**INTEGRATIVE PROJECT IN COMPUTER SCIENCE AND MATHEMATIC**

420-204-RE

**PROJECT**

**DELIVERABLE-1-**

### Team

Karen Florian, Steven Lennox Dy, Darina Horescu

### Team Name

M

### List of Program Courses and Concepts

List all the program courses that you have already token or are currently taking and list their key concepts.

If there is a discrepancy between team members where a team member did not take a certain course, mention it.

|  |  |
| --- | --- |
| Course | Concepts |
| Introduction to Programming | Simple programming concepts such as variable, classes, objects, etc. |
| Data Structures and Objects Oriented Programming | The principles of OOP such as inheritance, abstractions, polymorphism, and encapsulation and basic data structures like arrays and linked list. |
| Program Development in a Graph | Designing and implementing a graphical user interface application with JavaFx |
| Integrative Project in Computer Science and Math | Develop a scientific computer application |

### Project Idea

Each team member must think of and choose a project idea then work with their teammate to select the more convenient ones.

|  |  |
| --- | --- |
| Team Name: | Pludo |
| Team Member’s name and Project Idea 1: | Steven: Cannon Game |
| Team Member’s name and Project Idea 2: | Karen: Waves Simulation (Wave/Interference/Slits) |
| Team Member’s name and Project Idea 3: | Darina: Optics Simulation |
| Team Member’s name and Project Idea 4: | N/A |
| Selected Project Ideas and why: |  |

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### Project Description

Describe you project idea, in brief, all while addressing the following points:

**Concept**

* Describe the physical and/or mathematical concept(s) behind the project.

**Concept Aspects**

* Identify and list the main aspects of the concept such as the problem it addresses, the proposed solution, the solution category among other approaches’ categories.
* The possible variable parameters that would control the user interface animating the concept.

**Typical Input**

* Describe the typical input for the solution of the applied concept to work.

**Expected Output**

* Describe the expected output and how the user interface would look like and what it would allow the user to do.

**Feasibility**

* List the JavaFX, or similar technology, elements, and implementation components that you expect to use to implement the project.
* Justify the feasibility in terms of timeline and team tasks assignment.

**Individual part**

* For each team member, describe their individual part and how it would integrate with the whole project with other team members parts.

Write details here, around 250 words …