AP Computer Science
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September 8, 2014 Project

Due Friday, September 12, 2014

<u>Specification</u>
You will have to write the following class, implementing the specified constructor and methods. You may write additional methods and add any attributes to the class as you see fit. You may also want to write a different class with a *main* method in order to test your code.

Goal
1. You will write a *Tokenizer* class that accepts two Strings: a separator String and a token String
   a. The separator String is a String where each character is considered to be a "separator"
   b. The token String contains "tokens" and "separators"
2. The *Tokenizer* class will be able to iterate through the token string and extract the tokens
   a. Tokens are located between separators (or the beginning / end of the token String)

Examples
1. Separator String: " ", Token String: "This is a test"
   Extracted Tokens (each on a separate line):
   ```
   "This"
   "is"
   "a"
   "test"
   ```
2. Separator String: "ts", Token String: "This is a test"
   Extracted Tokens (each on a separate line)
   ```
   "hi"
   " i"
   " a "
   "es"
   ```
3. Separator String: "214", Token String: "10r3m 1psum"
   Extracted Tokens (each on a separate line)
   ```
   "0r3m "
   "psum"
   ```

Tokenizer Class should have the following
1. A constructor that accepts two Strings
    a. The first is the token separator String
    b. The second is the token String
2. A method *getNextToken( )* that returns a String of the next token
    a. If there is no next token (end of the String to be separated) then *getNextToken( )* returns *null*
3. A method *resetToFirstToken( ) implemented* such that subsequently calling *getNextToken( )* will return the first token
4. A method *isSeparatorCharacter( char character)* that returns a boolean if the *character* argument is a separator character


Submission

Email me your *Tokenizer.java* file before or on Friday, September 12. You will have until midnight. Submissions less than one day late will be penalized 50%. Submissions later than one day after the deadline will not be graded. If you submit a *Tokenizer.class* file, your submission will not be graded. As a reminder, my email address is victorkaiserpendergrast@popejohn.org