

# Implementing Abstractions

## Part Three

# Announcements

- **Midterm has been graded.**
  - Graded exams will be distributed at the end of class, along with statistics.
- YEAH hours for Boggle! are today from 7PM – 8:30PM in 380-380W.

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**<http://cs198.stanford.edu>**

# Implementing **Vector**

# Implementing **Vector**

- The technique we used to implement the **Stack** can also be used to implement the **Vector**.
- Store the elements in a dynamically-allocated array.
- Double the size when extra space is needed.

# Differences in **Vector**

- Elements can be added anywhere, not just at the end.
- Elements can be removed anywhere, not just at the end.
- Elements can be looked up anywhere, not just at the end.

# Building a **Vector**

- When designing a class, you typically must design both the interface and the implementation.
- Let's work together as a class to see if we can come up with how to do this!