CS 3100 Project 4 – Binary Search Tree

Spring 2021

Grading rubric

1. If the program cannot be compiled, deduct 90 points. If the program crashes, deduct 80 points.

2. All the submitted project files should have: Course Number / Course Title, your name, prof.’s name, date, and the project name. If you did not include these required contents in your submitted files, then 5 points will be deducted. Please include your last name in the project name, if not, another 5 points will be deducted.

3. Main() function: 26 points. For each member function that is not tested, deduct 1 point.

5. The member function insert() of BST: 12 points.

6. The member function search() of BST: 12 points.

7. The member function delete() of BST: 20 points.

8. The member function, clear() of BST: 10 points.

9. Constructor of BST: 4 points.

10. Destructor of BST: 4 points.

11. Save the nodes in the BST using inorder tree traversal to the disk: 10 points.

12. the BSTsize(): 2 points.

Bonus: 20 points total.

1. If your binary search tree class is implemented as a template class, that can not only support the last name string, but also can support integers, doubles, or other object types (i.e., the Binary tree node stores an integer, a double, or an object of other object type), then you can get bonus points (20 points).