COMP 3111: Software Engineering

Lab Activity: Domain Modeling Using Rational Software Modeler
Create the *HKeInvest* Domain Model Class Diagram

> **If you have not attended the tutorial or read the tutorial and lab notes for *Domain Modeling using Rational Software Modeler*, you may not know how to complete this lab activity. Attending the tutorial will help ensure that you are able to complete the lab activity during the lab session.**

LAB OBJECTIVE

In this lab activity you will use Rational Software Modeler (RSM)[1] to create the class diagram for the domain model of the *HKeInvest* securities portfolio management system.

CREATE THE *HKEINVEST* DOMAIN MODEL CLASS DIAGRAM

1. Create a folder named "HKeInvestModels" on the desktop[2].
2. Start Rational Software Modeler and create a new UML Project named "HKeInvest Requirements Models" in the "HKeInvestModels" folder.
3. Use the following settings for the model (*see pages 1 and 2 of the notes*).
    Categories: General
    Template: Blank Package
    File name: Domain Model
    Package type: Model
    Default diagram type: Class Diagram
4. Create the class diagram for the *HKeInvest* securities portfolio management system domain model from the requirements given in the course project problem statement.

Note: *Although capturing all the domain model requirements, including the attributes for each class, is important, for this lab activity you should <u>focus on capturing only the classes and the relationships among the classes</u>. You can add the attributes for each class/association class after the lab session.*

Note: It is expected that you will make a real effort to construct an accurate and complete class diagram. *If it is determined that you have not made such an effort, you will get no credit for this lab.*

HOW TO GET THE CREDIT FOR THIS LAB

To get the <u>full credit</u> for this lab, you must submit, <u>by 5 p.m. March 15 via Canvas</u>, a screenshot of your domain model class diagram for the *HKeInvest* securities portfolio management system. To submit your screenshot, click on "Lab 6" in the Assignments section of Canvas, and then click the "Submit Assignment" button to upload the screenshot file. To check your submission, click the "Submission Details" button on the right side. For help, click the "Help" button at the top-right of Canvas.

Besides the classes and associations needed for the *HKeInvest* securities portfolio management system, your domain model should also contain one additional "special" class in the top right corner of the class diagram showing your name in the class name compartment and one attribute named with your student id in the attribute compartment as shown in Figure 1. (Delete this class from your class diagram after the lab.)
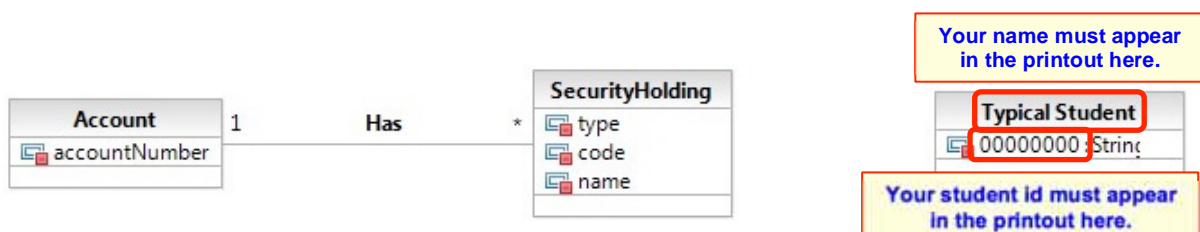

Figure 1: Example class diagram showing your "special" class.

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[1] Due to licensing requirements, Rational Software Modeler is not available on the ITSC virtual desktop.
[2] Be sure to backup this folder to the M drive.