Week 10 Essay Question

CSE-682 SOFTWARE ENGINEERING

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Question

You have been asked to test a method called "catWhiteSpace" in a "Paragraph" object that, within the paragraph, replaces sequences of blank characters with a single blank character. Identify testing partitions for this example, and derive a set of tests for the "catWhiteSpace" method.

In partition testing, input data and output results are divided into different classes (partitions). Input data that have commonalities are grouped together in the same class. Test cases should be chosen from each partition. Below are a group of partitions and a set of tests for the "catWhiteSpace" method.

Partition 1: Extra spaces in the middle of a sentence.

- "The name is   perfect."
- "I love   software engineering."
- "Salad was served   with vinaigrette at the dinner."

Partition 2: Extra spaces in between sentences.

- "It's all over, Floyd!   We have the building surrounded!"
- "Johnny likes to play baseball every Sunday.   He also enjoys hiking on Saturday."
- "10 times 2 equals 20.   23 times 5 equals 115."

Partition 3: Extra white space at the end of a line.

- "Bacon is delicious. However, it is not a healthy food.   "
- "Barbara is meeting Debby at the library.   "
- "Quantum computing utilizes the spin of electrons.   "

Partition 4: White space at the beginning of a line.

- "   John McEnroe is a famous tennis player."
- "   He would often argue with the officiating team."
- "   His autobiography is titled: You Cannot Be Serious."

The set of tests for the "catWhiteSpace" method is below. The set consists of 3 test cases. Each test case samples each of the partitions once.

Test 1: { "The name is   perfect.",
"10 times 2 equals 20.   23 times 5 equals 115.",
"Bacon is delicious. However, it is not a healthy food.   ",
"   He would often argue with the officiating team." }

Test 2: { "Salad was served   with vinaigrette at the dinner.",
"Johnny likes to play baseball every Sunday.   He also enjoys hiking on Saturday.",
"Quantum computing utilizes the spin of electrons.   "
"   John McEnroe is a famous tennis player." }

Test 3: { "I love   software engineering.",

      "It's all over, Floyd!   We have the building surrounded!",

      "Barbara is meeting Debby at the library.   ",

      "   His autobiography is titled: You Cannot Be Serious." }