SRML Editor Tutorial (2)

CO7205 Advanced System Design

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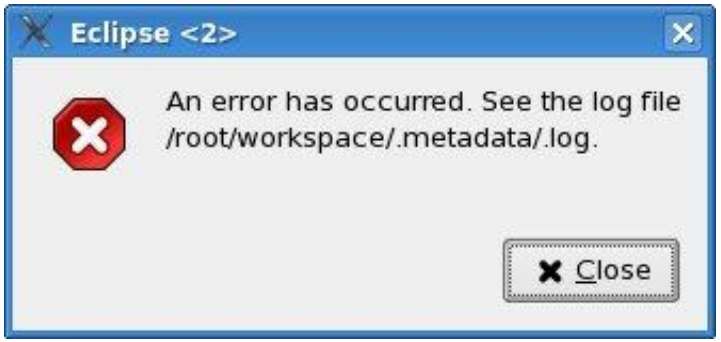
Lab sheet and materials

http://www.cs.le.ac.uk/srml/

Problem with Eclipse 3.4….

- Some of you may have problem with Eclipse 3.4. If it failed to start with following message:

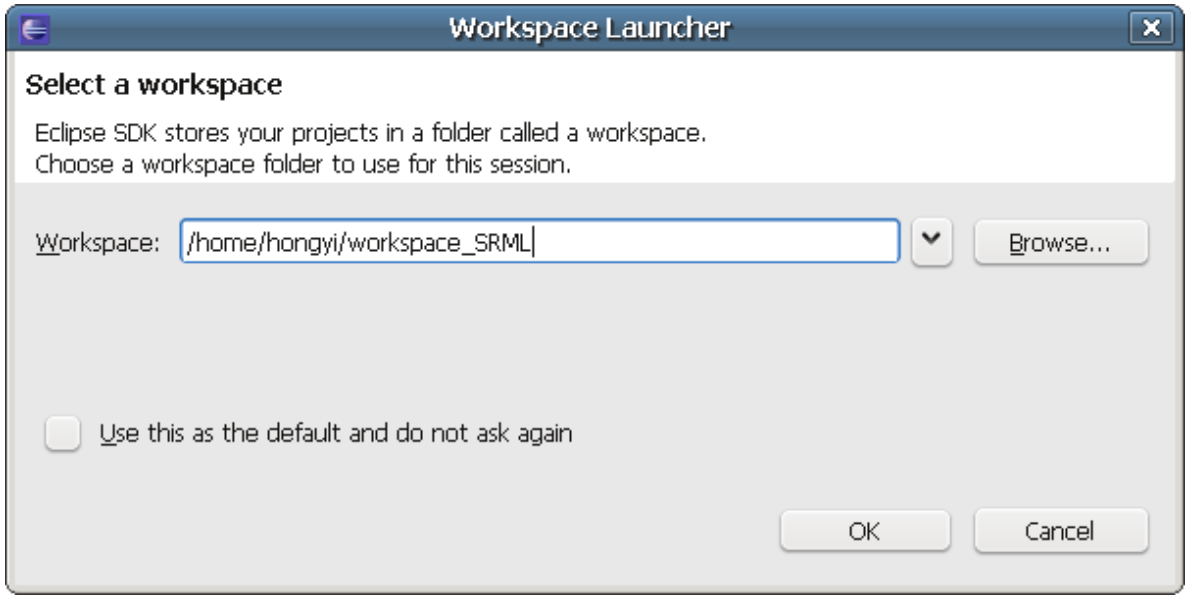


  - Please provide your CFS id to departmental system administrator, who will be there with us on 2nd November.

Start SRML Editor in MSc lab

- Lab sheet and materials
  - http://www.cs.le.ac.uk/srml/

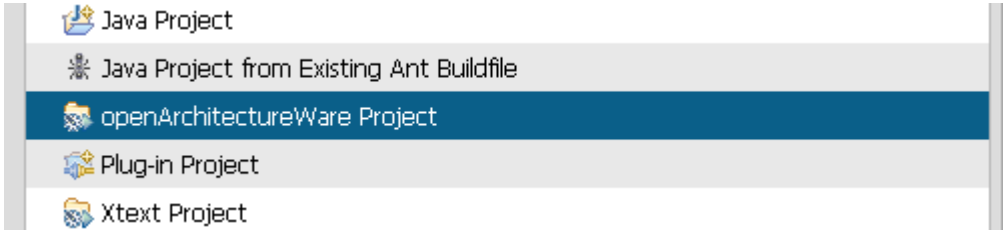
- Launch Eclipse 3.4 from Menu->Programming->Eclipse 3.4
  Create a new workspace e.g. *workspace_SRML*



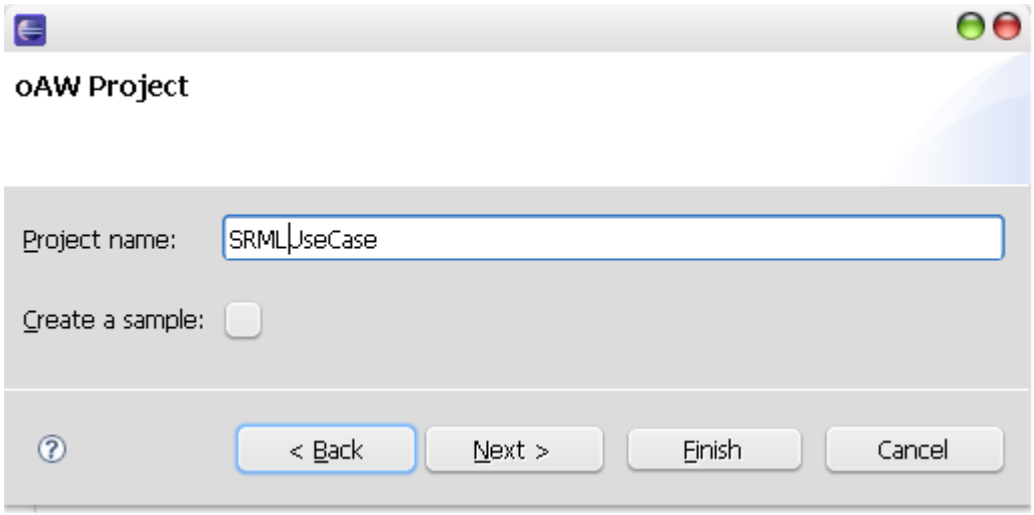
Use Case Scenarios to SRML

Create a new OpenArchitectureWare project

(1) File->New->Other->openArchitectureWare project



(2) Name the project "SRMLUseCase"



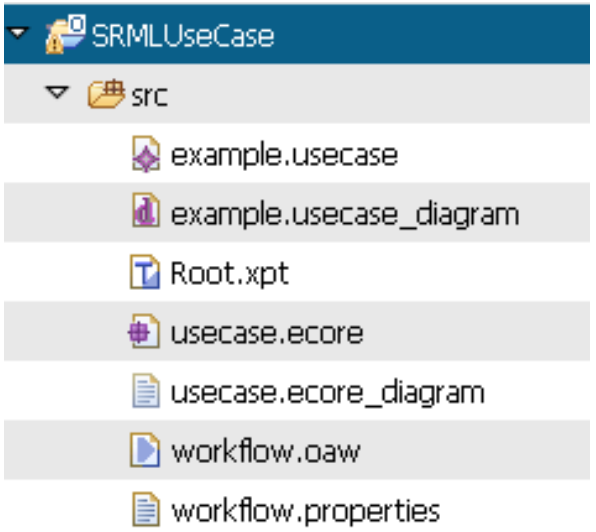
Use Case Scenarios to SRML

- Download SRML UseCase package from

http://www.cs.le.ac.uk/srml/example/usecase_package.zip

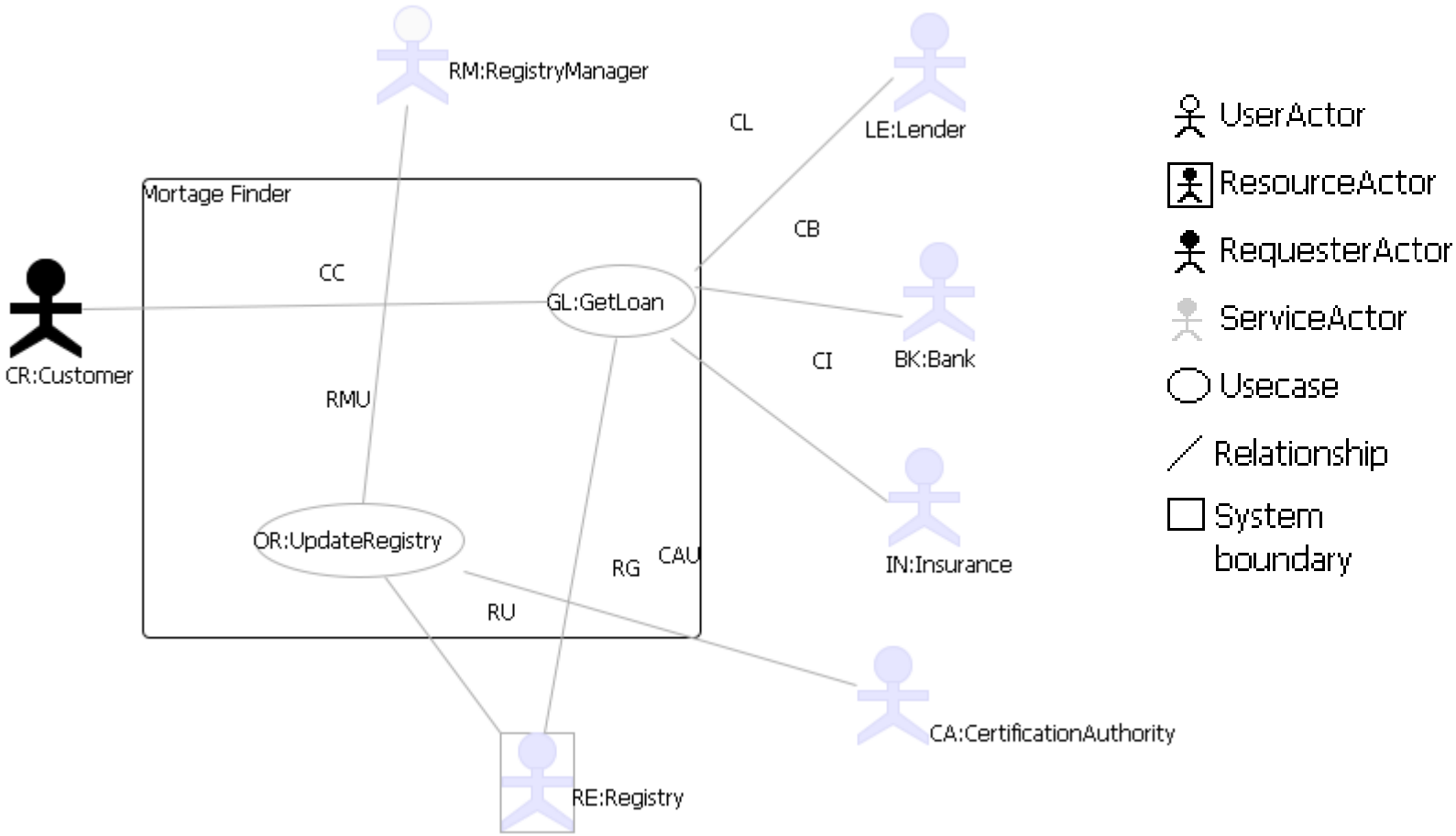
http://www.cs.le.ac.uk/srml/example/usecase_example.zip

- Extract and import all files into src/ folder
  - Select "*src*" *folder, right click on it and select "import" from the context menu, select "General->File System" and browse)*
  - The structure of your project should look like this:



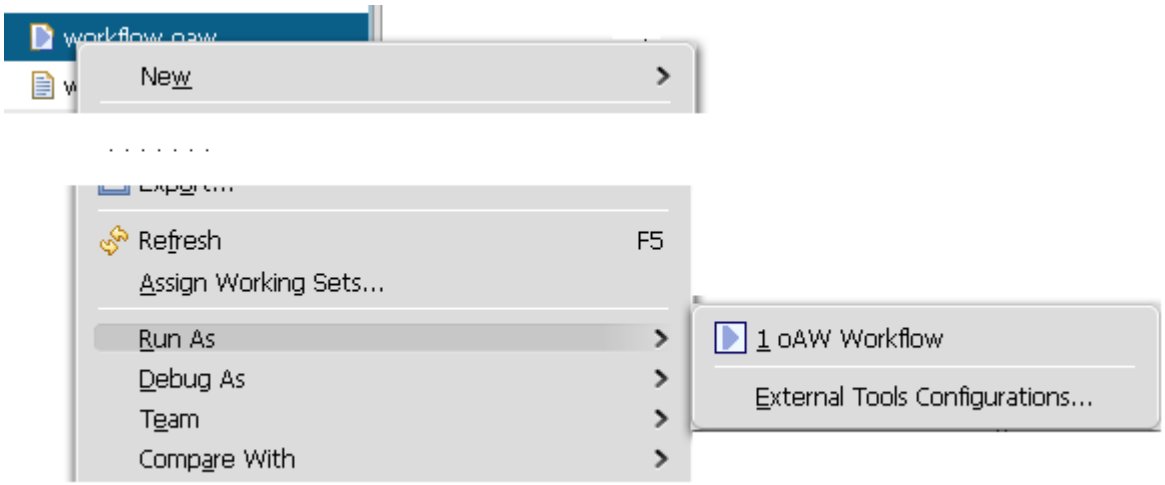
SRML Use Case Diagram

- Open "example.usecase_diagram", you should be able to the an example of SRML Use Case diagram (Mortgage lending).



Generate SRML from Use Case diagram

- Right click ***workflow.oaw*** and click ***Run as oAW workflow***



- Generated SRML code can be found in ***src-gen***.

Generate SRML from Use Case diagram

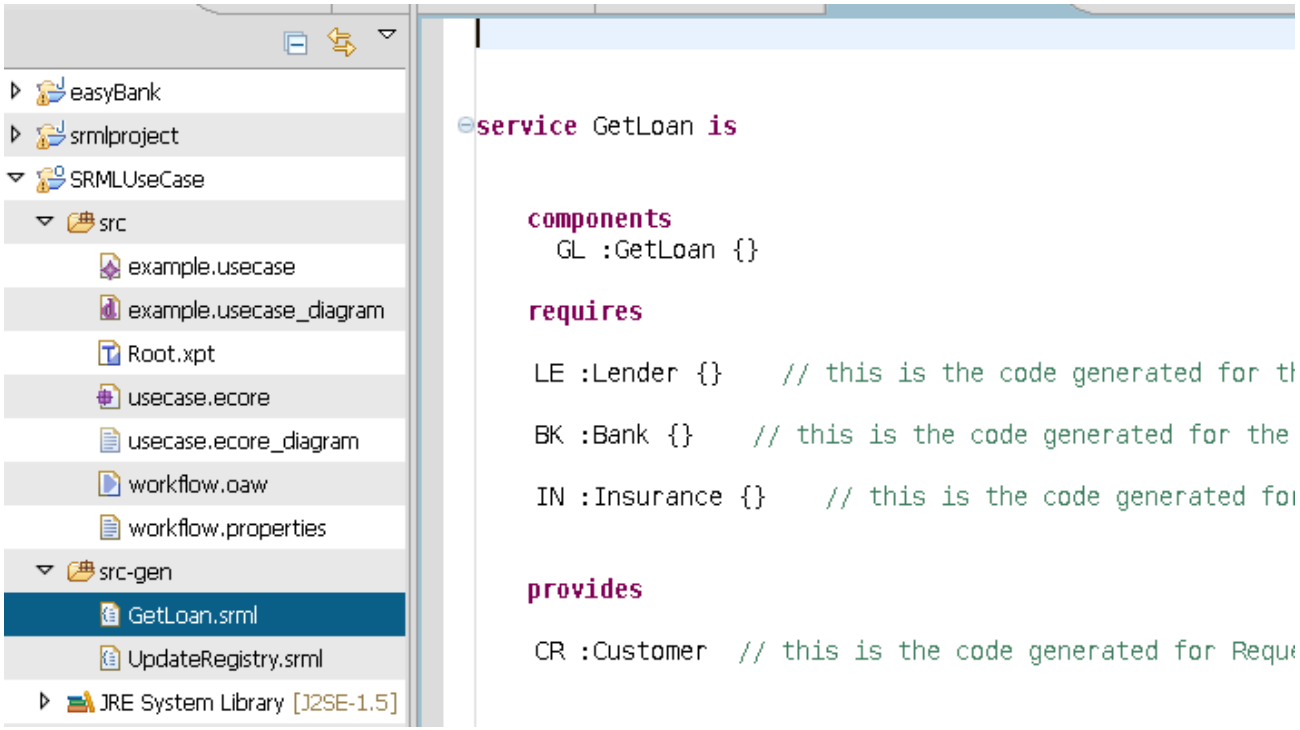


Figure 1 Generated SRML specification

Visualise SRML

- Right clicking on ***GenLoan.srml*** *or* ***UpdateRegistry.srml*** and select ***initialise srml_diagram_file*** will visualise the SRML document.

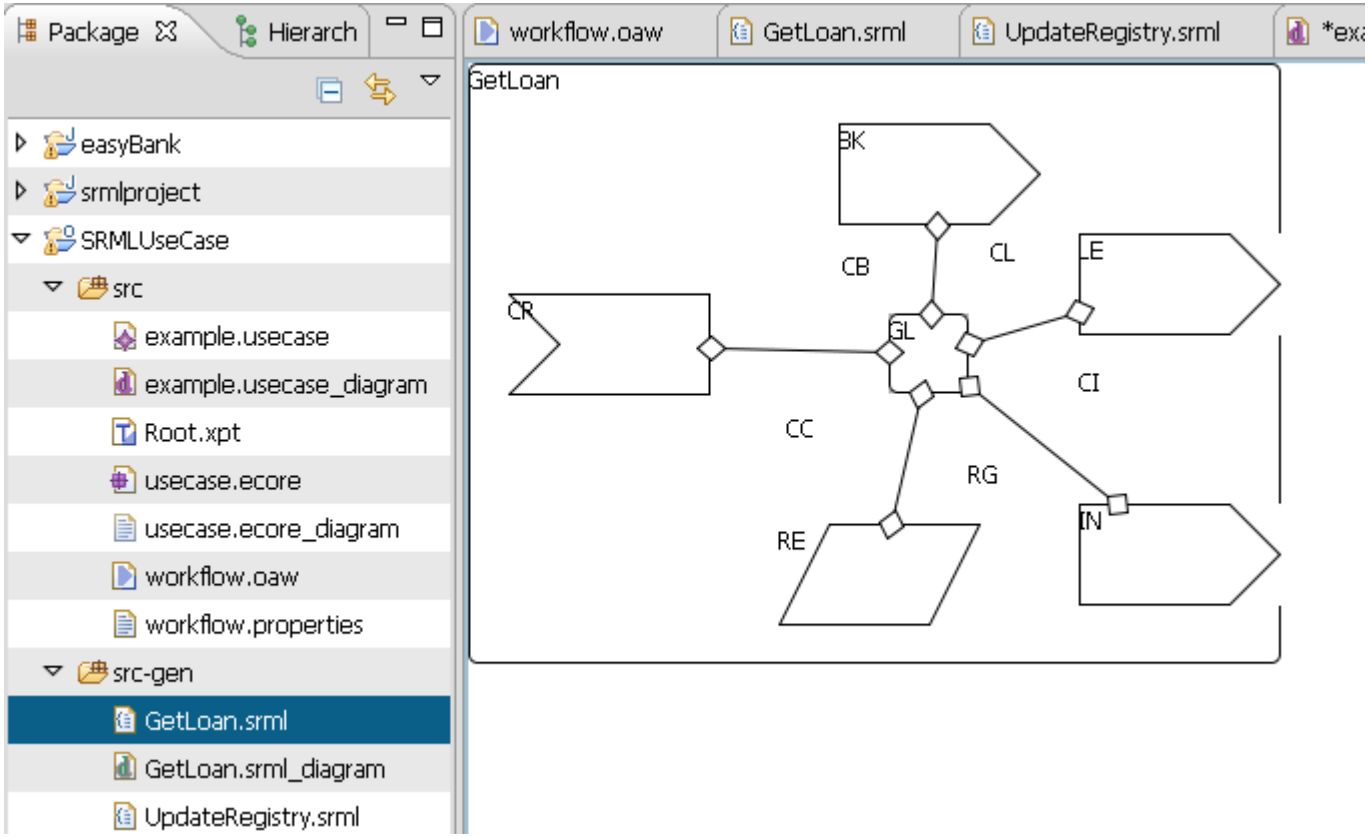
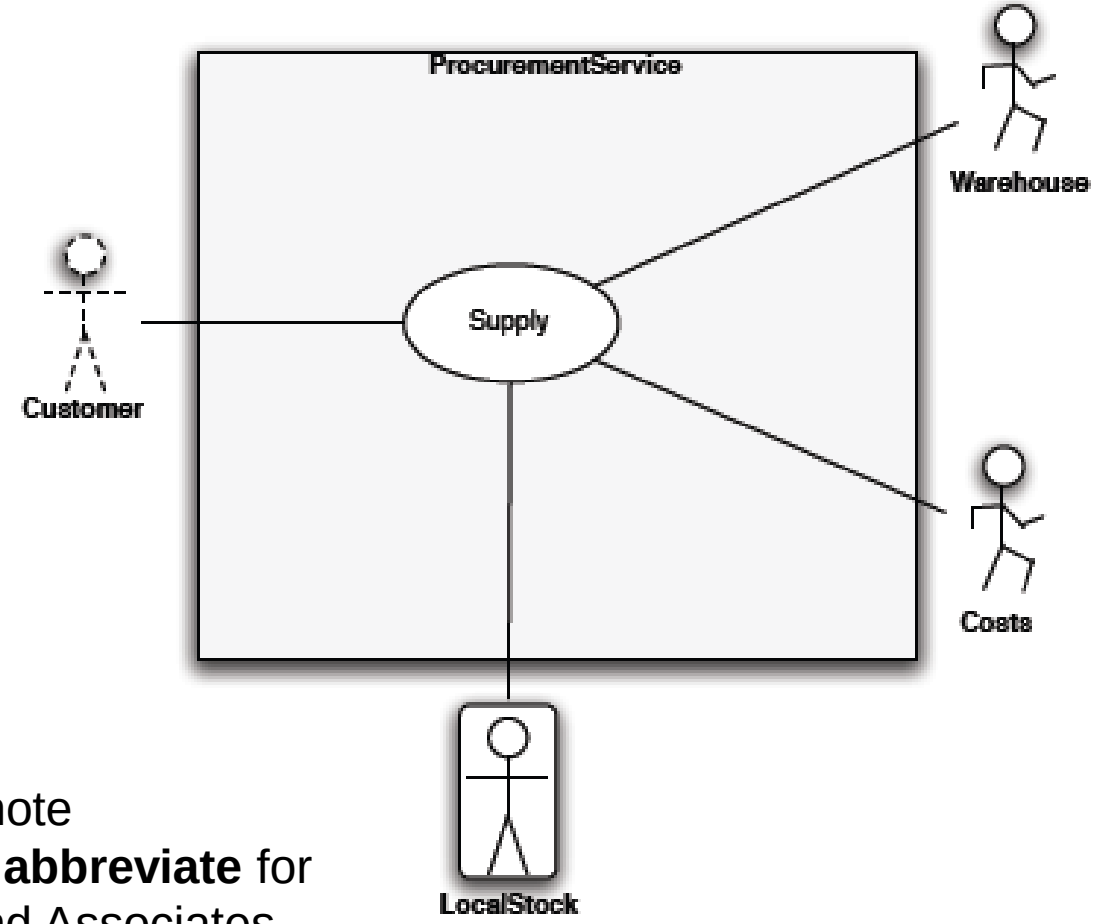


Figure 2 GenLoan.srml

Practice:

Draw an SRML Use Case diagram for Procurement Service we learnt in the Lecture and generate SRML



Tips:

(1) Read the lecture note
(2) Give **appropriate abbreviate** for Actors, Use Cases and Associates

e.g. (CU:Customer ---- CS--→ SU:Supply)

Practice:

Draw an SRML Use Case diagram for Procurement Service we learnt in the Lecture and generate SRML

- **Primary Actors**: represent entities that initiate the use case and whose goals are fulfilled through the successful complention of the use case
  - **User-actors**: instantiate an activity
  - **Requester-actors**: are service requester that discovery/instantiate a servicecase diagrams: overview of usage requirements for a system to be built

- **Secondary Actors**: represent entities to rely on in order to achieve the underlying business goal
  - **Service-actors**: represent a functionality to be provided on the fly (typically change from instance to instance)
  - **Resource-actors**: are statically bound and persistent (they are the same for all the instances)

Practice:

Draw an SRML Use Case diagram for Procurement Service we learnt in the Lecture and generate SRML

- Preparation:
  - Create a new ***openarchitectureWare*** project
  - Import ***usecase_package*** as what we had just done
  - Create a SRML Use Case diagram from "***File->New->Other->***
  - ***Examples->Use Case Diagram***"
  - Open "***workflow.properties***" and change the value of ***modelFile*** from "***example.usecase***" (line 1) to the model file you created (e.g. ***Procurement.usecase***).
- Design Use Case
  - Draw the Use Case diagram
- Code Generation
  - Run OAW workflow to generate SRML code
- SRML Visualization
  - Visualise SRML result.

Practice:

Draw an SRML Use Case diagram for Procurement Service we learnt in the Lecture and generate SRML