Preamble

A job interview is always a bit special in which candidate does not know too much about what he will be questioned. During which he can hesitates to answer to questions which he knows in normal time. To better evaluate you, I suggest to tests you on a small technical problem. I would ask you to solve it before the technical interview and send me your answer at least a few hours before the interview to allow me to look at it in details.

This small technical problem has two objectives. It will help me to evaluate your technical level on Eclipse/JAVA/EMF with a simple problem. In addition, it will help you to better prepare some of subjects of which we will talk during the technical interview.  At least, this will allow you to be more confident in the interview.

Problem statement

0 - Launch the development environment of your choice with the configuration of your choice;

1 - Create a Java class with a standard Java "Main";

2 - Import the files listed below (an EMF metamodel and model) into your project;

3 - Load the metamodel “dartlang.dartspec” and model into your Java code using the EMF framework;

4 – Count and Display in the console the number of elements in the model;

5 – Count and Display in the console the label of all elements of the model;

6 - Add a new instance of the type of your choice in the model (the type is to be chosen among the metamodel types).

Here are the two files to download and copy in your project.

EMF Metamodel: https:// …/model/dart.ecore

EMF Template: https://... /model/dartlang.dartspec

A few comments

1 - Success or failure of this small test is not an indicator of acceptance or refusal of the application. Stay zen!

2 - Do not hesitate to use the internet (even if you know everything, Google is our best friend at all). If you are using external elements, note them, we will discuss during the interview about how you addressed the problem as how you resolve it.

3 - The quality of the code and the elegance of the solution will be “certainly” taken into account. I do not expect miracles but some solutions are more elegant than others. Do not hesitate to propose a solution using the MOST elegant and modern approaches in Java and EMF.

4 - This problem is made to be simple, if you exceed 100 lines of real code (apart from blank lines, comments …etc.), there may be something wrong (but this may depend on the solution).

5 - Do not waste your time writing documentation for this example, a clear and understandable code should be sufficient for such an exercise. Do not hesitate to cut your code into several methods if necessary.

6 - When you front problems, do not hesitate to note them, we will discuss how you approached them and / or overcome them.

Ending

There will be no development exercises to be done in live during the interview. I consider that it does not reflect the real working conditions. During which you can have access to internet and during which you will be more serene to produce analysis effort. This is why I prefer a little preliminary exercise. If you encounter problems to download the exercise files please contact me.