

Rule of Three / Five / Zero - Lab

1. Smart Array

Implement a **SmartArray<T>** class that uses dynamic memory:

- Must be RAII, but STL containers / smart pointers are NOT allowed
- Has size, has index access (with **operator[]**)
- Can be resized
- No support for copying / moving or assignment/move assignment

Bonus: Even more RAII: don't use (directly) **new** methods.

Bonus: Enable iteration (for example: with range-based **for** loop).

2. Rule of Three for Smart Array

Implement the Rule of Three for the **SmartArray<T>** class.

Bonus: Implement it using the copy-and-swap idiom.