

1. Weighted Methods per Class

- **Inventory.java**
 - Number of lines of code: 252
 - Number of attributes: 3 (ingredients, finishedBatches, containers, batchCount, ingredientCount)
 - Total points: 252 (lines) + 5 (attributes) = 257 points
- **RecipeLibrary.java**
 - Number of lines of code: 78
 - Number of attributes: 2 (recipes, recipeCount)
 - Total points: 78 (lines) + 2 (attributes) = 80 points
- **StringFuncs.java**
 - Number of lines of code: 76
 - Number of attributes: None (utility class)
 - Total points: 76 points
- **Recipe.java**
 - Number of lines of code: 107
 - Number of attributes: 4 (name, ingredients, ingredientCount, numberOfBottles)
 - Total points: 107 (lines) + 4 (attributes) = 111 points
- **Ingredient.java**
 - Number of lines of code: 96
 - Number of attributes: 2 (name, quantity)
 - Total points: 96 (lines) + 2 (attributes) = 98 points
- **Container.java**
 - Number of lines of code: 64
 - Number of attributes: 2 (id, isDirty)
 - Total points: 64 (lines) + 2 (attributes) = 66 points
- **BeverageBatch.java**
 - Number of lines of code: 31
 - Number of attributes: 2 (name, size)
 - Total points: 31 (lines) + 2 (attributes) = 33 points
- **BreweryController.java**
 - Number of lines of code: 239
 - Number of attributes: 4 (view, inventory, recipeLibrary, productionSystem)
 - Total points: 239 (lines) + 4 (attributes) = 243 points
- **ProductionSystem.java**
 - Number of lines of code: 93

- Number of attributes: 3 (view, inventory, recipeLibrary)
- Total points: 93 (lines) + 3 (attributes) = 78 points
- **BreweryView.java**
 - Number of lines of code: 83
 - Number of attributes: 1 (scanner)
 - Total points: 83 (lines) + 1 (attribute) = 84 points

2. Depth of Inheritance Tree

- No inheritance is used in any of the classes.
- Total points: 0 points for all classes.

3. Number of Children

- No child classes or subclasses in the code.
- Total points: 0 points for all classes.

4. Coupling Between Objects

- **Inventory.java**: Uses methods from Ingredient, StringFuncs, Container, and BeverageBatch (4 external method dependencies).
 - Total points: 4 points
- **RecipeLibrary.java**: Uses methods from StringFuncs and Recipe (2 external method dependencies).
 - Total points: 2 points
- **ProductionSystem.java**: Uses methods from Recipe, Inventory, and BeverageBatch (3 external method dependencies).
 - Total points: 3 points
- **BreweryController.java**: Uses methods from Inventory, RecipeLibrary, BeverageBatch, and ProductionSystem (4 external method dependencies).
 - Total points: 4 points
- **Other classes**: No significant external method calls (0 points).

5. Response for a Class

- **Inventory.java**: 13 methods + 4 external calls = 17 points
- **RecipeLibrary.java**: 4 methods + 2 external calls = 6 points
- **StringFuncs.java**: 1 method + no external calls = 1 point
- **Recipe.java**: 8 methods + no external calls = 8 points
- **Ingredient.java**: 7 methods + no external calls = 7 points
- **Container.java**: 6 methods + no external calls = 6 points
- **BeverageBatch.java**: 4 methods + no external calls = 4 points
- **BreweryController.java**: 10 methods + 4 external calls = 14 points
- **ProductionSystem.java**: 5 methods + 3 external calls = 8 points
- **BreweryView.java**: 5 methods + no external calls = 5 points

Total Points for Each Class:

Class Name	Total Points
Inventory.java	278
RecipeLibrary.java	88
StringFuncs.java	77
Recipe.java	119
Ingredient.java	105
Container.java	72
BeverageBatch.java	37
BreweryController.java	261
ProductionSystem.java	107
BreweryView.java	89