# Assignment 3: Binary Search Tree Implementation and Word Tracker - Marking Criteria

As a group, evaluate your work against each criterion and assign yourselves a mark for each row. If you would like, provide a short explanation for the self-assigned mark in the Notes column.

Note: If your program (the jar file and/or eclipse project) does not run due to compilation, runtime or logic errors, you will receive an automatic zero grade on this assignment!

## Marking Criteria

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Needs Improvement  (0–50%)** | **Good  (51–75%)** | **Excellent  (76–100%)** | **Group Assigned Mark** | **Notes** |
| **Implementation** | Incorrect binary search tree implementation | Partially correct binary search tree implementation | Correct binary search tree implementation | **20/20** | BST implemented correctly with efficient insertion, deletion, and traversal operations. |
| **Serialization** | Incorrect implementation of serialization and tree persistence | Partially correct implementation of serialization and tree persistence | Correct implementation of serialization and tree persistence | **15/15** | Serialization persists the entire BST correctly; repository.ser fully supports persistence. |
| **Deserialization** | Incorrect reconstruction of BST from repository file | Partially correct reconstruction of BST from repository file | Correct reconstruction of BST from repository file | **15/15** | Repository file loads and rebuilds the BST exactly as saved with no data loss. |
| **Read Input File** | Incorrect reading of files and stripping of punctuation | Partially correct reading of files and stripping of punctuation | Correct reading of files and stripping of punctuation | **10/10** | Reads input files accurately; strips all punctuation and normalizes case consistently. |
| **Word Output** | -pf flag generates incorrect output | -pf flag generates partially correct output | -pf flag generates correct output | **5/5** | -pf outputs words alphabetically with correct file listings, perfectly matching spec. |
| **Line Output** | -pl flag generates incorrect output | -pl flag generates partially correct output | -pl flag generates correct output | **5/5** | -pl outputs words with correct files and all line numbers formatted exactly as required. |
| **Occurrence Output** | -po flag generates incorrect output | -po flag generates partially correct output | -po flag generates correct output | **5/5** | -po outputs total and per-file frequencies with all line numbers, formatted per spec. |
| **Reporting** | -f flag to create output file doesn’t work | -f flag to create output file partially works | -f flag to create output file works correctly | **5/5** | -f option correctly redirects output to file in all test cases with no errors. |
| **Documentation** | Submitted no readmes/instructions or javadoc documentation | Submitted some readmes/instructions and javadoc documentation | Submitted correct readmes/instructions and javadoc documentation | **10/10** | Detailed readme and complete javadoc generated with -private flag and placed in doc folder. |
| **Group Evaluation** | No group application evaluation submitted. | Some parts of the group application evaluation submitted. | All parts of the group application evaluation submitted. | **5/5** | Full group evaluation document completed and signed off by all members. |
| **Total** | | | | **95/95** |  |