Java Quiz

This Quiz is composed of two parts :

* First part : a list of MCQs, 0 to 4 answers can be given
* Second part : open questions

Part 1 : MCQs

**1. What is Hibernate ?**

a. A framework to manipulate the computer power features

b. A framework to perform unit tests

c. A database

d. A Project Configuration manager

**2. How to configure hibernate ?**

a. thanks to the hibernate.hbm.xml

b. thanks to hibernate.ini

c. thanks to hibernate.properties

d. thanks to hibernate.cfg.xml

**3**. **What are the two kinds of files that allow you to achieve a feature in a java web environment ?**

a. XML and properties files

b. JSP and Servlet

c. POM and Junit classes

**4. What is Apache Derby ?**

a. a database

b. an ORM

c. a Global Object Context

d. a famous development contest that takes place in the USA

**5**. **How does Maven helps developers ?**

a. by providing a way to convenient way to achieve Unit Tests

b. by standardizing the project definition

c. by automatically resolving dependencies, recursively

d. by providing some tools to connect to a database

**6. What is/are the concept(s) attached to the java interfaces ?**

a. Composition

b. Inheritance

c. Realization

d. Polymorphism

**7. What is Spring ?**

a. A Dependency Injection Framework

b. An Inversion Of Control Framework

c. A database

d. A Unit Testing Framework

**8. what is the right syntax to automatically initialize an instance within a context container ?**

a. @Autowired

b. @Inject

c. @Initialize

d. @Entity

**9. What is Tomcat ?**

a. A Build Tool

b. A Java Web Application Server

c. An IDE

d. A Servlet Container

**10. what are the two minimal annotations to be able to use a class as a datamodel in hibernate ?**

a. @Id and @Entity

b. @Entity and @Table

c. @Id and @GeneratedValue

d. @Id and @Table

Part 2

**11. Explain the Strategy pattern, give a UML representation**

**12. Explain the Pool pattern, give a UML representation**

**13. how to declare a dependency in the pom.xml file?**

**14. What is the name of the maven main file? What lines should it contain at the minimum?**

**15. how to declare a pre-initialized instance in the Spring context?**

**16. Cite and describe the 3 contexts and their scopes in a web app environment**

**17. Give a minimal Class definition that is able to be managed by JPA**

**18. How to declare a class mapping in the Hibernate configuration File?**

**19. Write an Interface “TestAble” with one constant and one method**

**20. Give a Web application global architecture schema, that involves all you understood during that semester.**