CompSci 6
Programming Design and Analysis

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Announcements
• Next time - Review for Final
• More on Recursion
• Complexity and Abstraction
• Recursive Art Winners!

Classwork today
• Library of books
  – Title
  – Author
  – Date pub.
• Search for books
• Sort the books found

Result of Search - Katz

Harry Potter and the Philosopher's Stone
J. K. Rowling
2000

Where the Wild Things Are
Maurice Sendak
1970

Oh, the Places You'll Go!
Dr. Seuss
1990
Want to Sort Answer

- Several ways
  - By Title first
  - By Author first
  - By Counts (number of copies) first

Interface Types

- Makes code more general and more reusable
- Express common operations

Example for Today

- public interface Comparator<T>
  - Has a compare method
- Implement compare by Titles

```java
package yourwork;
import java.util.Comparator;

public class TitleComparator implements Comparator<Book>
{
    public int compare (Book left, Book right)
    {
        return left.getTitle().compareTo(right.getTitle());
    }
}
```

You’ll implement

- Comparator for Author first, etc…
- Comparator for Count of number of copies first, etc..
- See handout