CS-405-10861-M01 Secure Coding 2024 C-3

4-1 Activity: Exceptions

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**Initial Results:**

I wanted to verify that I understood what the initial source code file would generate. I started a new project in Visual Studio and attempted to build the source code file exactly as provided. This may not have been necessary, but it clarified the descriptions in the assignment prompt.

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**Approach Details:**

My approach mostly followed the TODOs throughout the provided source code. The first TODO requested that any exception be thrown. I added a runtime error at line nine. The next TODO requested that an exception handler be added. I added a try-and-catch around the call (lines 21 and 27) that watches for the runtime error. The third TODO requested an invalid argument exception which was added using a throw command at line 33. The fourth TODO requested an exception for dividing by zero. I used a runtime error that echoes a message stating the program cannot divide by zero. This was added at line 43 and tests the denominator using an if loop. The fifth TODO requested a handler for only exceptions thrown by divide. Using a combination of try/catch, if/else it is possible to handle only exceptions where the denominator is zero.

**Console Output:**

**A black screen with white text

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