SCHOOL OF ENGINEERING AND TECHNOLOGY

COURSEWORK FOR THE

BSC (HONS) INFORMATION TECHNOLOGY; YEAR 1

BSC (HONS) COMPUTER SCIENCE; YEAR 1

BSC (HONS) INFORMATION TECHNOLOGY (COMPUTER NETWORKING AND SECURITY); YEAR 1

BSC (HONS) SOFTWARE ENGINEERING; YEAR 1

ACADEMIC SESSION 2023; SEMESTER 2,3,4

PRG1203: OBJECT ORIENTED PROGRAMMING FUNDAMENTALS

DEADLINE: 31 JULY 2024 11:59PM (Wednesday)

INSTRUCTIONS TO CANDIDATES

• This assignment will contribute 20% to your final grade.

• This is a group (maximum 5 students) assignment

IMPORTANT

The University requires students to adhere to submission deadlines for any form of assessment.
Penalties are applied in relation to unauthorized late submission of work.
Any work submitted after the deadline, or after any period of extension granted shall be marked as a Fail or awarded a zero.

Academic Honesty Acknowledgement

"I Kim Hyunwoo, Lee Ming Hui Isaac, Cyril Clement, Gavindra Ramadhansyah Fadyl, Lee Cheng Yuen (student name). verify that this paper contains entirely my own work. I have not consulted with any outside person or materials other than what was specified (an interviewee, for example) in the assignment or the syllabus requirements. Further, I have not copied or inadvertently copied ideas, sentences, or paragraphs from another student. I realize the penalties (refer student handbook undergraduate programme) for any kind of copying or collaboration on any assignment."

김현우, leeminghuiisaac, Cyril, Gavin, Leechengyuen 31.07.2024 (Student's signature / Date)

Group Number: 50

Team Members:

No	Name	Student ID
1	Kim Hyunwoo	22021984
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3	Cyril Clement	23094204
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5	Lee Cheng Yuen	22018279

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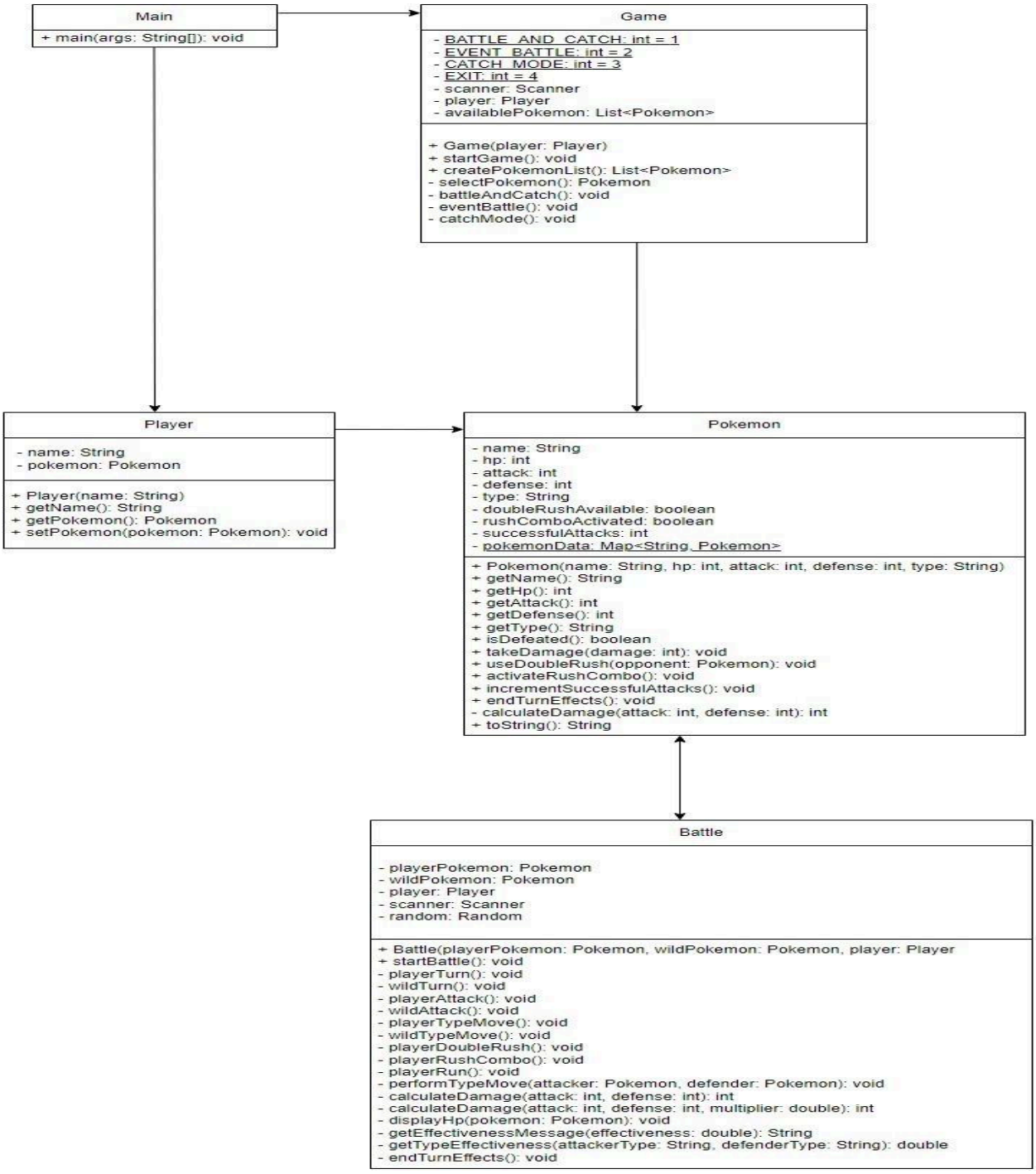
UML Diagram

UML diagram (class and class relationship diagram) that includes all the classes and class relationships of the system.



Add-on Features

A description and justification of the add-on feature(s) you have implemented in the assignment.

Two add-on features

Two add-on features have been added to improve the gaming experience: the double rush feature, and rush combo feature.

The "Double Rush" feature allows a Pokémon to perform two consecutive attacks in one turn. When activated, the Pokémon will make two different attack attempts against its opponent, each dealing damage as per the standard attack mechanics. This adds another layer of strategy to the game which allows players to have an additional offensive option, by dealing a large amount of damage to the pokemon. It helps to keep the gameplay exciting and is balanced by only being able to use double rush once during a battle.

The “Rush combo” feature can be activated when Pokémon has achieved a series of successful attacks (e.g., after 3 consecutive successful attacks). When activated, "Rush Combo" allows the Pokémon to perform a powerful special combo attack that deals enhanced damage. The "Rush Combo" incentivizes players to focus on maintaining a streak of successful attacks, which encourages players to improve and adapt their strategy to maximize effectiveness, adding more strategic depth to the battles.

Both these features help to keep players engaged during battles and help them to have a sense of progression and improvement.

Video URL

YouTube link: https://youtu.be/0mM3wahnFsM