



# CS213: Object Oriented Programming Assignment #2 2022-2023

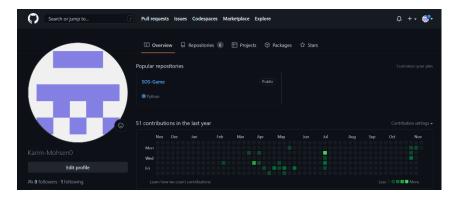
### **Team Members:**

- 1- Karim Mohamed Mohsen (20210509)
- 2- Abdalazez Sabry Abdalazez (20210212)
- 3- Ayman Mohammed Aboukhalifa (20210517)

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### GitHub Accounts Screenshots:

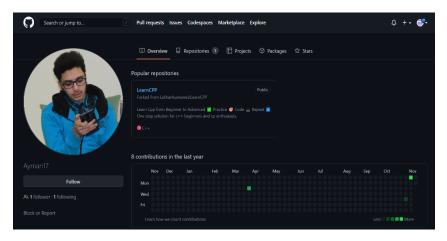
# Karim (20210509):



# Abdalazez (20210212):



# Ayman (20210517):



Task/Name	Karim	Abdalazez	Ayman
Task 1(BigReal)	Constructors	Operator+	Operator >>
	Setters	Operator-	Operator <<
	getters	Operator >	Operator ==
		Operator <	
Task 2 (BankSystem)	BankAccount class	BankingApplication	Client Class
		class	
Individual problems	Problems 2,5	Problems 1,4	Problems 0,3
Group Bonus 1	We all worked together in this task		
Group Bonus 2	We all worked together in this task		

### **Group Bonus 1 Report:**

The tool used for the code analysis is (PVS Studio)

The tool was useful to detect some small optimization issues

But we had a small problem with the tool at first because it couldn't run on VS Code so we had to use it with Visual Studio.

As for the issues that the tool found there wasn't any important issues that would cause a big impact on the code that we developed

For task 1 (BigReal): the biggest issue that the tool found was that we were using the function (find()) to search for a string rather than a character which was using more memory.

For Task 2(BankSystem): There were two issues that we think was important to fix and they are as follows:

1-Not all members of a class are initialized inside the constructor.

2-It's better to use '= default;' syntax instead of empty constructor body.

### **Group Bonus 2 Report:**

The tool we used to generate the UML is MS Visual paradigm.

We think that you shouldn't use this tool if you want it to generate the code for you or save you time, but it is good if you want to map out the program's structure before you start as to keep track of what you've done and what's left to do next.

About the generated code's quality and readability it depends on how you use the tool and what you write as the names of the classes/functions, but generally most of the times the code that the tool produces will be clean.

