University of Pittsburgh Department of Electrical and Computer Engineering ECE 0302: Data Structures and Algorithms

In-Class Exercise 4: Dynamic Bag Class

<u>Instructions</u>: Implement a DynamicBag ADT. Theoretically, the bag should have no size limit, (other than the maximum heap size assigned to program during the runtime). Practice dynamic memory allocation/deallocation (don't use std::vector), and include a custom copy constructor and custom copy assignment operator.

- 1. Download the starter code
- 2. In dynamic bag.hpp define the class DynamicBag conforming to the BagADT interface.
- 3. In dynamic bag tests.cpp implement a few tests for the methods using Catch.
- 4. In dynamic bag.tpp implement the DynamicBag methods.
- 5. Build your code locally as you work.

<u>Submission</u>: submit a zipped folder to Canvas under ICE 4 – Dynamic Bag.