**ICS4U Summative Outline-Begins Monday May 28, 2018-Ends Monday June 18, 2018**

**Final Project Outline:**

In groups of no more than three your task is to create a project in HTML-PHP-JAVA that demonstrates many of the programming concepts learned in this course. See **Appendix A** for a list.

**Stage 0-**Tuesday May 29

/5 marks

*Preparation*

Back up your work at sdsscomputers.com and then wipe it clean. Your site is now to be devoted to your summative project. Start by creating a suitably design homepage entitled “**ICS4U Final Summative Project**”. Include a short paragraph describing what you have learned in this course. Describe all the projects you have developed throughout the semester and how they related to the class. Finally describe the purpose of this summative project and then list all the possible ideas you’ve thought about making in relation to it. Include a table of contents/links to all the remaining stages outlined in this handout.

**Stage 1** – Wednesday May 30

*/5 Marks*

*Brief Proposal*

As a group, select from your list of ideas presented in Stage 0. Create a short(must not exceed 5 minutes) video presentation outlining in general your project goals, the key role each member will play in the development of the project as well as possible concerns i.e. what aspects of the projects will present you with the greatest challenges. Embed your video onto your project website in the appropriate linked page along with avatars of all group members. Below each avatar include your name as well as your designated project position i.e. lead programmer, web designer, project manager etc.

**Stage 2** – Friday June 1

*/25 Marks*

*Written Proposal*

Write a detailed proposal that outlines the project that you are attempting to create. Be specific. Describe in detail every feature of your project. It can include flow charts and diagrams to help explain the program. Also include drawings of your GUI or sketches of your windows and web pages. Describe how you will use the items in **Appendix A** in your project. Create a short paragraph for each item. Include an appropriate heading.

**Stage 3** – Friday June 8

*/25 Marks*

*Prototype*

Your prototype should be a simple layout of your program. It should give the user or tester the basic idea of the program without all of the functionality working. It’s evidence of the work that will eventually lead to a final working product. The more complete the better. Full completion however is not expected.

**Stage 4** – Monday June 11

*/25 Marks Presentation*

*Prototype Presentation*

Create short video presentation explaining what you have accomplished so far. Describe all the Appendix A features your project includes to this point. Outline what problems you have encountered and what alterations to your original plan will be included.

**Stage 5** – Friday June 15  
*/50 Marks*

*Rough Program*

A Beta version of the project. At this point most of the functionality of the project should be working. All screens and web pages should exist and have most functionality. The main portion of your program should be coded and fully functional.

You should have available the following:

1. *Website Section with program and general explanation.*
2. Link to source code.

**Stage 6** – Monday June 18

*/100 Marks*

*Final Program -- RC1*

Congratulations! Release Candidate 1 versions of your software are to be handed in.  
Hand in the following:

1. *Website Section with program and explanation*. Update your webpage with screenshots. Provide detailed instructions on how to use your program. Explain any installation instructions. List any minimum requirements needed to run your program. Provide a link to your program. Explain all software and websites that were used to create your project. Make sure to describe how they were used as well. (60 Marks)
2. Digital Link to source code, fully documented and formatted. Write a report that updates your written proposal provided in stage 2. Explain what you were able to achieve in your plan and what you were not (include sub headings divided into Completed and Not Completed). Make sure to include your new revised class map. (40 Marks)

**Final Mark worth 15% of course mark:**

**\_\_\_\_\_\_ /235 x 15% = \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Notes:**

* **no extensions on any stage**
* **failure to have materials available for a particular stage on its due date will result in a mark of zero for that stage (unless a doctor's note is provided)**
* **all members of the group must have all stages available on their website at all times**
* **all marks will be assigned by your teacher on a copy of this outline**
* **the final copy of the marks will be handed to each group at the end of the exam or on the exam review day**

**Appendix A**

* static members
* constants
* inheritance
* encapsulation
* polymorphism
* access methods
* method overloading
* multiple constructors
* overridden methods
* visibility modifiers
* immutability
* sorting
* binary search
* recursion
* file IO
* HTML
* CSS
* PHP