Due Sep 23, 2022 by 11:59pm **Points** 100

M5: Project 5

COMP 1210: Fundamentals of Computing I

Instructions

This project extends the previous project by writing an HexagonalPrismList class and HexagonalPrismListApp class. The program will consist of:

- HexagonalPrism from previous project, which defines HexagonalPrism objects
- HexagonalPrismList, which defines a HexagonalPrismList object that contains HexagonalPrism objects
- HexagonalPrismListApp, which:
  - reads in a file name entered by the user, then reads the list name and HexagonalPrism data from the file
  - creates HexagonalPrism objects and stores them in an ArrayList of HexagonalPrism objects
  - creates an HexagonalPrismList object with the list name and ArrayList of HexagonalPrism objects
  - prints the HexagonalPrismList object
  - prints summary information about the HexagonalPrismList object

Make sure to review the TriangleListApp.java example, which was discussed on this module's **Instructional Resources (https://auburn.instructure.com/courses/1426013/pages/m5-instructional-resources)** page and on slide 42 of the lecture notes, in preparation for this assignment. You will be applying the same techniques used in the video to this project.

Note that the HexagonalPrism and HexagonalPrismList classes will be used in the next project.

General Requirements

- **Academic Honesty - When you submit to Web-CAT, you are certifying that the work**

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- **Skeleton Code (ungraded) assignment -** You are encouraged to submit your files to the Skeleton Code (ungraded) assignment in Web-CAT, which checks file and class names, as well as method names, parameters, and return types. Your files to do not have to be complete (e.g., method bodies may be empty, except for return statements when the return type is not void). Web-CAT also runs Checkstyle on your files. Submitting to the ungraded assignment may save some of your graded submissions since it will catch compilations errors that may occur when your files are compiled with the Web-CAT test files. Since this is ungraded, there is no penalty for not submitting to the Skeleton Code assignment in Web-CAT; however submitting is recommended.
- **Completed Code (max of 10 submits) assignment -** You must submit your files to the Completed Code (max of 10 submits) assignment in Web-CAT, which grades your files and provides feedback on issues that caused you to lose points. Note that your grade will not appear in Canvas until your TA assigns the Design/Readability points and releases the grade to Canvas.
- **What to submit** - You must submit all files for the assignment at the same time to Web-CAT. If you do not submit all files together, Web-CAT will not be able to compile your files with its test files, and the submission will likely receive zero points for correctness.
- **How to Submit** - Submit your files to Web-CAT by clicking Web-CAT button on the jGRASP toolbar and selecting the appropriate assignment. Note that if your files are in a jGRASP Project, the Web-CAT button will be on the Open Projects toolbar. You have 10 attempts to submit, but strive to achieve a perfect score on the first submission. If you are unable to submit to Web-CAT via jGRASP, you should upload a zip file containing your files directly to Web-CAT prior to the assignment deadline. If you are unable to submit to Web-CAT directly or via jGRASP, you should email a zip file containing your files to your TA prior to the assignment deadline.
- **Grading** - This assignment will be graded based on the specifications for functionality, style, and documentation. Be sure that your files pass the Checkstyle audit available in jGRASP in order to earn all of the style points.

Resources

Download these instructions and data files to complete your project for the week:

- **Project 5 instructions (https://auburn.instructure.com/courses/1426013/files/204195185?wrap=1)** ↓ **(https://auburn.instructure.com/courses/1426013/files/204195185/download?download_frd=1)**

- [(%24CANVAS_COURSE_REFERENCE%24/file_ref/gd2778c40c5a52ddd1e7de4a31167ad3b/download?wrap=1) **Project 5 data files** (https://auburn.instructure.com/courses/1426013/files/204195196?wrap=1) ⭳ (https://auburn.instructure.com/courses/1426013/files/204195196/download?download_frd=1)