

CS 260 100P

Stacks

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Topics to learn

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- dynamic arrays
- circular arrays
- singly-linked lists
- tail pointers
- queues
- public interfaces
- order notation (big Oh)

Tasks to perform

Implement the following classes:

- a queue class (based up a dynamic circular class)
- a queue class (based up a singly linked-list class)

Each class should be implemented in a separate file. Provide a main function that tests the interfaces of each class in a way that your Mentor can easily ascertain the correctness of your solution.

Descriptions of *Classes*, *Nodes*, *Lists*, and *Stacks* can be readily found in the literature. Your linked-list class must implement a tail pointer.

Other requirements

Be able to describe to your mentor the complexity of each operation in the public interface of your classes using order notation.

Note: most operations must be performed in constant time.
