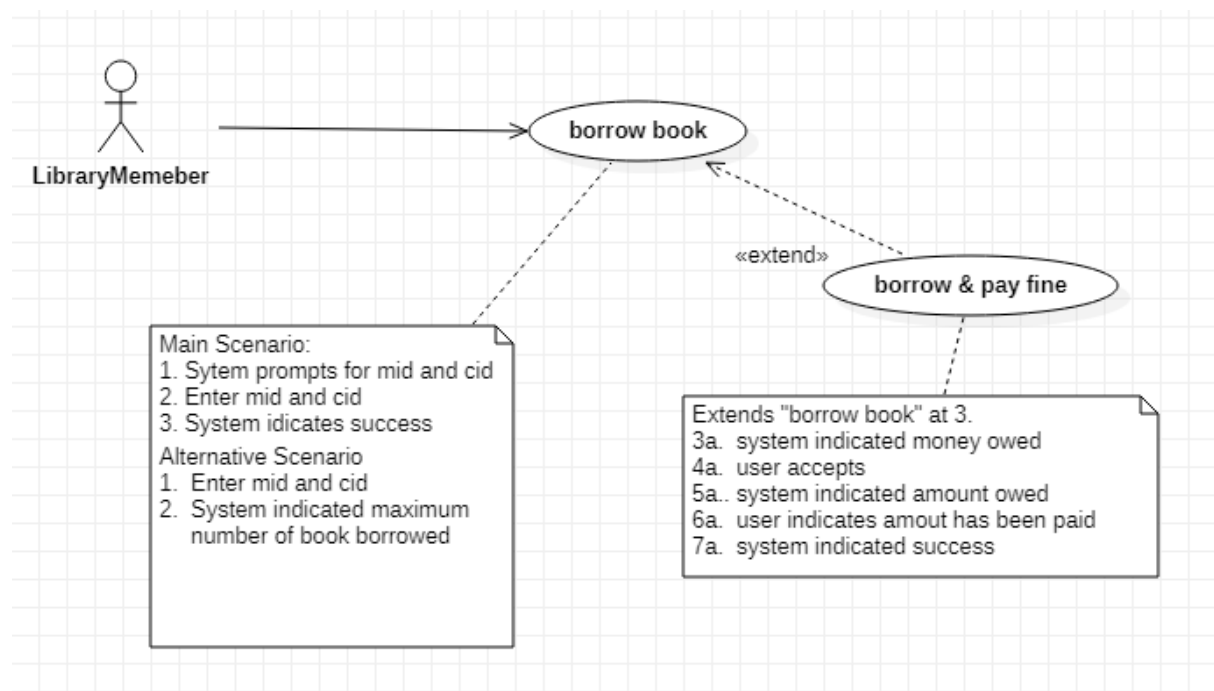
Start a new StarUML project and save it as **Library.mdj**

Usecases

Use menu **Model / Add Diagram / Usecase Diagram**. Then draw usecases for the library and attach a note to each usecase which outlines the main scenario. Important that you do this carefully as this work will be graded. See the library PDF for some sample usecases. For example:



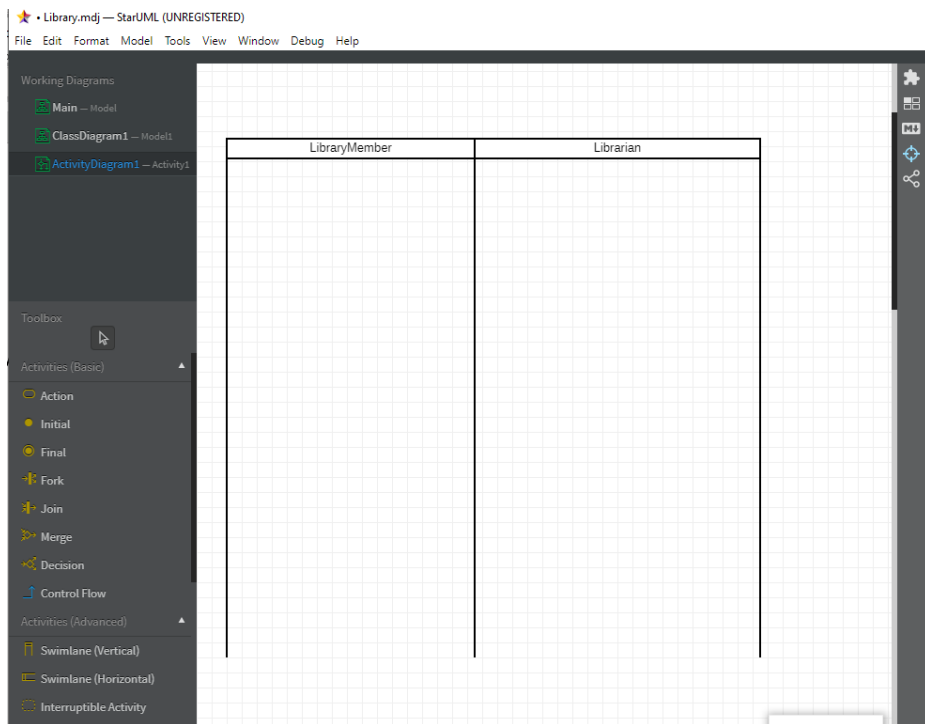
The following diagram is just to give you a guideline.



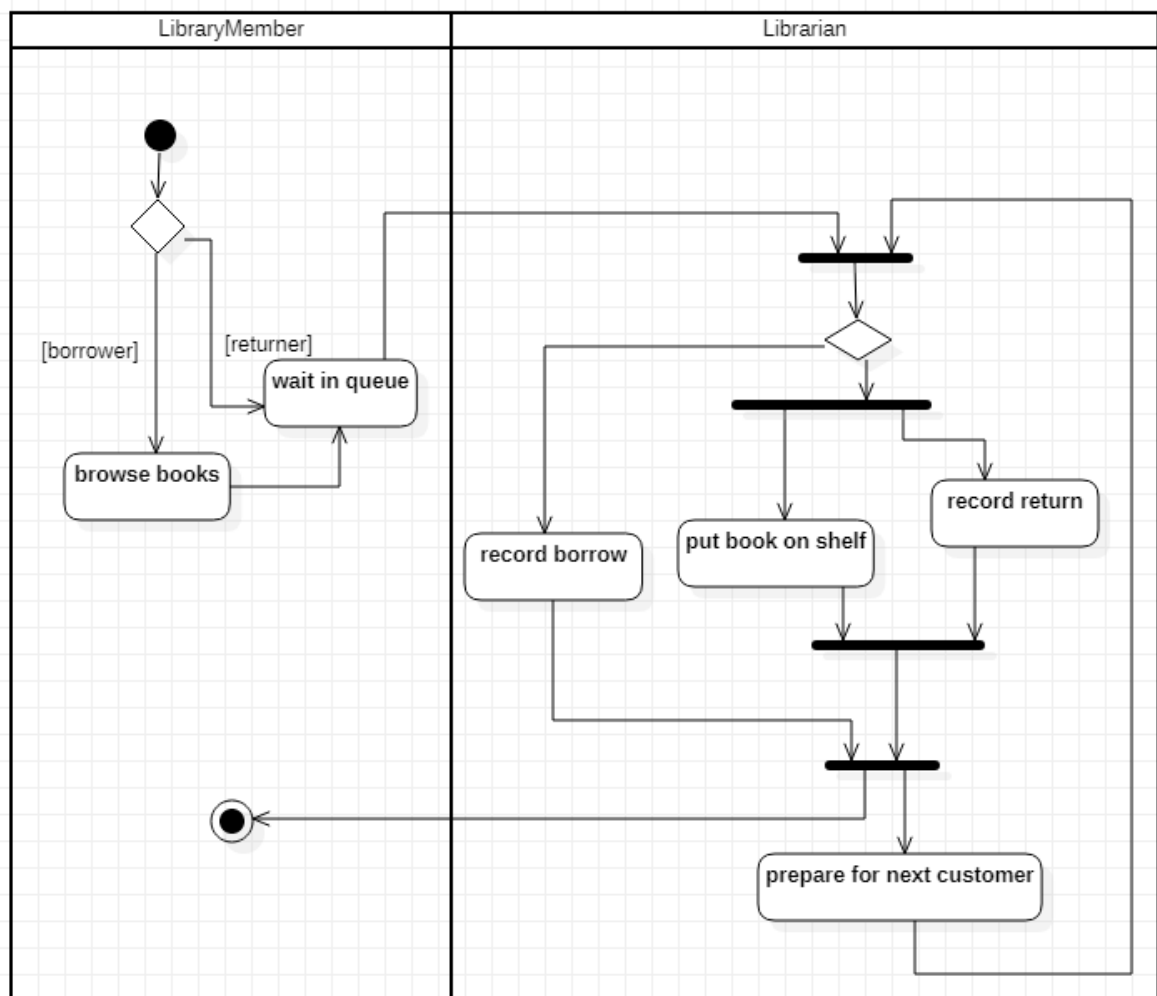
Activity Diagram for Business Workflow Modelling

Use menu **Model / Add Diagram / Activity Diagram**

Expand the tool palette on bottom left to see Activities (Advanced) and add two swimlanes to your activity diagram. Then expand and rearrange them to get something like:



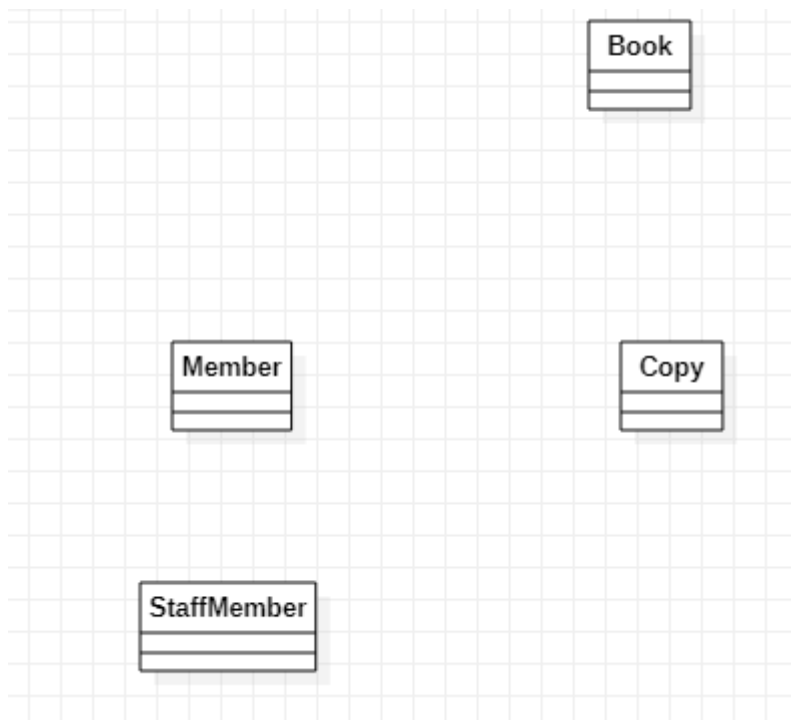
Complete the Activity Diagram so that it looks like:



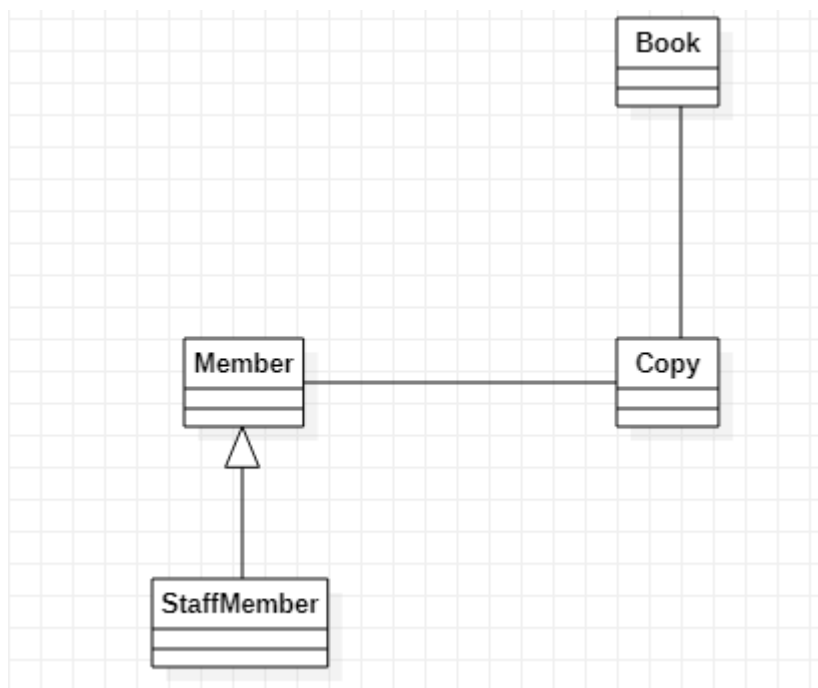
Note that by selecting a control-flow link and pressing **Control-L**, the link will become rectilinear.

Class Diagram – Domain Model

Use menu **Model / Add Diagram / Class Diagram**. Use the tool palette to draw the following:

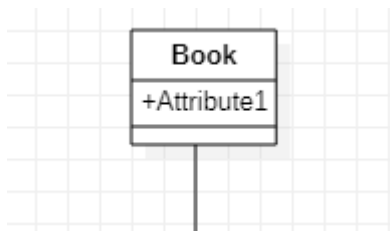


Link them with associations and generalization to get:

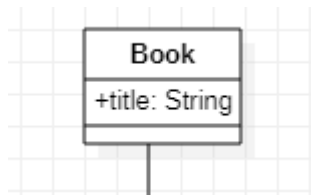
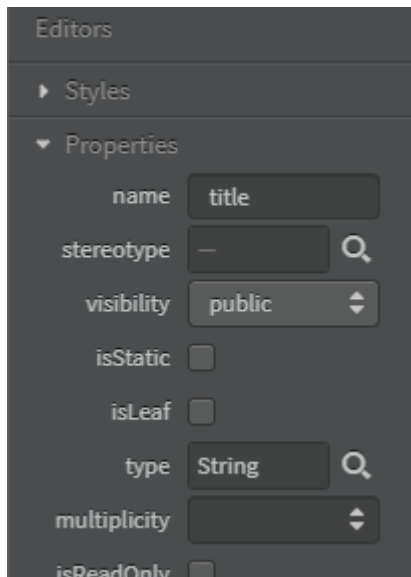


Adding Attributes to a class


Right click on Book class and select **add / attribute**.



Select this attribute, and edit its name and type properties as show.

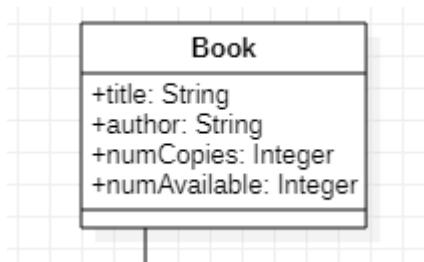


Double-click on Book class to see the following context sensitive edit tool buttons. Click on the first

button  to add another attribute. Name it **author** and its type String.

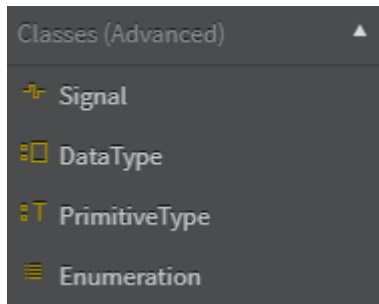


Add other appropriate attributes as show below.



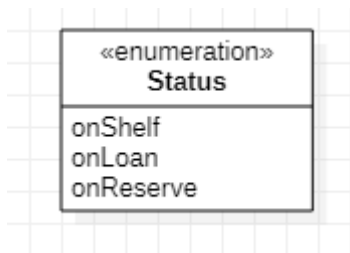
Adding an Enumerated Data Type

On the bottom right hand side, expand Classes (Advanced) and select Enumeration.

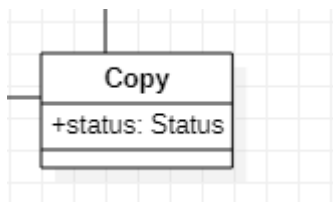


Add an Enumeration called **Status** to the class diagram.

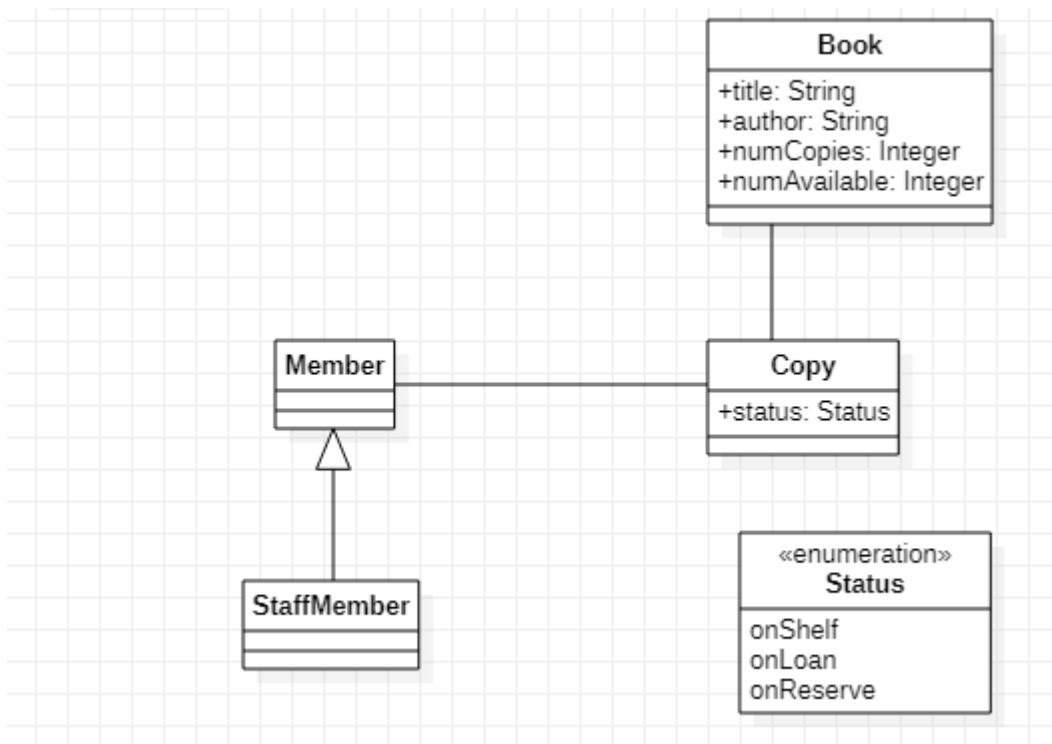
Then add 3 Enumeration Literals to this new enumerated data type to get:



Then edit the status attribute of class **Copy** to get:

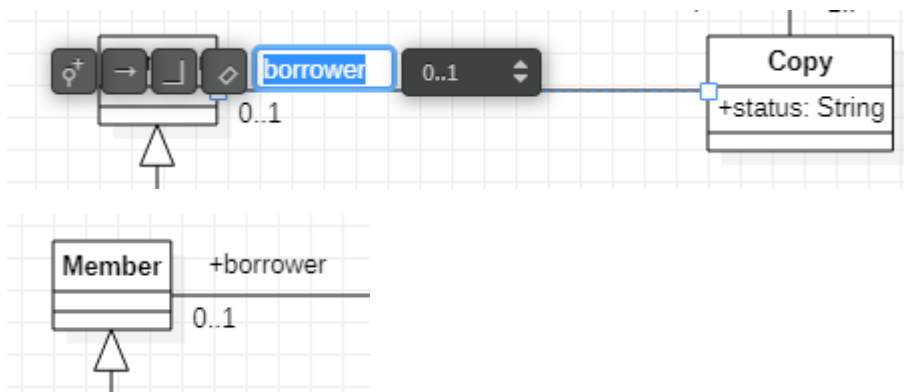


Class diagram should now look like:

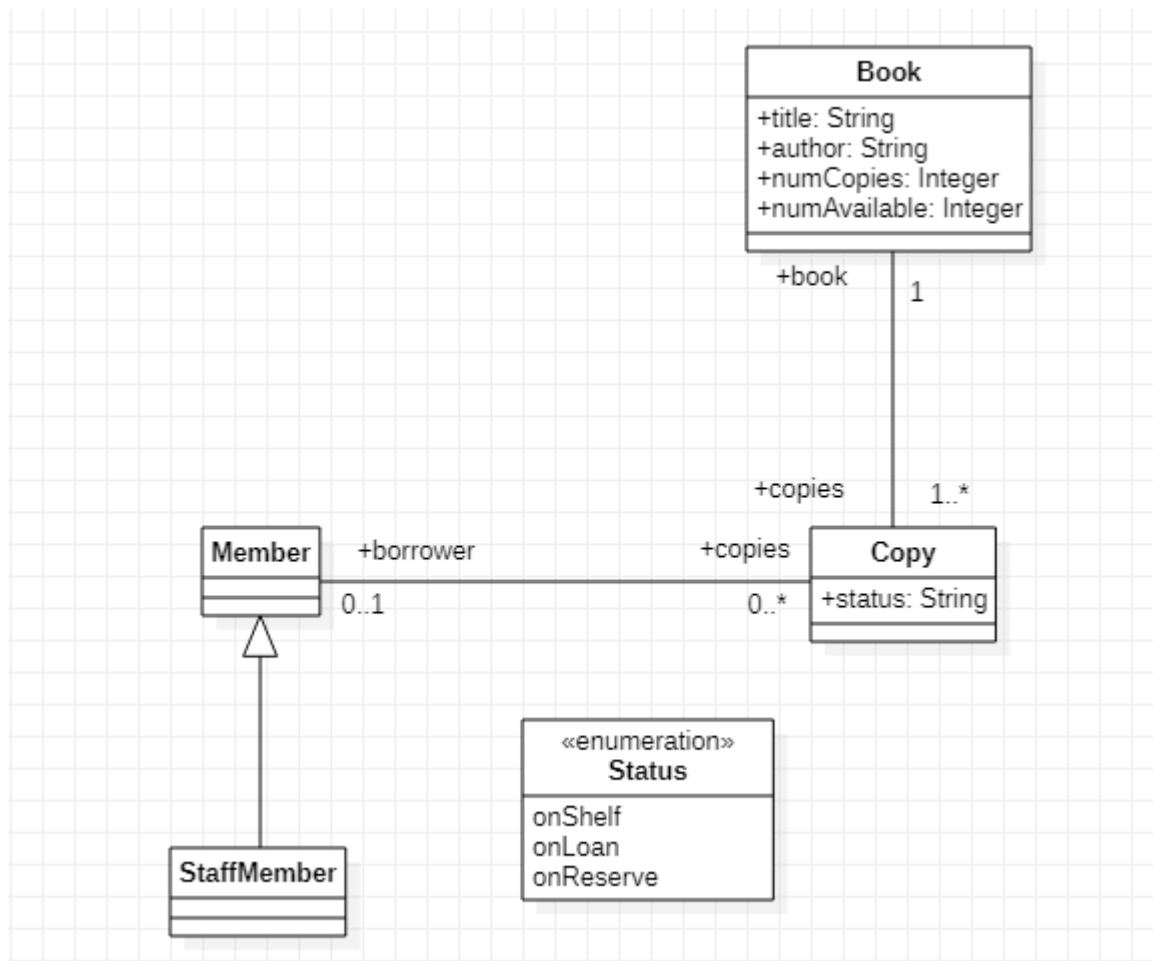


Adding Multiplicities and Role Names to Associations

Double-click on left end of association from Member to Copy and enter the role name **borrower** and multiplicity as shown next:



Add others as indicated in the class diagram:



Exercise – you will be expected to demo these diagrams at a later date

Add other attributes that you consider appropriate to the classes.

Add some more usecases with one or two scenarios for each one.