Functions & Conditionals

CSE 114 INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING

Announcements

Reading assignment (in Downey's Think Java textbook):

◦ Functions / Methods (Chapter 4)
◦ Conditionals (Chapter 5)

Methods/Functions

In *programming*, a **function** is a name given to a set of statements that perform a well-defined task

- A function inside a class is called a method
- Java programs are made up of a class with methods

Program structure expanded

- See program_structure_2.txt

Methods/Functions

Important to understand
- Why creating more methods is a good idea
- How to create a method
- How to use a method that you created

Let's start with an idea that we all are familiar with
- See idea.txt

Using Java now – let's start with a simplest form of a method and start improving it incrementally with the following examples in order:
- See Func1.java

        . . . .

- See Func6.java

See how two methods communicate with each other
- See communication.txt

Conditionals

Java (like all languages) allows us to check a condition and execute different steps depending on the outcome

- ◦ See conditionals.txt for a more formal discussion of the concept
- ◦ One way to create conditional statements in Java is with `if`, `else if`, and `else` statements

Conditionals give whole new possibilities for writing code

See Cond0.java

Different kinds of conditionals with methods

Conditionals in multiple methods
- ◦ See Cond1.java

Conditionals with multiple branches
- ◦ See Cond2.java

Conditionals with nested if...else's
- ◦ See Cond3.java