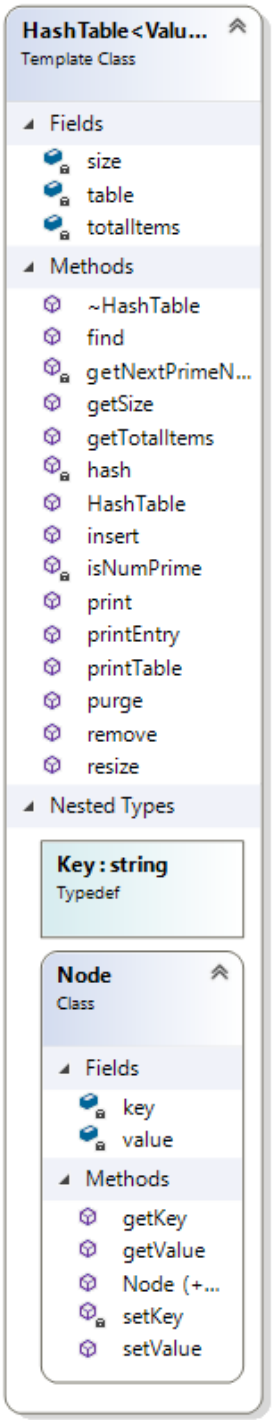
Assignment Sheet

Course, instructor name & contact info	GAME255 – Data Structures and Design Patterns Jean – Paul Amore, jean-paul.amore@humber.ca
Assignment name	Lab 4 – Resizing a Hash Table
Grade value	6% (Rubrics attached)
Due date	Week 9
Individual or group assignment	Individual. You may consult with your peers on this assignment, but you are not allowed to share your work or submit work that is not yours. Violation of this may result in an academic misconduct penalty.
Submission instructions	Submit your C++ file HashTable.h on Blackboard
Targeting these learning outcomes from course outline	• Estimate the complexity of algorithms used with common data structures.

Assignment Instructions

Using the Microsoft Visual Studio project provided, complete the functionality for the Hash Table class HashTable, based on the comments supplied. The HashTable class contains the following fields and member functions:



Assignment Instructions

Complete the functionality for the following fields and methods:

- `void resize()`

Use LinearProbing to complete the solution for this method. Once you complete the functionality for the HashTable class, ensure that it executes with the supplied main() function.

SAMPLE OUTPUT

You can review the output by running the executable in the OUTPUT folder.

NOTE: The main() function should not be modified for any reason.

Rubrics

CRITERIA	0 POINTS	1 POINT	2 POINTS	3 POINTS	4 POINTS	5 POINTS
1. LOGIC	Did not complete assigned work	Does not demonstrate ability to use logical process	Poorly demonstrates ability to use logical process	Somewhat demonstrates ability to use logical process	Demonstrates ability to use logical process	Demonstrates exceptional ability to use logical process
2. EFFICIENCY	Did not complete assigned work	Does not demonstrate any efficiency	Poorly demonstrates efficiency	Demonstrates some efficiency	Demonstrates efficiency	Demonstrates exceptional efficiency
3. FUNCTIONALITY	Did not complete assigned work	Barely any code is functional and accurate	Parts of code are functional, but are not accurate	Some code is functional and accurate	Most code is functional and accurate	All code is functional and accurate
4. PROCESS & ORGANIZATION	Did not complete assigned work	Very confusing code indentation and/or algorithms	Somewhat confusing code and/or algorithms	Satisfactory code and/or algorithms, but could be improved	Good code and/or algorithms	Excellent code and/or algorithms
5. TEST CASE	Did not complete assigned work	Does not compile	Barely any code functions with test case	Partially functions with test case	Mostly functions with test case	Fully functions with test case
6. TIMELINESS	Did not submit or submitted five, or more days late	Submitted four days late	Submitted three days late	Submitted two days late	Submitted one day late	Submitted on time

Grading standard

30/30 - Work so amazing the instructor would only see this once in a lifetime
25/30 – Exceptional work, rare
20/30 - Great work, student has full command of the topic.
15/30 - Minor errors
10/30 - Errors and perhaps a major error
5/30 - Regular and consistent major errors. Lack of understanding
2/30 - Largely empty