Java mini lab 1-2

In this homework, we are going to practice how to design classes which define the abstract characteristics of a thing, and draw a class diagram to describe your design.

 A simple principle for designing a class for the things in the same category is to extract the common parts of them. For example, the common attributes of cars could be: number of doors, engine size, and number of seats. As you can imagine, there are also common operations of cars, such as, accelerate, and brake. We can further design classes for the components of cars to make the *Car* class more flexible. For example, we can design a class for engines, a class for wheels. In this way, our *Car* class can generate more types of cars.

Here is an example of a class diagram for the class *Car:*

Please design the classes for the thing that you are interested in. Here are some examples:

* Personal Computer
* Bank
* Company
* School
* ...

**You need to hand in the following items:**

* **A class diagram for your design**
* **A documentation briefly explains your design**

**(why composition/aggregation, meanings of attributes and methods)**

**Please email your HW to: CS340100@gmail.com**

**Deadline: 2010/3/15 23:59**

Note:

* Use meaningful names for your classes, attributes and methods.
* Acceptable file formats are: \*.png, \*.jpg, \*.gif, \*.pdf, \*.doc, \*.docx
* Recommended UML tool: [http://astah.change-vision.com/](http://astah.change-vision.com/en/product/astah-uml.html)