

Cairo University

Faculty of Computers and Artificial Intelligence



CS213 – Programming II

First Semester 2022 – 2023

Group A

Assignment #1 Report

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Task 1 - Classes, objects, abstraction and operator overloading

Work Done:

- Hossam Ahmed Fouad – 20210124
 - a - Initialization of number from string constructor - `BigDecimalInt (string decStr)`
 - b - Initialization of number from int constructor - `BigDecimalInt (int decInt)`
 - c - Operator overloading for addition (+) to handle addition on strings for `BigDecimalInt` Class - `BigDecimalInt operator+ (BigDecimalInt anotherDec)`

- Omar Gaafar – 20210263
 - d - Operator overloading for subtraction (-) to handle subtraction on strings for `BigDecimalInt` Class - `BigDecimalInt operator- (BigDecimalInt anotherDec)`
 - e - Operator overloading for inequality sign (<) - `bool operator< (BigDecimalInt anotherDec)`

- Mohamed Waleed – 20210362
 - f - Operator overloading for inequality sign (>) - `bool operator> (BigDecimalInt anotherDec)`
 - g - Operator overloading for equality sign (==) - `bool operator== (BigDecimalInt anotherDec)`
 - h - Operator overloading for assigning operator (=) - `bool operator= (BigDecimalInt anotherDec)`
 - i - Member function that returns size of number - `int size()`
 - j - Member function that returns sign of number - `int sign()`
 - k – Operator overloading for output operator (<<) - `friend ostream& operator << (ostream& out, BigDecimalInt b)`

Task 2 – Individual problems from Sheet 1

Problems Done:

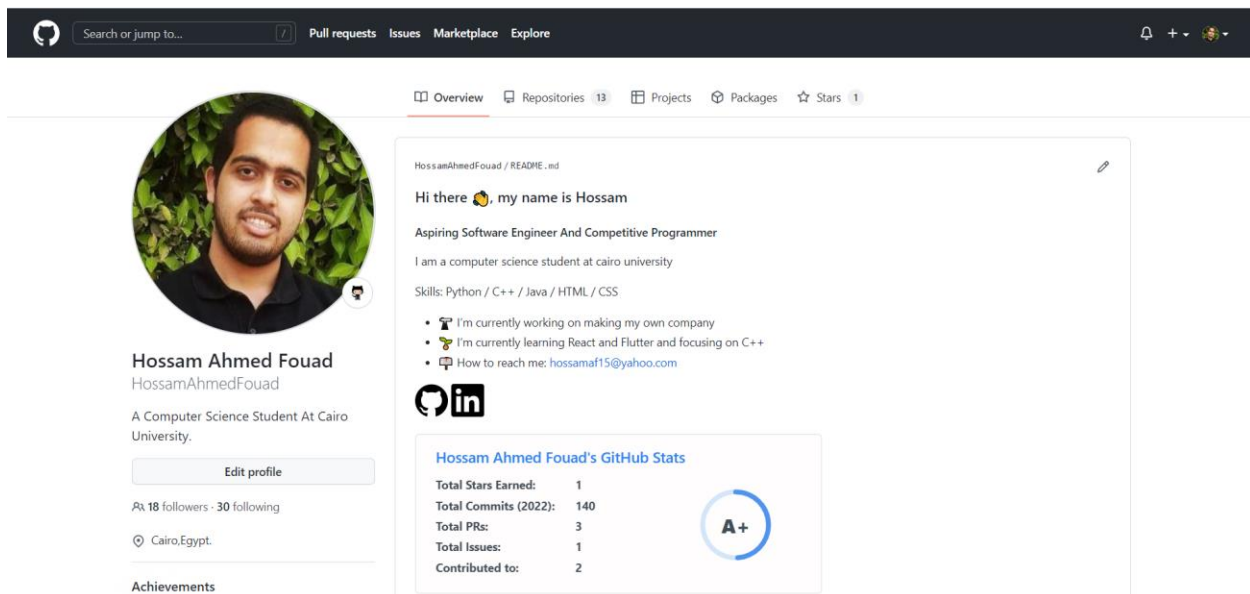
Hossam Ahmed Fouad – 20210124: 0 – 3 – 6

Omar Gaafar – 20210263: 1 – 4 – 7

Mohamed Waleed – 20210362: 2 – 5 – 8

GitHub Accounts

Hossam Ahmed Fouad – 20210124



The screenshot shows the GitHub profile of Hossam Ahmed Fouad. The profile includes a circular profile picture, the name 'Hossam Ahmed Fouad', and the username 'HossamAhmedFouad'. The bio states 'A Computer Science Student At Cairo University.' and 'Aspiring Software Engineer And Competitive Programmer'. The skills listed are Python, C++, Java, HTML, and CSS. The profile also shows 18 followers and 30 following. The 'Achievements' section is visible. The 'Hossam Ahmed Fouad's GitHub Stats' box shows: Total Stars Earned: 1, Total Commits (2022): 140, Total PRs: 3, Total Issues: 1, and Contributed to: 2. The profile is set to public and is located in Cairo, Egypt.

Hossam Ahmed Fouad
HossamAhmedFouad

A Computer Science Student At Cairo University.

[Edit profile](#)

18 followers · 30 following


📍 Cairo, Egypt.


Achievements

Hossam Ahmed Fouad's GitHub Stats

Total Stars Earned:	1
Total Commits (2022):	140
Total PRs:	3
Total Issues:	1
Contributed to:	2

Omar Gaafar – 20210263

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Omar Gaafar
OmarGaafar1

Unfollow

8 followers · 9 following

Achievements



Overview Repositories 6 Projects Packages Stars 1

Popular repositories

Wreckage_Warehouse Public

Wreckage_Warehouse is a game that is for chaos makers . So if you are one of them , then this game is for you , jump in and do your job :)

☆ 1

Two-Squares-Game Public

This is a multiplayer game of two players, each player can cover two adjacent numbers only , whoever cover the last possible numbers wins

Python

100-Game.py Public

This is a multiplayer game of two players, each player enters a number from 1 to 10 , whoever makes the score reaches 100 wins.

Python

Problem-Solving Public

This Repo. will contain the code of the problems that I solved :)

C++

Obstacle-Assult-Game Public

Third Person Game >> You will face some obstacles that will try to prevent you from achieving your objective. So Can you make it or not :)

C++

Treasure-Hunter-Game Public


First Person Game , Based on deduction and solving mysteries , by grabbing objects and use it . Dive In and be your own Holmes


C++

332 contributions in the last year

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
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Mohamed Waleed – 20210362

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Mohamed Waleed
Snowkaai

Unfollow

4 followers · 4 following

Highlights

PRO

Block or Report

Overview Repositories 1 Projects Packages Stars

Popular repositories

Rational-Calculator Public

C++

8 contributions in the last year

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Mon												
Wed												
Fri												

Learn how we count contributions

Less More

Contribution activity

October 2022

Created 3 commits in 1 repository

HossamAhmedFouad/CS213-Assignment_1 3 commits