

## CSC 330 Assignment 4

Note: The questions are from the textbook “Starting Out with Java: From Control Structures through Data Structures, by Tony Gaddis and Godfrey Muganda, 2006”.

### Chapter 17:

Q1 (Programming, 40 points):

Gaddis T. and Muganda G. Book, Page 1032, Programming Challenges, 1.

Please provide some test inputs.

Estimated time: 4 hours.

### Chapter 18:

Q2 (Programming, 30 points):

Gaddis T. and Muganda G. Book, Page 1100, Programming Challenges, 1.

Please provide some test inputs.

Estimated time: 3 hours.

Q3 (Programming, 30 points):

Gaddis T. and Muganda G. Book, Page 1100, Programming Challenges, 5.

Please provide some test inputs.

Estimated time: 3 hours.

**Bonus Question:** extra credit will be awarded

Gaddis T. and Muganda G., Chapter 17, Page 1032, Programming Challenges, 2.

Please provide some test inputs.

Estimated time: 2 hours.

### Submission instructions:

Please submit a paper copy and an electronic copy.

#### Paper copy:

- Please submit the paper copy at the beginning of the class.
- Print the program source code files and the output screen captures (or output file). If no output screen capture (or output file) is submitted, it would be assumed that the related program does not compile.
- Identify each assignment question by writing the question number at the top of each page.
- Add the following statement to the first page of your submission: “I have abided by the UNCG Academic Integrity Policy on this assignment”. Please write your full name and sign next to the statement.

#### Electronic copy:

- Please submit a **lastname\_firstname\_assignment04.zip** (or lastname\_firstname\_assignment04.rar) file through the Blackboard Digital Dropbox. This zip (or rar) file should contain all submission files.

- Put the answers of all written questions in a **lastname\_firstname\_assignment04.doc** file.
- For programming questions, you only need to submit the \*.java files.
- Name each \*.java file (and related java class) according to the question number (e.g. Q1\_\*.java).

**Grading guidelines (programming questions):**

Your programs will be judged on several criteria, which are shown below.

- Correctness (50%): Does the program compile correctly? Does the program do what it's supposed to do?
- Design (20%): Are operations broken down into classes and methods in a reasonable way?
- Style (10%): Is the program indented properly? Do variables have meaningful names?
- Robustness (10%): Does the program handle erroneous or unexpected input gracefully?
- Documentation (10%): Do all program files begin with a comment that identifies the author, the contents, and the compiler used for that particular file? Are all the classes, methods and data fields clearly documented? Are unclear parts of code documented?

A program that does not compile will get at most 50% of the possible points.