



CSE 113 B
September 13 – 17, 2010



ANNOUNCEMENTS

- ⦿ Lab 1 posted
- ⦿ Bring text to recitation for Labs 2 & 3
- ⦿ Lab 2 posted
- ⦿ Exam review 9/22
- ⦿ Exam 1 is Friday, 9/24



```
import greenfoot.*; // (World, Actor, GreenfootImage, Greenfoot and MouseInfo)

/**
 * Write a description of class Car here.
 *
 * @author (your name)
 * @version (a version number or a date)
 */

public class Car extends Vehicle
{
    /**
     * Act - do whatever the Car wants to do. This method is called whenever
     * the 'Act' or 'Run' button gets pressed in the environment.
     */
    public void act()
    {
        // Add your action code here.
    }
}
```

Comments Ignored by compiler

comment only one-line version

* - starts the comment

*/ ends the comment

Class compiled - no syntax errors

```
import greenfoot.*;

public class Car extends Vehicle
{
    public void act()
    {
        //
    }
}
```

class definition

* Every class needs a name

method definition

{ } is the method body code to perform actions

No changes need to be saved

5

If- statements

- Allow us to make choices in our programs

Syntax: if (condition)
 {
 instruction
 }

6

Condition must be an expression that evaluates to either true or false

- If condition is true, code in the $\{ \}$ is executed
- If condition is false, the code in the $\{ \}$ is not executed

7

```
if ( random  
    number is in the range we want )  
{  
    do this action  
}
```



8

limit / range

Greenfoot. getRandomNumber (5);

telling
Java where
to find the
method

calling
a method

numbers will
be
0, 1, 2, 3, 4



9

"Do something
20% of the
time"

Greenfoot.get Random Number (100) < 20

Operator

< "less than"

> "greater than"

* <= "less than or
equal to"

= >= "greater than or
equal to"



10

Operators (cont.)

== "equals"

!= "not equals"

+ addition

- subtraction

* multiplication

/ division



11

Turning in a range $-x$ to x

Know:

random numbers are given in the range 0 to y

Want:

our range to be w to z , then we need to figure out how to shift the range



12

KEYBOARD INPUT

- ⊙ Greenfoot.isKeyDown() method to determine if the user is pressing a particular key and then we can make an actor behave in a certain way based upon it.

