Java Review Technical Brief and Three Minute Lecture Critique

Frequently, throughout our careers we will be asked to provide a technical brief on a technology or topic that we have used in a project. This can help refresh members on a team of their own knowledge and can inform newer members of a useful topic. We are also frequently asked to give feedback to others to help them improve what they are doing. Being able to provide constructive, useful, and thorough critique improves the performance of your team, reflects positively upon you, and builds good rapport with your colleagues.

This assignment will give you the opportunity to practice presenting a technical brief and providing substantive critiques in a low stake setting.

For this assignment, you will evaluate a three minute lecture given by one of your classmates. In order to be useful, each of your ratings must be supported with concrete examples from within the presentation. Further, your critique must include suggestions for improvement that are likewise specific and concrete.   It is also important to focus on substantive improvements. Though minor issues can also be addressed, these minor issues should not be solely emphasized. Finally, **the tone of the critique must be positive and supportive.**

What I Want You To Learn
- Basic Java review topics
- Planning strategies for a setting where you know you are being evaluated
- Evaluate work with specifics and detail
- Express evaluations in a constructive and positive tone
- Learn how to listen critically
- How to listen attentively and respectively to co-workers

What you are going to do
During class (Tuesday):
Form a group of 5-6 students.   Assign each student one of the following review topics:
1. iteration (structural and non-structural)
2. inheritance vs composition
3. polymorphism in method behavior
4. memory allocation and management (stack vs heap, garbage collection)
5. data structures (arrays, lists, *hash maps*)
6. [if 6 students, split data structures: one person gets arrays+lists and one person gets hash maps]

During lab:
Prepare your technical brief presentation. You should:
1. Make sure that you have Eclipse Luna (4.4) installed. We will be using this version this semester, so please update it if you have an older version. You may find it easiest just to download a new version. Choose "Eclipse IDE for Java Developers" at
https://www.eclipse.org/downloads/packages/eclipse-ide-java-developers/lunar
2. Research your topic to find key definitions, notable use cases, and code examples.
3. Prepare 3 slides:
   a. Introduction to your topic. You can include whatever you want on this **except code examples**.
   b. A short code example/examples. Any additional markup or text should directly relate to the code example.
   c. A question or problem that would test listener understanding **and involves code**. There must have a single correct answer. You are welcome to make this a multiple choice question (with at least 4 options -- do not make it true/false).

You will have 12 minutes per presenter:
- 3 minutes during which the presenter lectures
- 2 minutes to have each listener answer the question
- 3 minutes for the presenter to give the correct answer and discuss any questions listeners have
- 2 minutes for the listeners to write additional notes about the presenter
- 2 minutes to share **warm comments only** with the presenter

You are going listen carefully to one of the other students in the class present a review topic for three minutes. During this time you will take notes that will enable you to critique their lecture. In particular, you will evaluate whether the material they present is correct and complete; their presentation is engaging, audience appropriate, and professional. Take careful notes because you must give specific examples from their presentation that supports each of your comments. Where you believe they did well explain where and why; where they could do better, identify where, why, and give specific suggestions for improvement.

Most importantly, you must provide your critique in a professional manner that both supports your colleagues' efforts and provides them with accurate, useful specific actions that they can take that will help them improve.

Criteria for assessment [100 points total]
- [10] Supported each comment with examples and reasoning
- [5] Discussed content correctness
- [5] Discussed content completeness
- [5] Identified areas where the lecturer did well
- [5] Identified areas where the lecturer could improve
- [10] Gave specific, concrete suggestions for each area for improvement
- [10] Wrote with a supportive, constructive tone
- [50] You will receive an automatic 50 points towards the grade of this assignment for doing your presentation. We are not grading the quality of your presentation at this point of the semester.
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Please submit your 3 slides of material, and a single document containing each of your critiques. Please include the following text at the beginning of each page and include one presentation critique per page:

Presenter: (their name goes here)
Topic: (the topic goes here)