

## Introduction to Java

Lab Project: 06

Points Possible: 150

Due Date: Nov. 19, 2015 (11:59pm)

**Objective:** Create a simple GUI flashcard program.

### Grade Table:

Programming Guidelines are followed	25
Report is created with Screenshots	25
Flash Cards are stored in Data Structure	25
Data Structure is randomized	25
GUI function as required	50
Total (Points Possible)	150

**Instructions:** The goal of this project is to create a simple GUI flashcard program. It is fine and expected that you will base your work on your previous projects. As before, you will need to create a data structure to hold a series of flashcard objects. For this project, again simply hard code in values for the flashcard objects in the driver for your program.

The flashcard data structure should be randomized. Each time the program is run the order of the flashcards should be unique. Do some research – the easy solution to this is only a few lines of code.

The GUI should consist of a single JLabel and JButton. On starting, the JLabel should display a welcome message and the JButton should display “Start.” After starting the first question should be displayed and the button should display “Click for Answer.” Upon the next click the label should display the answer and the button should display “Next Question.”

After the last question has been answered the program should display a dialog box asking the user if they want to go through the questions again. The main button should be disabled.

Just to be clear, I expect you to simply hard code the questions and answers into the program somewhere. In a future project you will modify this program to read a file and load questions and answers from it.

### Turn In:

1. Create an executable jar file as demonstrated in class (see the class Blackboard site for notes) that contains your source code and class files named “project06LastName.jar”

2. Create a short documentation report (doc or docx) containing screen shots as needed of your program meeting or attempting to meet the specifications in the above grading table. If you are unable to meet various specifications include any error message that are generated when you attempt to compile or run your program. Include a brief description (1 paragraph is fine) documenting your work and describing the functionality of your program. In the report include the version of your Java Compiler (at the command line run "`javac -version`" and any other tools you used.

3. Submit the resulting report and jar file to Blackboard

*If you have any questions email me early and often at the below address!*

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