# CS239

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# Collection Design Exercise – The "Sack"

- A Sack represents an unordered collection of objects.
- A Sack may contain duplicate items.
- Sacks support adding and removing items.
- It it possible to remove a designated item or to remove a randomly selected item.
- It is possible to tell if a Sack is empty and how many objects the Sack contains.

- Your task:
    - Write the method headers for a Sack class.
    - Assume a Sack of Objects.
    - *Don't* worry about the internal data structure yet.

# Sack Implementation

- How should we implement the Sack?
- What internal data structure should be used?
- What attributes will we need?

# Type-Safe Sack

- What changes will be necessary?