# Objects

CSE 114 INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING

#### Announcements

Start of the second phase of the semester

#### Topics:

- Objects
- Object composition
- Memory representation of objects

Reading: follow the lecture notes closely and use textbook as a reference

## Why objects?

#### Program structure for objects

See program\_structure\_5.txt (v. 5)

X.java and UseX.java

See UseRandom.java that uses java.util.Random.java

#### Two steps for creating objects

- 1. Define a class X in a file named X.java
- 2. Create as many objects (also known as 'instances') as you like using the class (as the 'blueprint' for creating objects of the type X) in the main of UseX class in a file named UseX.java.

You can create objects in some methods in some other classes, but we will do it this way for now.

See creating\_objects.txt also

### Examples

See Account.java and UseAccount.java

See Point.java and UsePoint.java

#### Objects and Object Composition

What is an object?

See objects.txt

What is object composition?

See object\_composition.txt

#### Memory representation of objects

Will use UseAccount3.java to demonstrate it