Discussion #4 2/22/10

Announcements:
- Midterm: online – starting this weekend
- Old Midterm up – see CourseAdministration attachments

Topics this week: method mechanics; method design principles; more on “this”;

Writing methods

Infant work first:

1. Write an Infant method (in Infant class) that returns an Infant’s age in years (an 18 month kid is 1.5 years old).

2. Write an Infant method that returns an Infant’s age in days, where 1 month = 30 days (a 3 month old kid is 90 days old).

3. Rewrite the Infant constructor using “this”. (see Infant definition on other side – fix lines 7,8)

4. Write a method that’s passed two double values and writes the greater of the two to the console.

5. Write a method that’s passed a String, an integer, and a character, and returns true if the character actually appears at the indicated integer (position) in the String. How would you trap for out-of-bounds int values?

6. Person class is on other side. Not much too it, but: write a setAge method.

7. Write a makeSibling method in Person class – two parameters: a first name, and age (assume last name is the same). Should return another Person – a sibling! Give a sample call in a driver class.

8. Suppose me and you are arbitrary Person objects, and suppose you encounter the following print statement: System.out.println(me.sameName(you)); which returns true if me and you have the same (identical) last name. Write the sameName method.
public class Person{
    private String firstName;
    private String lastName;
    private int age;  // in years

    public Person(String first, String last, int age){
        firstName = first;
        lastName = last;
        this.age = age;
    }

    public String getFirst(){return firstName;}
    public String getLast(){return lastName;}
    public int getAge(){return age;}
}

public class Infant{

    private String name;
    private int age;  // age in months

    public Infant(String name, int age){
        ??
        ??
    }

    public String getName(){return name;}
    public int getAge(){return age;}

    public void anotherMonth(){age = age + 1;}
}