CS 3100 Project 1

Fall 2017

Grading rubric

1. If the program cannot be compiled, deduct 90 points. If the program crashes in the beginning without testing any member functions or has segmentation faults in the beginning of the program, 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. You also need to submit a makefile or a compiling command to compile your source codes. If not, another 5 points will be deducted.

3. Main() function: 15 points. In the main function, if no menu, deduct 5 points. If in the main() function, while reading the file, if EOF is not checked, deduct 3 points. For each member function that is not tested, deduct 1 point.

4. The Employee class: 6 points.

5. The member function insert() of BST: 9 points.

6. The member function search() of BST: 9 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: 5 points.

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

12. the BSTsize(): 2 points.

Bonus: 40 points total.

1. If you also save the employee records in the binary search tree to disk using preorder tree traversal or postorder tree traversal, you will get 20 points of bonus points (10 points per tree traversal method).
2. If your binary search tree class is implemented as a template class, that can not only support employee record (i.e., the object stored in the Binary tree node is an employee record), but also can support integers, doubles, strings, or other object types (i.e., the Binary tree node stores an integer, a double, a string, or an object of other object type), then you can get bonus points (20 points).