Summative Task

**Teacher:** Ms. Willis **Due Dates:** Jan 22, 2025

Introduction:

This is the final culminating project for the course. This summative assignment is meant to give you an opportunity to demonstrate your best programming knowledge, problem-solving skills and what you have learned.

Your task is to design, develop a **game/interactive picture** of your choice, but must be approved by the teacher. Your program must be original, user friendly and efficient.

Requirements: Your application must:

* Be done in Java – **Make sure that your teacher can run your program in *Processing* and see your code.**
* **Detailed problem description and breakdown of how the application code will work** (add this in the comment shell under the purpose/description of the program).
* Have proper comments to show that you understand **all** parts of the program.
* Use proper programming style including indenting, spacing, proper variable names, function descriptions for every user defined function.
* Use Javabuilt-in **functions**.
* Graphic design must accompany the program.
* Use at least 2D **array**. [optional]
* Be efficient, that is: don’t write ten lines of code that can be written in two.
* The instructions on how to play the game must be **clearly explained before the game begins**.
* Be original**. Copying will result in serious consequences!** If you use **small** parts of a program that is not original or your own,**make sure you indicate the source and explain what it does** in your comments. This should **not** be a major part of your program.

Items to be handed in:

**The Working Program:**

Submit a working copy of your program with **everything** that is required to run it. This should include text files, pictures and other programs(objects) if you choose to use them.

**Due Date: Thursday Jan 22nd, 2025, by 3:30pm on D2L**.

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| Level 3: using the following effectively:   * Content description included in “Criteria for Java Summative” document including Documentation section | Level 4: using the following effectively:   * Everything mentioned in level 3 + * Choice content included from supplemental document in the EXTRA section |

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Rubric is online …

Name:

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| **Criteria** | **Level** (R, 1, 2-, 2, 2+, 3-, 3, 3+, 4-, 4, 4+, 4++,4!) | **Feedback** | |
|  | **Name:** |  |
| **Project marks will be based on: Originality, Creativity and Degree of Difficulty** | | | |
| **Process** (Extra Research Learning) | | | |
| **Thinking:**   |  |  | | --- | --- | | * File IO * Objects * Counters | * Linked list * External Libraries * Project Documentation | |  |  | |
| **Product** (The program) | | | |
| **Knowledge:**  The application is creative and **original**. |  |  | |
| Uses structures familiar to student. |  |
| Uses new structures demonstrating research by student. |  |
|  | |
| **Communication:**  Code is easy to understand with comments and good spacing/indenting. |  |
| Program/application is user-friendly and intuitive. |  |
|  | |
| **Application:**  Program/application shows a thorough application of using the concepts/topics learned in class. |  |
| Shows the appropriate, efficient, useful, and logical use of programming structures: UserInput, Methods, Loops, Math,... |  |
| Works as intended and described in the purpose/description. |  |
| Is bug/problem free and has no syntax or logic errors. |  |
| **Overall** | | | |
| **Product** |  |  |  |
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