William Hill – Software Developer in Test

# Personal Information questions

Current Salary: 4800 euros/month

Current Package (Pension/Bonus etc): n/a

Notice Period: 0

Reason for moving to the UK: English speaking country

Salary that you are looking for: 4800 euros/month and above

# Skills Ratings

Maven – 7/10

Webdriver – 8/10

Junit – 8/10

Jira – 9/10

# Screening Questions

**1. In Java what is an Object? Why would you use these in your development process?**

An Object is an instance of a class. For example: NokiaLumia is a class and a NokiaLumia mobile phone with IMEI number(unique identifier) 3748034284784 is an instance of that class.

An object comes with its own data and methods. It makes code easier to develop – closer to the real world – and therefore also easy to maintain. OOP concepts like Encapsulation, Polymorphism and Inheritance make the use of objects worthwhile.

**2. In Java development what is the purpose of Maven? What benefits does it provide to your development?**

Maven is a build automation tool for Java projects.

Benefits:

* Makes dependency management super easy
* Downloads dependency jars itself, without needing human intervention
* Can be used to automatically run builds on continuous integration servers

**3. What is JUnit used for?**

Junit is a unit testing framework used to create and execute unit tests. Ideally unit tests are self-sufficient and should be able to run in any order.

**4. What different types of element identifiers could you name in a HTML page?**

* id
* classname
* tagname
* attribute
* linktext/text

**5. Have you used Continuous Integration processes before? What benefits do they provide to Testing specifically?**

Yes, I have used Continuous Integration processes at my last two assignments.

Benefits:

* Test failures (unit, integration) are caught very early in the sprint
* Newly added features are incrementally available for testing and thus early feedback can be provided

**6. What are the benefits of using a source code management system like Git or SVN?**

* Should something go wrong, you always have the last working version to restart work with
* Different branches can be maintained with different versions of the software
* When meaningful checkin comments (for example with JIRA numbers) are made, one can search for how the code snippet was prior to and after successive commits
* Restrict project access to selected developers

# SOAP UI Discussion

* **Discussion**: The current test schedule is very time intensive, so there may be some steps taken that would not be considered best practice. Could you raise some discussion areas on how you could improve the maintainability of the test pack in SOAP UI given the option of more time?

First, a basic set of SOAP assertions should be agreed on, and these should be applied to all responses in the test suite. Second, some portions of a test case could be reused in other test cases, therefore they should be picked out and modularized. Also, property levels could be revisited.

# Non Functional Tests

* How will you design the Performance Test for Peak load? How many concurrent users/threads will you need to run the test assuming the response average is 5 seconds?
  + The test will consist of accessing an event page. There will be 1000 users/threads to run the performance test.
* What Types of NF Tests will be required in the above case?
  + The above case is a Stress test.
* What tools in your opinion will be required to complete NF Tests including Monitoring and Load generation?
  + JMeter
* What are the ‘Key’ Metrics you would collect?
  + Actual Average throughput
  + Actual Average response time