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 substr(int beginIndex)
  - Returns substring from beginIndex to end of string
- String substr(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.substr(indexOf(“Can”),
              indexOf(“Can”) + 4);

What is two?

Write Reverse a String, Palindrome

• String Reverse(String s)
  – Returns the string in reverse

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