CS 200 Sections 02 & 04 Spring 2013

Week #4: Top 3 Lessons Learned

1. I learned that delimiters are a separator of data used to mark the start and end of items of data.
2. As for the strings being stored, strings in java are stored as a series of characters and an address of location of first character is reference to string in storage.
3. At last, in the java program, the Decimal Formatter is a class in which creates formats for data like currency/money.

D. McManus

1) I learned how there is different types of string values in each code. For example ASCIICode + the rest of the Unicode character set.

2) I learned how the Strings are stored by a series of characters. Also, the address of the location of the first character is the reference to the String in the storage. The charAt method can reference any character of a String.

3) I learned there is a decimal format in the API that can be created to create currency output. It requires an instance of the Decimal format object to be created.

J. Morales

When using the Decimal Format output, the java API has to be used:
- import.java.text.DeciamlFormat;

➢ A delimiter is the first white space used to identify end of a sequence of text when using the next method. Delimiters can be user defined to any other character of preference.

➢ Strings are stored as a series of characters; the address of the first character is the reference for access to the string.
- Strings start with 0,1,2,3….
- Within a string a ‘space’ is also counted as a character

M. Khan

1. When concatenating strings, you use the + sign to connect the strings together. The + sign will not be doing any math; it just connects the string variables together and converts it to string data in the output.

2. Remember! You must stay within the bounds of the string you create. The first value in a string is stored at index zero. Thus, the last character in the string is at index (length – 1). If you try to reference a position outside the bounds of that string, you will get a Run-Time error.

3. If you use an Escape Sequence in a string, it does not increase the string length by two characters, it only increases it by one character. The backslash is considered invisible in the string length.

T. Blanchard

1. First, in Java, String is special, String is simply an array of char, a Java String is an object of the class java.lang. (because of that, always starts with upper case letter)
2. As in arrays, first unicode character of a String is stored at 0. Space is also treated as a character.
3. A String which has zero characters can be written as "". Like in int (default value of 0) or other primitive data types default value ("") can be assigned to clarify the code.

M. Mardosz

The three lessons are: 1. A delimiter is used to separate data. Some examples of delimiters are commas, brackets, and angle braces. 2. Any string has a string bound which is the length of the string minus one. Use the string method: length(); to find the length of the string then subtract one to get the string bounds. Going out of bounds means that you are asking for an index that does not exist and you will get a Runtime error. 3. There are many string methods that are useful. Some of them include toLowerCase(); and toUpperCase(); which are used to change the string to all lower case and upper case respectfully. The method charAt(x); finds the character at the index value that is specified. The method indexOf(x); finds the index of the first character in the word that is asked for in the string.

D. Starostka

Three things that I learned in week four are that an empty string is a string with no characters. You cannot have an empty space in between the quotation marks because then it will not be an empty string. Second, a delimiter is separator of data. By default it is whitespace (for the next method), but you can change it to something else like an exclamation point. Last but not least, the string method “charAt(x)” is helpful when you only want to use a certain character from a user’s input. For example, if you only want to use the character “Y”, but the user enters the word “Yes” as a string.

J. Gomez

1. The dot operator (.) is used to reference a method of the string object/class.

2. String Literal = "are enclosed in quotation marks"

3.A Decimal Format comprises a pattern and a set of symbols

-G. Martinez

1. Using the method printf, you can specify the number of digits to include after a decimal point. For example:

%6.2f would output a number (float data type) 6 characters wide, with 2 digits after the decimal point.

2. Strings are stored as a series of characters. Each character is referenced by an index, with the first character referenced at index 0, the next at index 1, etc.

3. A substring is a portion of a string. The method substring(0,5) will return a substring that begins at the first character of the original string and ends at the sixth character of the original string.

J. Hoffman

String Methods:

.length(); will give us the number of characters in a string variable, but the indexable range is 0 to length - 1; an example would be "I am awesome." has a length of 13, but the last character is located at the index of 12. If you were to try to indexOf() to length; you'd end up getting a run-time error.

.indexOf(); allows the user to find specific character in the string. Although if the character is not in the string, it'll just return -1. indexOf

E. Herring

You can make your output have the correct decimal place, commas, and dollar sign by using the decimal formatter.
The first character starts at index zero in a Java String object.

S. Malik

1. I learned how strings are stored in memory. The first character of the string is the reference to the string in storage and is assigned the index integer value of 0. Each character in the string increments upward from zero. Spaces and punctuation count as a character. It's possible to isolate characters and assign a new variable to store them using the charAt() or substring() methods.

Ex.)

String phrase "How cool is that?";

char a = phrase.charAt(8);

// a = 'l';

// is it cool? can be written using the phrase variable and substring()

System.out.println(phrase.substring(9,16) + " " + phrase.substring(4,

8) + phrase.substring(16));

2. Output can be formatted using the printf classes. Format specifiers begin with a % and end with a character that indicates the type of data being converted and inserted into the String.

Ex). %f = float, %s = string, %c = char

J. Schmedt

1. We learned that Strings are objects, but we can declare and initialize them like a primitive data type. Instead of having to create a new object like we did with the Scanner class

Scanner keyboard = new Scanner(System.in);

we can just use

String name = "Ed";

2. We learned that we need to watch our white spaces from now on because it can effect how are output looks and it will cost us valuable points.

3. We learned how to use DecimalFormat and printf to format output and need to format our currency from this point on.

E. Zacharias

(1) When you input an integer or a double into their associated variable. If you perform the 'nextLine()' method afterwards, what happens is the 'Enter' key, will be stored as an empty space into the string, consisting of zero characters. "".

(2) The 'System.out.println' method will always ouput a string. And it will always advance the cursor to the next line.

(3) Working with substrings, when you assign two different strings to, two different variables 'a' and 'b'. Using,

String c = a.substring(0,8) or b.substring(Parameters of the string of characters you would like to use, from the string 'b'). You may now assign this new 'substring' to the variable 'c'.

S. McGovern

Classes are central to Java
Java has no primitive type for strings
ASCII has 8 bits only a subset of Unicode which has **16** bits
whitespace : the blank space character that holds a position in a string
The first character in a string is at index 0
the address of the location of the first character is the reference to string in storage
A String variable is not a simple variable, as a variable of type int is.
The operation by using + operator to connect two string is called concatenation operator
The blanks and the period count as characters in the string
Some methods in the Class String
CharAt (Index) and compare To(A_String)
and Java is always Case sensitive

J. Konan