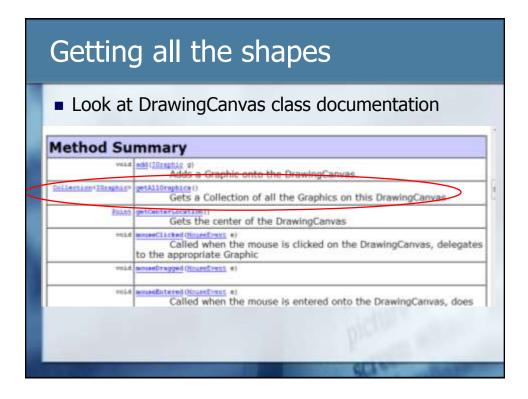


March 28 – April 1, 2011

#### Announcements

- Lab 6 continued this week in recitation
- Grades on UBLearns
  - Exam grade recorded incorrectly need to bring the exam to me (IN PERSON) preferably during office hours
  - Lab grade question email Ming
  - Lab grade recorded incorrectly can email me with the Lab and which section you submit to
  - Other questions office hours
- Resign deadline is Friday, April 1<sup>st</sup>
- Exam 4 is Monday, April 4<sup>th</sup>

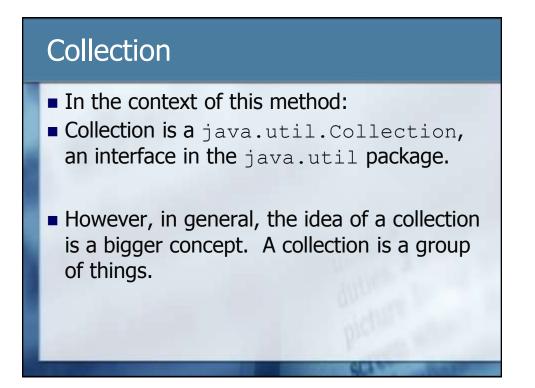


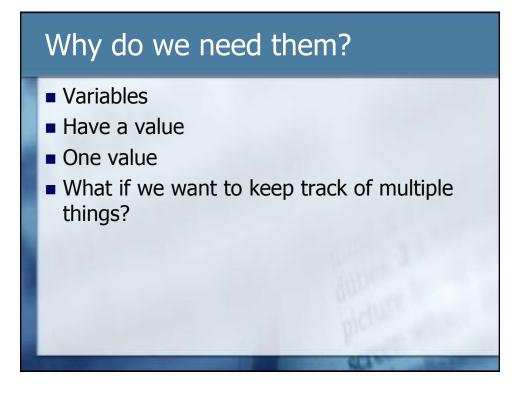
## getAllGraphics method

Returns

Collection<IGraphic>

Question 2: What do you think a Collection is?





# Another Question

## It's a type

- It's the type of thing inside the collection.
- Formally, <IGraphic> is called a generic.
- Ironically, generics specify the type of "thing" a collection holds.
- It also provides compile-time checking of the contents of the collection.

## Example Collection < Cat > bagOfCats = something.getAllCats(); bagOfCats.add(new Cat()); bagOfCats.add(new TabbyCat()); bagOfCats.add(new StrayCat()); bagOfCats.add(new Dog()); Problem! The compiler would not allow this at compile time.

### Our example

- Question 3
- Write the code to create the local variable an assign the collection to it.

# What's next • We need to go through the "bag" and tell ach graphic to move up.

### How do we do that?

- Get a graphic out of the bag
- Move the graphic up
- Repeat steps 1 & 2 until we moved all the graphics up on the screen.

