

## Programming Languages 2

### Lesson 5

Upgrade a given recipebook

1. Download the recipes.zip file from the homepage, and import it to netbeans. (File->Import Project...->From ZIP)
2. Open all files in the recipes package. There are three classes and one **interface**.
3. Go through the files and understand, what is done by the project.
4. Run the project. Figure out, what is the problem, and solve it.
5. Implement the RecipeBook interface by the class MyRecipeBook.
  1. The addRecipe adds a new recipe given as a parameter.
  2. The searchRecipe returns the recipe that has the same name as the parameter.
  3. The deleteRecipe deletes the recipe with the given name.
  4. The printAllRecipes print out all recipes.

*Use a Vector of Dish-es to store the recipes. You can see how it works in the DummyRecipeBook class.*

6. Read the name of a new Dish from the keyboard.  
(You can do this with the Scanner class. Instantiate a new scanner using  
`Scanner sc = new Scanner(System.in);`

Then use the `nextLine` method of it to read a String till “enter”).

7. Read the time of a new Dish from the keyboard.  
(You can do this using the same scanner as above. This time use the `nextInt()` method of Scanner.)
8. Add three ingredients of the Dish using `Scanner.next()`.
9. Finally read the recipe from the keyboard using `Scanner.nextLine()`;
10. Add the recipe to the RecipeBook that you create using MyRecipeBook;
11. The problem in exercise 4 is the following. Since the Dish class does not have any `toString` methods, it prints out the object Ids when it is called. You can solve this problem by adding your own `toString` method to the class. It may use the following form: “name (time)”