"Hello"

February 7, 2006

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Announcements

• Read for next time Chap. 13.1-4, 16.1-2
• Assignment 3 is due Thursday
• Classwork Jan 31 due today
• Classwork Feb 2, Feb 7 due Friday
• Reading Quiz for next time
• Exam 1 is Thursday, Feb 16!
Strings

• A String is a class
• String constant
  – “The NC State Fair starts Friday!”
• All strings are constants! You cannot change them!
• Do not need “new” when creating a String
Strings (cont)

- How do you build a new string?
  - Initialize a string as empty
  - Use + (concatenation) to put strings together
  - Example:

    ```java
    String dayFairStarts = "";
    String month = "Oct";
    dayFairStarts = "Friday";
    dayFairStarts += ", " + month + " " + 14 + ", "+ 2005;
    
    - Has the string been modified?
What can you do with strings?

• Look at API
• int length()
  – Returns length of string
• String substring(int beginIndex)
  – Returns substring from beginIndex to end of string
• String substring(int beginIndex, int endIndex)
  – Returns substring from beginIndex to endIndex -1
Example

String one = "ferriswheel";
String two = one.substring(5);
String three =
    one.substring(4,6);

What are two and three?
Finding substrings in strings

• int indexOf(String str)
  – Returns first position of str in the string
  – First position in a string is 0

• int indexOf(String str, int fromIndex)
  – Returns first position of str starting at fromIndex
Example

String one = "Cotton Candy";
String two =
    one.substring(indexOf("Can"),
    indexOf("Can")+4);

What is two?
Write Reverse a String, Palindrome

• String Reverse(String s)
  – Returns the string in reverse
  – Hint: Build a new string that is the reverse

• Boolean Palindrome(String s)
  – Returns true if s is a palindrome
  – Hint: Use Reverse
Classwork Birthday

• Convert a String that represents a number to an int

Example:

```java
String numString = "87";
    int num =
        Integer.parseInt(numString);
    // num has int value 87
```
Classwork – Class Scores

• Find the mode of (44, 77, 88, 77, 35, 44)
• How?