The quiz will have three questions of approximately the same weight:

- 1. On Chapter 7. Tokenizers, File I/O, testing, and UML. You will be asked to write a program, draw a diagram, or suggest test cases.
- 2. On Chapter 8. Given an API with 2 or more classes involving aggregations, write programs or predict the output of code fragments.
- 3. On Chapter 9. Given an API with 2 or more classes involving is-a relationships, write programs, classify methods, or predict the output of code fragments.

Data Sheet:

String Methods	char charAt(int p)
(invoke on a string s)	Returns the character at position# p in s.
int compareTo (String t) Returns a negative number if s <t, a="" and="" if="" number="" positive="" s="" zero="">t.</t,>	Static Methods
int indexOf (String t, int f) Looks for the string t within s, starting at position# f in s. Returns the position in s where the match was found. Returns -1 if no match was found.	<pre>Integer.parseInt(s) Double.parseDouble(s) methods to convert a string s that contains a number to a primitive type.</pre>
int indexOf(String t) Looks for the string t within s (as above), starting at the beginning of s.	double abs (double x) Returns the absolute value of x (Math)
String substring(int f, int t) Returns all characters in s with position numbers \geq f and < t.	double pow(double x, double y) Returns x raised to y.(Math)
String substring(int f) Returns a substring of s that begins at f and extends to the end of s.	double rint (double a) Returns the closest double to a that is equal to a mathematical integer. (Math)
String replace (char x, char y) Returns a string with all occurrences of character x in s replaced by y.	String repeat(int count, char c) Returns a string made up of c repeated count times. (IO)
String toUpper/LowerCase() Returns a string of all characters in s converted to upper / lower case. String trim() Returns the same content as s but with any leading/trailing white-space	<pre>String Tokenizer Constructor: (String s, String delimiters) Methods: String nextToken(), boolean hasMoreTokens(), int countTokens()</pre>