H07: Due Tue 04/26 in LECTURE, 50 hwk pts

Reading assignment for H07

We are moving right along, reading two more chapters. The chapters are short, and a good bit of this is basic review of OOP concepts you may have already seen in CS24 (and possibly in CS32 if you took that, which is recommended, though not required, as a pre-req to CS56). This is the last homework before Midterm 1, and will be graded and returned to you during Lab on Wed 04/27.

- HFJ, Chapter 7, **165** through 196
- HFJ, Chapter 8, **197** through 235.

Questions

(1) 10 pts: Fill in your name, lab section, umail address, and CSIL username

```
name:_____        lab section (circle one):    5p

umail address:    _____ @ umail.ucsb.edu    csil username: _____
```

(2) (10 pts) Based on your reading in HFJ Chapter 7:

Complete the following exercise from p. 179, putting a check next to the relationships that make sense.

☐	Oven extends Kitchen
☐	Guitar extends Instrument
☐	Person extends Employee
☐	Ferrari extends Engine
☐	FriedEgg extends Food
☐	Beagle extends Pet
☐	Container extends Jar
☐	Metal extends Titanium
☐	GratefulDead extends Band
☐	Blonde extends Smart
☐	Beverage extends Martini

(4) (15 pts) Based on your reading in HFJ Chapter 7:

What does it mean to have a "polymorphic argument" or a "polymorphic return type" for a method? Explain with an example—but NOT using the example of Vets and Animals used in the book. Substitute your own example. Give a detailed enough description of the class hierarchy you have in mind to make it clear that you get the concept.

(5) (15 pts) Based on your reading in HFJ Chapter 8:

Briefly describe the difference between an abstract class and an interface.