

# Lab 5

April 9, 2021 @ 11:59pm

## Expectations

- Demonstrate your understanding of stacks and queues.
- Understanding of the code implemented
- Clean code

## Requirements

Your application should do the following:

- Using the **DynIntStack** and **DynIntQueue** classes covered in the lab, convert both classes into **template classes**.
- The two template classes should be called **DynTempStack** and **DynTempQueue** respectively.

Your application must execute the following:

- Create a total of 2 DynTempStack objects.
  - One of a primitive type of your choice
  - One of a non-primitive type of your choice.
- Demonstrate the capabilities of the stack by performing a minimum of 10 stack operations (push, pop). Show the contents of the stack after each operation.
- Create a total of 2 DynTempQueue objects.
  - One of a primitive type of your choice
  - One of a non-primitive type of your choice.
- Demonstrate the capabilities of the queue by performing a minimum of 10 queue operations (push, pop). Show the contents of the queue after each operation

## Rubric

Task	Weighting
Implementation of the two template classes	30%
Implementation of the template class demonstration	10%
Clean Code	20%
Video	40%
<b>TOTAL</b>	<b>100%</b>

## Submission

- Video presentation of the lab
  - Video must be no longer than 5 minutes.
  - Upload your video to **YouTube** as an unlisted video. Ensure the link provided is a working link.
  - Emphasize the design of your code in your presentation.
  - Ensure your code looks presentable (i.e. Clean Code).
- Link to the GitHub repository

## Penalties

You submit the incorrect files	0% for submission
Your code does not compile	0% for submission
Your code is not written in C++	0% for submission
Wrong naming convention	50% off submission
Late penalty	10% per day up to 50%. Then 0% for submission
Plagiarism <ul style="list-style-type: none"> <li>• Includes copying classmates work</li> </ul>	0% for submission. Breach of Academic Integrity report filed



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