Programming: Week 9 Tutorial

For your potential application:

1. State the hypothetical name of your application. E.g. ExpensesManager - This would be your application class (the only class with the main method) and you must state its name. Note: Class names are mostly singular.

The name of my application would be JobSearch.

2. What other things need to be there be in the system that you have multiples of? E.g. expense0, expense1 (or an expense array), etc.

Other things that need to be there, which have multiples of, is a class like JobOutput which will have the outcome of the job search.

3. Which of these objects would be of the same type? E.g. every expense had a name and a cost and therefore every expense (e.g. expense[0], etc.) came from the same Expense class. List the classes that you have identified, in addition to the application class.

There can be more classes but I would like to set just a class for my application and that is JobOutput only and which will have the variables like location, workType, organisation and salary. String for location, String for workType, String for organisation, double for salary and there's gonna be an array list for the values as it's not logical to put values individually because there can be a lot of data. So, an array list be stated for that. Constructor is also called for, as it is necessary to call that to initialise the variables and the name of constructor will be same that of class.

4. Add more detail to each class by specifying what private member variables would be there for each object. E.g. the Expense class can have members String name, double cost so that every Expense object will have a unique set of values for each of these variables. (Note: All member variables must be explicitly private and non-static in Intro to Prog).

Various private classes are made inside the JobOutput class for each variable such as a private String location, private String workType, private String organisation, private double salary.

5. From the member variables that you have identified in #4, which of

these are mandatory when creating an object? E.g. We said that an Expense cannot be created without a name and a cost (any other members variables such as date are not that important to specify at the time of creating an Expense object). These would be in your constructor's parameters/arguments. For each class identified in #3 above, state the constructor's parameters (only the application class can have a constructor without parameters).

The data is added to each class and variable which is set above such as setting values or data for location, workType, organisation and salary. The data is set in the above stated variables which will redirect the customers to application to use that data for getting a job outcome or output.

The parameters are:

private String location, private String workType, private String organisation, private double salary.

6. For at least the application class, state at least one other important method that must be there in the application that is not a simple get/set (accessor/mutator) method. E.g. an Expense object has the getName and getCost methods and these are too obvious to state for this purpose. Instead we are interested in methods like addExpense, displayExpenses, etc.

One other important method used in the application can be the display for all the variables or private classes made like for location, workType, organisation, salary. Display method is used like displayJob() that has fulfilled the specifications of customers as in context of location, workType, organisation, salary.