Java Exam 2: Graded out of 50.

1. Define the following terms (2 pts each):
   1. Unit Test =
   2. Object=
   3. JFrame =
   4. Encapsulation =
   5. Inheritance =
   6. Input Sanitation =
   7. Polymorphism =
   8. Interface =
   9. Primitive type =
   10. Test-Driven Development =
   11. Servlet =
2. Explain the roles of the following elements in a swing application: (3 pts each)
   1. JPanel =
   2. Event =
3. Describe the difference between a JSP and a Servlet (4 pts)
4. Explain the roles of Unit Testing, Integration Testing, Product Testing, and Deployment Testing(6 pts)
5. Explain why we use an Application class as well as an Object class when coding in Java (3 pts)
6. What are the return types of the following methods? (1 pt each)
   1. Public static void main( String[] args)
   2. Private int executeUpdate()
7. Explain the purpose and function of a try-catch-finally structure. (2 pts)   
     
   Try will try the given code in the try block. Catch will catch any errors that come out of try. Finally runs even with errors in try and catch, as long as the try and catch does not crash the program.
8. Explain the difference between a float and a double (3 pts)

Both represent real numbers, primitive types.

1. Discuss briefly the advantages and disadvantages of using version control software, such as git.. (5 pts)   
     
   Advantages: Access code from anywhere, see updates, get faster updates

Disadvantages: Anyone can access your code, branches can become out of sync

1. EXTRA CREDIT: (2 pts)

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| Isaac and Albert were excitedly describing the result of the Third Annual International Science Fair Extravaganza in Sweden. There were three contestants, Louis, Rene, and Johannes. Isaac reported that Louis won the fair, while Rene came in second. Albert, on the other hand, reported that Johannes won the fair, while Louis came in second.  In fact, neither Isaac nor Albert had given a correct report of the results of the science fair. Each of them had given one correct statement and one false statement. What was the actual placing of the three contestants? |