



OBJECT-ORIENTED PROGRAMING REPORT

PROJECT: MEGAMAN

GROUP: 10

MEMBERS:

- NGUYỄN THANH PHONG - ITITIU19040
- HUỖNH HỌC LÂM - ITITIU19022
- HÀ MINH KHOA - ITITIU19020

I. Introduction:

- For this object-oriented programming project, we built a game called Megman which is a very famous game that provide memorable, enjoyable and exciting experience for many gamers in the late 1900's and early 2000's.

II. BASIC RULE AND FUNCTION OF THE GAME:

- The basic rule of this game is that the player controls the main character, megaman, travel through while defeating enemies placed throughout the map.
- The player can use button such as "Z" to make megaman jump, holding "Z" will make megaman jump even higher, and "X" to shoot bullets at enemies.
- If megamn make contact with an enemy or an enemy's bullet, he will lose a small amount of health. If megaman loses all of his HP, game over.
- The megaman's health will be represented with a yellow bar in the left-hand corner.
- When the player reaches the final stage, there will be a boss awaiting for the player arrival.
- The boss will have a considerably larger health pool and have an interesting and unique type of shooting, therefore, making the match between megaman and the boss will be a bit more difficult and compelling.
- In order to win the game, the player must defeat the boss before he loses all the main character loses all his health.

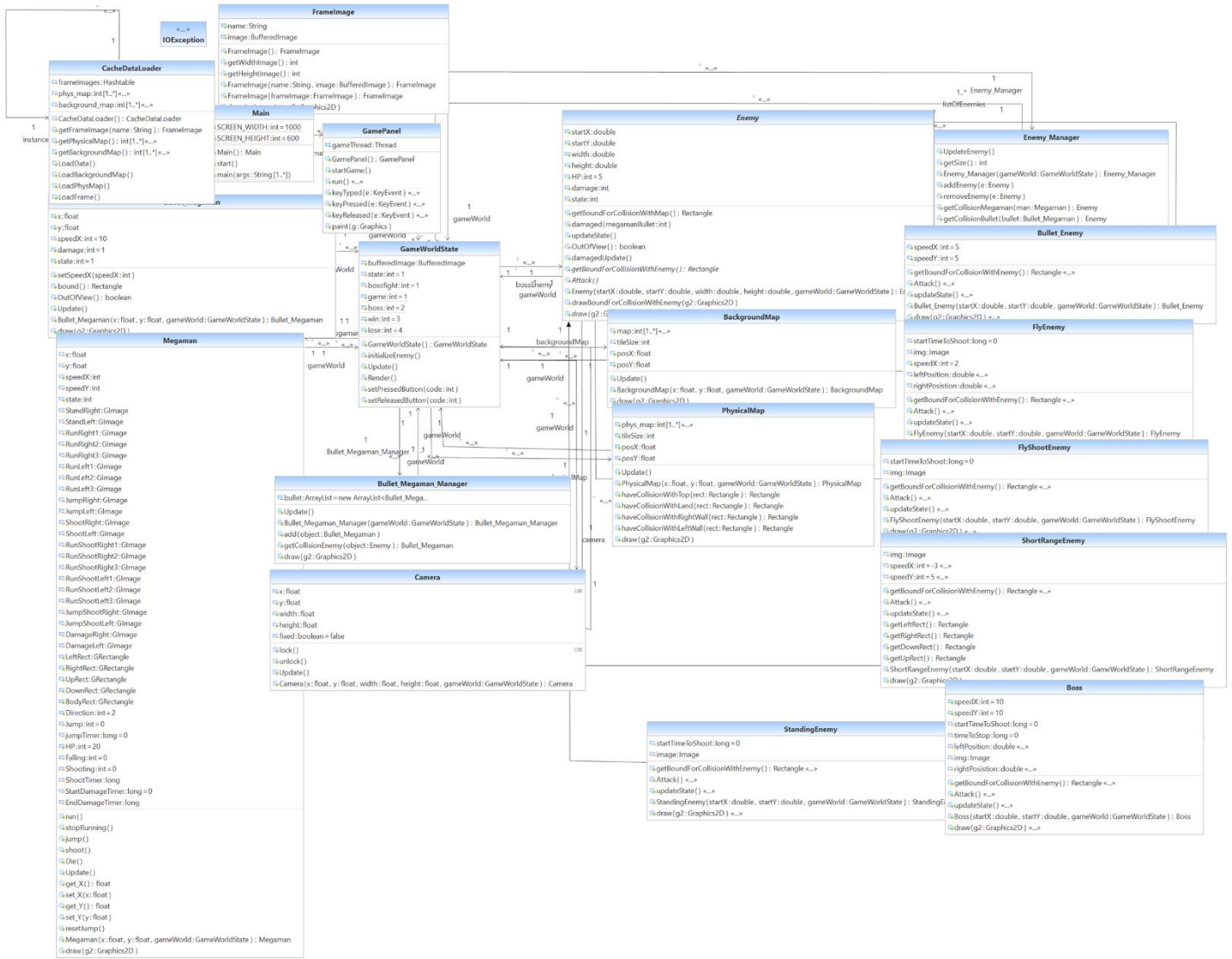
III. Contributors:

- We divided the project into 3 main parts that we thought would create a functional, logical and interesting game: Map, Megaman, Enemies.
- Each member of the team is in-charge of a major part of the project:
 1. Huỳnh Học Lâm: Leader of the team, main idea contributor, debugger, in charge of megaman and bullet megaman classes as well as implement in GameWorldState class.
 2. Hà Minh Khoa: idea contributor, debugger, background and physical map designer, in-charge of physical logic collision of the map.
 3. Nguyễn Thanh Phong: idea contributor, debugger, in charge of creating enemies, enemy bullets and enemy manager as well as boss.

IV. GitHub link:

<https://github.com/baryenmunich123/OOPProject>
(github.com)

V. UML diagram:



(There is an image an an umlcd file included in the github that everyone can access to have a better view of the uml.)

VI. Overall:

- In conclusion, our team has learnt a lot of new knowledge and coding skills throughout the project such as: dealing with deadline, teamwork, git operation, utilize OOP's knowledge to implement this game.