Project\_Game:

We started working on the project around the beginning of December due to lacking time since we both work around 20 hours a week and are athletes. However, we got it done and learned a lot about using libraries to create games and how the logic behind games work. Also, we now have much better understanding about Object oriented programming and how extremely important it is in game design.

At the beginning, we met on Saturday to figure out how to use android studio and how to display a window on the screen. Since we decided to make a game, we figured out that JAVA would be a better choice than c++ because of the amount of support it has on the internet and the variety of libraries it supports. It was very confusing how to link libGDX library to android studio and get its window compiled. However, once we did it, things started to get easier.

Our next meeting was the next weekend and we stayed programming for 12 hours straight. We basically were learning how to use the library and its built-in classes and functions and how to draw objects on the screen, animate them, get commands from user, and the hardest thing was to figure out how to move the screen when the user is moving.

We met two days after that and we started programing our game and we also spent around 8-10 hours programming. We were basically writing chunks of codes and once it works, we try to transform it into OOP style. We started by drawing a small box instead of helicopter and then we gave it a position, velocity, and acceleration. Then we figured out how to make the screen move once the box get close to the edge. Then we made other boxes and we made collision detection methods and it WORKED!. After that, we made an algorithm to generate boxes randomly and reposition those boxes once they get behind the screen. At the end, we ended up with a game that has boxes with different colors and collision was working.

On saturday and sunday before the submission, we were transforming the boxes into real sprites and animations, and we added a start menu and a game over menu and we also made the game gets harder as the score increases.