**Lab 5 Report**

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1. **Write a lab report including the following information:**
   1. **A description of the objectives/concepts explored in this assignment including why you think they are important to this course and a career in CS and/or Engineering.**

The objectives/concepts explored in this assignment were templates and exceptions. We used try-catch blocks to catch user defined exceptions. We used a template to generalize the class we made in task 1 in task 4. These two concepts are very important to a career in CS as generalizing classes and types can be much more efficient for coding and allow for reusability. Try try-catch blocks are used often in development, so they’re an important skill to know.

* 1. **The sections from each task indicated to be included in the lab report.**
* **Task 1: Include in the submission a description of how you designed your add and remove methods. This description should not be code or pseudo code.**

For my add board game function, I incremented the amount games held on the shelf and used that as the array index to add the new board game. For my remove board game function, I decrement the amount of games held and then use that as the array index to return the board game being removed. The gamesHeld variable is what keeps track of where to add or remove a board game.

* **Text

  Description automatically generatedTask 2:**

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* **Task 3: Include a discussion of the advantages of trapping an error in the class versus the calling function.**

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I believe that we should trap the error at the root where it occurs. This is advantageous because if we were to use this class elsewhere, we wouldn’t again have to trap our error. It also leads to us writing better code in general.

* **Task 4:** **Include a discussion of the advantages of using a template over specific types.**

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The advantages of using a template over specific types include code reusability which makes for more efficient and readable code. Advantages also include the safety of not having to worry about the type, so it can be less prone to errors.