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Assignment 2

Design:

I had a hard time integrating this new content with my previous code, so I ended up creating two separate programs, one that displays an Array Stack, and one that displays a LinkedList.

I designed these with few variables as to not overcomplicate what I was working with, the LinkedList only has two variables, and the ArrayStack isn’t that long. I wanted to create these to be fairly generic so that if I had to apply them to my code, it wouldn’t be too much work.

The LinkedList was a lot more complicated to understand, and I’m not sure if I did an adequate job on it as I did not display removing or adding variables.

Tests:

Test cases that I had planned out consisted of ensuring different variables pass my printing process. As I have not set up any user input quite yet, I don’t have to test multiple different types of inputs into the window, however, I did the standard modify and check that I still print the appropriate value.

ArrayStack

|  |  |
| --- | --- |
| Initial compile and run | Compiled, ran, but got a compilation exception saying that I should recompile with –xlint  Still passed |
| Adjust variables | Adjusting variables, ensuring it still compiles and runs |
| Check each interaction | This was me looking at my peek, my push, my pop. All to understand and ensure that it is behaving as intended, with this I found that my pop wasn’t working quite right, and would delete the value before my intended position, but I had gotten that fixed |

LinkedList

|  |  |
| --- | --- |
| Initial Compile and run | Ran fine, no compilation errors. |
| Adjust variables | As I have a Boolean, and a string field, I ran through and ensured I got an error if I entered a non-boolean value for a Boolean field. Validating user input didn’t have purpose as I don’t allow users to input anything yet. |
| Loops working properly | I had an initial problem with nulls occasionally printing, I managed to fix this however, by adding a function that will print that there are no items left in the array when the value is null. |

Reflection:

While this is a nice introduction to the stack, and how you can interact with it, I feel like there’s a lot more that I could understand and implement in the coming assignments, such as sorting, and inserting into specific locations. Maybe even integrating these into my base project. I feel like I understand java’s interaction with other classes and methods a lot more now than I had before as I am forcing myself to not just write everything in one method.