COMP 1030

Final Project
This project is worth 10% of your grade
DUE: Monday, November 22nd , 5pm ET

Introduction

The purpose of this project is to allow the student to demonstrate their ability to integrate the material they have studied during the COMP1030 course into a functional single java game application.

Overall Deliverable

Using the java programming language you are to develop a simple computer game of your choice **using only the constructs studied in the COMP1030 course**. Grading of the project is based upon the grading rubric below.

Specific Deliverables

1. A working application with no bugs, please submit a runnable file.
2. A description of how the game is played and the goal of the game.
3. A copy of the code in text form, black letters on white background. (not a screen shot of the code)
4. A flow chart diagram for the game.
5. A written summary of each class explaining its attributes and how it integrates into the game as a whole.

NOTE:

- Use only information and constructs found in the lecture slides. Do not use constructs from the video course if they are not found in the lecture slides.
- If your game is unique it must not already exist online. However, if you choose to write a ubiquitous game such as checkers this is allowed, but your code must be unique.
- Your code must represent a single game, not a set of simple multiple games like 5 different guessing games for example.
- Each class must be a true object for your game and thus must integrate into your game as an object, not simply a class/object filled with code or static methods.
- The main method can only contain a few lines of code (max 7) to jump start the program.
- No more than 3 static methods can be contained in the game.

- The instructor reserves the right to schedule an oral review if your submission appears, in any way, to be written or influenced by a third party, the purpose of the oral review is to confirm that you are the author of your submission. Failure to demonstrate authorship of your submitted code will result in an academic misconduct which in turn will result in a zero in the test or a zero in the course.
- Plagiarism is the presentation of someone else's work as your own, plagiarised code will result in an academic misconduct and a zero in the test or course.

- If a student submits advanced code or code similar to that of another student or code that does not adhere to course coding standards an oral review may be scheduled to validate authorship of the code. If the oral review is not successful a zero will be awarded on that question and an academic misconduct will be filed resulting in a possible zero in the course.
- The assignment is to be completed individually with only general guidance from other persons.
- You must be the author of any code you write, authorship means that you thought up the solution framework, designed the code and authored the code, typing the code does not mean you authored the code. Writing the code with help from another person or the internet does not mean you have authored the code.
- Sharing the content of your submission with other students is prohibited; students who submit similar code may be subject to an academic misconduct.

Grading Rubric

Game Element	Points
Proper javadoc headers	1
One comment for each section of code	3
Proper use of naming conventions	3
Descriptive variable & method names	1
Proper tabbing	3
Proper code layout	3
Readability	3
Proper user messaging	3
Proper encapsulation	1
Proper use of access modifiers	1
Class 1 Used (Main)	10
Class 2 Used (as a game integrated object vs a class that holds sequential or static code)	10
Class 3 used (as a game integrated object vs a class that holds sequential or static code)	10
Class 4 Used (as a game integrated object vs a class that holds sequential or static code)	10
Use of if/else	5
Use of while	5
Use of for stmt	5

Use of do-while	5
Use of Switch	5
Use of Static methods	5
Use of method overloading	5
Use of single dimensional array	5
Use of multidimensional array	5
Use of Exception Handling	5
Use of String class methods	5
Use of Wrapper Classes	5
Code Complexity	Basic Game – 10 points Intermediate Game – 25 Points Advanced Game – 50 Points
Game description	5
Flow chart	10
Class descriptions	10
TOTAL	197

Academic Misconduct Penalties

In the Computer Studies faculty, an academic misconduct will result in one of the following penalties depending on the number of academic misconducts on file. Academic misconducts are attached to the students file for the life of their time at the college; therefore a second or third offence will carry the penalty as outlined below regardless if they were committed in a different course or program.

- The first academic misconduct will result in a zero in the student work.
- The second offense will result in a zero on the course.
- The third offence will result in an 8 month suspension from the college.

Plagiarism in writing computer code

The purpose of writing code in this course is to demonstrate that you have independently written and understand the code and have the ability to independently solve a given problem with software. Therefore, you must be the author of any code you write. Authorship means that you independently designed the solution framework, designed the code and authored the code. Simply typing the code based upon coaching from a third party does not mean you authored the code. Writing the code with help from another person or the internet does not mean you have authored the code. Of course you may seek help to understand a construct in its general application, but you must then independently transfer that general knowledge to the specific problem you are trying to solve. So to be clear**, copying a code solution or a portion of a solution, of any size directly from a third party source, is a form of plagiarism, and will result in a zero in the work involved.**

Late penalties

5% will be deducted for each day late, starting one minute after the due date/time. After 5 days late, a grade of 0 will be assigned to the submission.

Submission Instructions

All submissions must be able to be compiled and therefore function properly to score any points.

Paste the signed Declaration of understanding to your file.

Upload your project to D2L as a **Single PDF file** and an executable file.

Instructions

Paste the statement of declaration shown below at the top of your submission. Please note that submissions without this ***Declaration of understanding*** will not be graded.

Declaration of understanding

I understand that plagiarised answers will receive a grade of zero and an academic misconduct.

I understand that an academic misconduct will result in an automatic zero in the assignment in the event that this is my first offense and an automatic grade of zero in the course if this is my second offense.

I understand that all answer material, must be original material.

I understand that plagiarism means to present someone else's material as my own.

I understand that to copy material from the internet, text books, course slides, or any other source, is a form of plagiarism.

I understand that to copy material from the internet, text books, course slides or any other source, and then to change a few variable names etc. in that material is a form of plagiarism.

I understand that to copy material from the internet, text books, course slides or any other source, and then to slightly modify that material is a form of plagiarism.

I understand that the appropriate way to complete this assignment is to write and test all of the code myself while referencing other sources for general guidance.

I have read and clearly understand each one of these statements, and accept the responsibility and penalty for any actions that I take which may contravene any one of these statements.

*Name (type)*_____
Student Number: _____

*Signature: (draw with mouse or tablet pen):*_____

Fill out the name and student number section of the ***Declaration of understanding***.

Sign the signature portion of the declaration of understanding by using the draw tool and your mouse or a tablet pen and paste into your answer document.