Stacks and Queues

Calvin Higgins

Department of Computer Science and Statistics
University of Rhode Island

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Warmup Problem

When You Enter The Classroom:

- **Program the following function:**

```
// Assume `m_data` is the underlying array.
// Assume `m_size` is the size.
// Assume `m_capacity` is the capacity.
void DynamicArray::pop_back() {
    // TODO: Remove the last element.
}
```

- **Analyze the number of arithmetic operations:**
  - Assume an input of size n.
  - How many arithmetic operations (like additions) does your algorithm(s) perform?
    - Give a formula $T(n)$.
  - What does $T(n)$ mean, in terms of your algorithm(s) runtime?

Write your group's work on the whiteboards!

Lab Directions

Begin These Now:

- **Consider attending the review session:**
  - TODO (2:00-2:50PM)
  - TODO (3:00-4:00PM)
  - This Friday at 2:00-4:00PM in Engineering 040
  - Ask your group members if they are going!
- **Create a new project in your IDE for Lab 4**
  - If you aren't sure how to do this
    - Ask a group member
    - Search for documentation
    - Chat with AI
  - If you are still stuck, call over a staff member
- **Work through the lab handout**
  - Available on GitHub under labs/lab-04
  - https://github.com/URI-CSC/212-fall-2015
    - Yes, it is 2015 not 2025
  - All directions available in the lab handout