## **ICS3U SUMMATIVE PROJECT**

#### PURPOSE:

To combine all of your programming skills in one large project and to demonstrate an understanding of each of the major concepts we have covered in class this semester including:

- String manipulation
- Object Oriented Programming (OOP) and design
- Arrays/ArrayLists
- File Input/Output (I/O)
- User interface (command prompt / graphical)

# PROJECT - OPTION ONE:

Your program will be used to keep track of a collection of data. What that data will be is for you to decide. You may choose to store information about mp3s, novels, compact disks, movies, inventory at a store, addresses/phone numbers, etc.

Minimum class requirements include:

- One class to describe the type of object you will keep track of.
- One class to interact with the information stored in the text file.

The user interface will use the methods in this class to:

- o add new information
- o update or remove existing information
- o search and retrieve information
- One class for the interface to allow the user to update the information you are storing by adding or deleting data and to search the information using any of the object's attributes.

### PROJECT - OPTION TWO:

A program of your choice that has been discussed with and approved by Mr. Hudson. It should be original and must demonstrate your understanding of each of the major concepts covered in this course (as listed above.)

You will not use threads. You will not have any animation.

You will write your program AT SCHOOL.
It must be an **INDEPENDENT** EFFORT.

### **IMPORTANT DATES:**

 <u>DAILY</u> – Submit your plans (until they have been marked), then submit ALL java files and your <u>daily log</u> to:

- <u>Friday, January 9<sup>th</sup> (at the latest)</u> Detailed written proposal is due You MUST submit a written proposal (ideally no later than this Thursday) that includes:
  - o A **detailed sketch** of the user interface to demonstrate how the program will look as it is being used.
  - o All of the classes you will write (use UML diagrams along with separate descriptions for methods as needed for clarification.)

Your proposal must be discussed with and approved by me before you begin writing any code. This proposal will represent some of the marks for this summative.

• <u>Friday, January 23<sup>rd</sup></u> – The finished project is due by 11:10 am <u>SHARP</u> in the handin folder:

I:\Handin\Hudson\ICS3U - Fall 2014\Summative\YourName

You will submit the following:

- The contents of the entire project folder which includes:
  - All **Java** files (in the src folder)
  - All **class** files (in the bin folder)
  - Any other necessary files (text files, images, etc)
- o A runnable **jar** file that runs your application (program)
- Your **daily log** explaining each day's challenges and accomplishments to the appropriate folder

NOW READ THE RUBRIC ON THE NEXT PAGE!!!

ICS3U SUMMATIVE EVALUATION RUBRIC FOR	
PROJECT TITLE	
OVERALL LEVEL	

	R	1	2	3	4
Project Proposal  The student has thoroughly thought through the project. The proposal includes detailed illustrations of the user interface and detailed descriptions of each class and of the structure of the program overall		with limited effectiveness	with some effectiveness	with considerable effectiveness	with a high degree of effectiveness
User Interface / Functionality  Student demonstrated to the class that the program functions as it was intended to and demonstrates that the program includes clear instructions, is easy to use and is visually appealing.		with limited effectiveness	with some effectiveness	with considerable effectiveness	with a high degree of effectiveness
Documentation  Student consistently used appropriate format throughout the program.  All identifiers were meaningful and appropriate.  Comments explain all methods and any complex calculations/code.		with limited effectiveness	with some effectiveness	with considerable effectiveness	with a high degree of effectiveness
Program Structure and Design  Student has demonstrated an understanding of OOP design in the structure of each class and in how they interact.  Student has used file I/O effectively to interact with stored information.  Student has used arrays and string manipulation as needed.  Student has allowed the user to interact with the stored data/information.		with limited effectiveness	with some effectiveness	with considerable effectiveness	with a high degree of effectiveness