Object-Oriented Programming

Exam Prep

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- Each question is worth 50 points
- Your grade will be calculated based on the best two questions you answer

Question Points

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- Pay attention to the number of points, the higher the number of points the more detailed your answer should be

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- The amount of points for each question should give you an idea of how long you should spend answering a question

Time Management

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  - 5 minutes for reading the paper
  - 50 minutes for answering the questions
  - 5 minutes for reviewing your answers and checking for mistakes

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- Misreading the question can lead to you focusing on the wrong topics
  - Even if you write a good answer, if it is not for the correct question you will not get a good grade
- Ensure that you fully understand each of the questions before beginning
- If necessary, use the dictionary provided to help translate the question

Answering Questions

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- This is a rough guide to how much time you should spend, some questions will take a little less, some a little more

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- This is a final check to make sure that the answer makes sense for this question
- This is probably the most boring part of taking an exam
- However, if you find and correct one mistake, it could make the difference between passing and failing

Neatness

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- you do not have to have perfect writing in your exam, but if I cannot read your answer I cannot give you a good grade
- Write as neatly as you can, the easier it is to read the easier it is to grade

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- However, it may be a part of the grade for an essay type question
- More importantly, grammatical mistakes may confuse the answers you write
- If your answer is not very clear, it may be more difficult yo get a good grade

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Question Examples

- Describe the difference between checked and unchecked exceptions in Java. Give one example of each type of exception

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Not Answering the Question

- Describe method overloading in Java in your own words. Why is this a useful feature?

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Actual Student Answer

Overloading in Java is to simplity the Java code. It we implements a complex class, overloading is to simplity the method. Because in the real world there are too many classes have been written overloading method make us easier to use this class or method.

Not Answering the Question

- Describe method overloading in Java in your own words. Why is this a useful feature?

Actual Student Answer

Overloading is a method to make sure the Java programe can be runing with a clearly way and make sure there is not recouse waste. This is a useful feature cause when we use overloading we can make the programe more easy and useful.

Not Answering the Question

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Actual Student Answer

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A good answer

Overloading a method in Java means that we are providing multiple versions of the same method (name and return type) but with different parameters. A good example of this is print or println, there are many versions of these methods that allow different parameters. The programmer does not have to be concerned with getting the matching exact parameters.

Not Answering the Question Fully

- Discuss what a `Thread` is used for in Java. Describe the two ways that a thread can be created in Java

Actual Student Answer

A thread is a sequence of instruction that are executed in order. We can extend thread class to create a stream or we can implement runnable interface and pass a runnable object to a thread object to create a thread. (5/10)

Not Answering the Question Fully

Actual Student Answer

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A good answer

A Thread is a flow of control in a program. In Java threads can be used to add multiple flows of control to our program. In this way we can perform multiple things at the same time. The first method to create a thread in Java is to extend the Thread class. You need to override the run method in the class. These statements will be the new flow of control. The second method is to implement the runnable interface. Similar to the previous idea you must also implement the run method, which will contain your code. However to run this type of thread we must wrap the runnable object in a Thread object.

Not Answering the Question Fully

What is the difference, why is this answer not very good.

- The question ask discuss what a thread is used for in Java, not what is a thread.
- The question states describe the two ways a thread can be create, not to list them.

This is a 10% question, this means that in an exam you should take approximately 10% of your time working on the answer. This gives an good guess to how much detail is expected in the answer.

Answering a similar question from a previous exam

- What is the function of the keyword `final` in Java? What effect does it have on a variable? What effect does it have on a method? What effect does it have on a class?

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Actual Student Answer

keyword ~~static~~ final makes the variable or method of the final and it will belong to the class, but not to the instance. ~~Static~~ Final variable can be share between different instance. It means if we change the value of it, one instance of the class, the value in other instance of the same class will be changed. ~~Static~~ final method is a method that belong to the class and we should call the final method directly by using classname method. Suppose there is a class named counter, and a final method named add(). we should use in this way counter.add().

Answering a similar question from a previous exam

- What is the function of the keyword `final` in Java? What effect does it have on a variable? What effect does it have on a method? What effect does it have on a class?
- If the question was actually about the static keyword, this would have been nearly a full mark answer, but instead of studying about the different keywords and their effect, the student studied previous exams. Because I know students will do this I will always change the types of questions that are asked.

Begging does not work

Adding a message to the exam, saying something like
"dear teacher, please let me pass because (I broke up with my girlfriend and will work harder next year)/(I come from a poor family and can't afford to repeat)/(I think English is too hard)"
These excuses will not change 15% into 40%. Passing a module (unless you are really really smart) should take a lot of work and practice, this needs to be started very early and you need to keep up with the content. If you fall behind, it will only get more difficult.