## **DynamicVector**

Write a class named "DynamicVector" in folder with the same name.

This class is very similar to std::vector. It needs to support <code>push\_back</code>, <code>at</code>.

<code>reserve</code>, <code>capacity</code>, <code>size</code>, and <code>data</code> methods (just like vector does). It also needs to support the Rule of Three member functions as well as one additional member function: a constructor that takes a pointer to a dynamically allocated array and an int (denoting the size of that array). The class must use this array for its internal data structure (similar to the Stack example from the lecture). However, if a methoid is called that needs to increase the capacity more than the size that the array has, a new dynamically allocated array should be created.



## Only use the array

The object should store its elements in the array it is given. There is no need to use std::vector or any other data structure internally.



## Provided Header

I've written a header file for you. I recommend using it.