Allen Taylor

CMIS 350 6382

Project 1

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**UML Diagrams**

Diagram

Description automatically generated

**Test Case 1**

Requirement: All operators included in test cases.

|  |  |
| --- | --- |
| Input: | - + 1 2 / \* 3 4 5 |
| Expected Output: | 1 2 + 3 4 \* 5 / - |
| Actual Output: | 1 2 + 3 4 \* 5 / - |

Graphical user interface, text, application, email

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**Test Case 2**

Requirement: Test cases include expressions without spaces.

|  |  |
| --- | --- |
| Input: | -+1 2/\* 3 4 5 |
| Expected Output: | 1 2 + 3 4 \* 5 / - |
| Actual Output: | 1 2 + 3 4 \* 5 / - |

Graphical user interface, text, application, email

Description automatically generated

**Test Case 3**

Requirement: Test cases include cases that pop an empty stack.

|  |  |
| --- | --- |
| Input: | - + 1 2 / \* 3 4 |
| Expected Output: | Syntax Error with JOptionPane is displayed. |
| Actual Output: | Syntax Error with JOptionPane is displayed. |

Graphical user interface, text, application, email

Description automatically generated

**Test Case 4**

Requirement: Test cases include cases which result in a non-empty stack.

|  |  |
| --- | --- |
| Input: | - + 1 2 / \* 3 4 5 5 |
| Expected Output: | Syntax Error with JOptionPane is displayed. |
| Actual Output: | Syntax Error with JOptionPane is displayed. |

Graphical user interface, text, application

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**Lessons Learned**

I had difficulties with generating a custom exception, but I used the following process to resolve the issue.

1. First, I created the **Syntax Error Class** that extends **Exception**, then used **super** within the constructor.

Graphical user interface, text, application, email

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1. Next, I used **throws new SyntaxError()** on both the **preToPost()** and **postToPre()** methods.

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1. Last, I had to surround the method inside a **try/catch block** and display the **error string** with a **JOptionPane**.

Text

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