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CS 420 – Object-Oriented Design  
Project # 4  
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**Description:**

The Application class allows the user to manipulate the BST, that includes an implementation of generics, by accepting input data from a text file titled "InputData.txt" and from command line and keyboard. The application provides the user with instructions and a list of available commands to use for the program within the comments. The user can use "help" to view a list of commands the user can input, "quit" to end the program, "add" to add an employee to the bst, "remove" to remove an employee from the bst which utilizes the StackUnderflowException, StackOverflowException, and IOException handling, contain() to find an employee in the bst, inorder() to print the bst in inorder traversal, and size() to view the current number of employees. The application also writes out to a file titled "OutputData.txt".

**Files included:**

Java Files:

1. MendozaRaelyn\_BST.java
2. MendozaRaelyn\_BST\_Application.java
3. MendozaRaelyn\_BST\_Interface.java
4. MendozaRaelyn\_BST\_Node\_Class.java
5. MendozaRaelyn\_Employee.java
6. MendozaRaelyn\_Stack\_Interface.java
7. MendozaRaelyn\_StackADT.java
8. MendozaRaelyn\_StackOverflowException.java
9. MendozaRaelyn\_StackUnderflowException.java

Class Files:

10. MendozaRaelyn\_BST.class
11. MendozaRaelyn\_BST\_Application.class
12. MendozaRaelyn\_BST\_Interface.class
13. MendozaRaelyn\_BST\_Node\_Class.class
14. MendozaRaelyn\_Employee.class
15. MendozaRaelyn\_Stack\_Interface.class
16. MendozaRaelyn\_StackADT.class
17. MendozaRaelyn\_StackOverflowException.class
18. MendozaRaelyn\_StackUnderflowException.class

Read Me File:

19. readMe\_Project4\_MendozaRaelyn.pdf

UML Diagram PNG:

20. MendozaRaelyn\_UMLdiagram\_Project4.png

Text Files:

21. InputData.txt
22. OutputData.txt

## UML Diagram:

