# Phase four Report

## *The Game:*

1) Summery of the game and how to play.

Our game is a maze type bank robbery where the main character controlled by the user(the bank robber) will be running through the maze with the goal of getting to the escape helicopter, with out colliding with the barriers placed down by the police which are trying to catch the main character(the robber).Further more other than the static barriers placed down by the police there are also moving barriers(police cars) that will move closer to the player after every tick of the clock(after each move).

The player must then try to get to the escape helicopter with the greatest score possible. There will be two main categories of points that the player can gain by going through the maze. One being the fuel needed for the car that the main player(robber) is driving. The second way the user can gain points in the game is to take a path though the maze that would coincide with the randomly placed bags of money(rewards) in the maze. Once at the escape helicopter the amount of money collected will determine the players score. Moreover, if enough fuel is not collected by the player the car(driven by the player) will run our of fuel and the player will loos the round.

The objective of the game is for the player to take a path in the maze that ensures that the player does not run out of fuel and also gain/ collects as many of the randomly placed money rewards as possible. Furthermore, the player will lose a set quantity of fuel every time there is a collision with one of the static barriers place down by the police. If the player collides with other barriers other than the ones place down by the police(ex. Colliding with the maze walls, which in our case is made of grass) the player will not lose fuel but will lose the move for that turn(the player will waist time trying to do something that is not allowed in the game).

2) Modifications made to the original plan and changes made.

The biggest change/ modification we made to our original plan, was the change made to our UML diagram. Although we initially thought we had a good understanding of what we wanted to do and how we needed to do it, as we actually started developing the project, it became apparent that some

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things needed to change. We ended up changing some of the layout of the UML diagram and associations and aggregations made between different classes and objects. An example of this would be the changes made to our level generator and enemy/main player generator, as we had to refactor those to some extent to make them work together more smoothly, since interactions between those two classes are very important for the proper function of the game.

3) lessons learned.

The biggest lesson that we learned while working on this project was, to get comfortable with team work. The coding and creating of classes, was for the most part easy enough with a little bit of effort but what was not so straight forward was how to split the work among ourselves and work effectively in a group in a productive way. This took more time for us to fine tune and it for sure was one of the most important things we learned. When the work is split among group members evenly and in a way where each member is using their strength the best results are achieved.

## *Tutorial:*

Below is a basic tutorial of how to play the game and things to watch out for, more information can also be found in the game overview section of this report, as well as the read me file in our git hub repository.

1) game play:
Once the JAR file is executed and the game starts the following screen will be displayed.
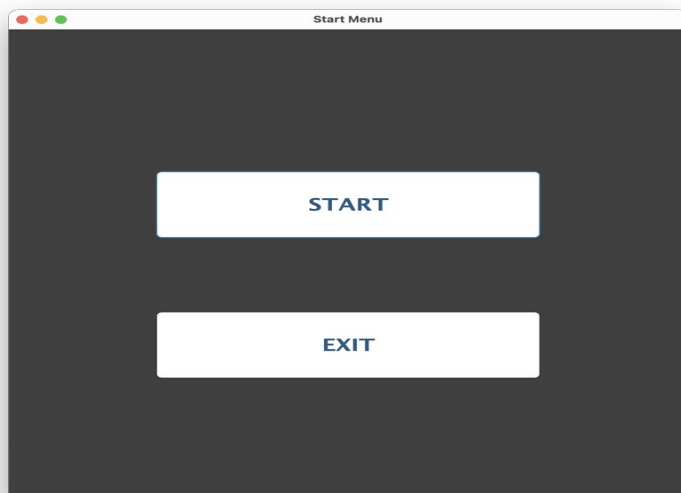
At this point the player can press the start button to start the game or the exit button to exit the game(duh!).

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Once the game is started you can see the amount of time left to complete the level on the top banner , as well as the number of points gathered. Furthermore, the car is controlled using the WSDA keys.

The player needs to pick up the red fuel canisters so that the car does not run our of fuel.



The player(in the red car) must also gather as many of the green money stacks as possible to maximize the number of points while avoiding getting stuck and caught by the blue police cars that start chasing the player once the game starts. Moreover, the player must try to make it to the escape helicopter on the top right corner before the time is up to pass the level.
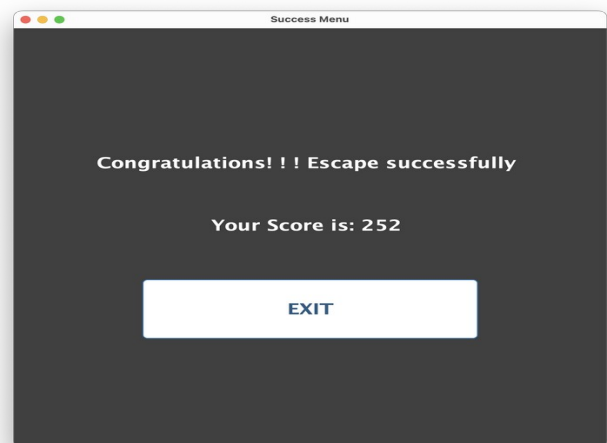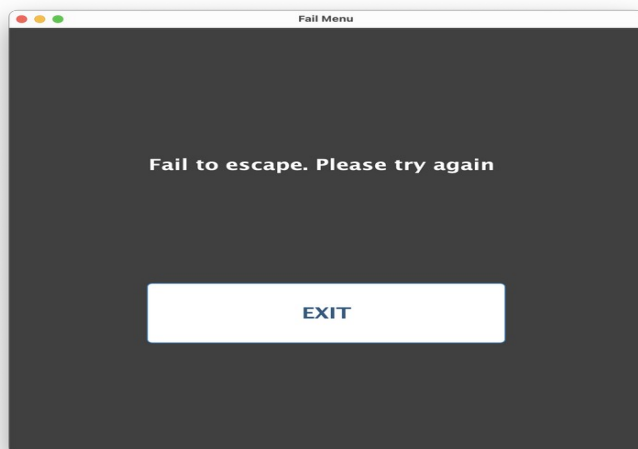




The two screens above will appear based on whether the player has failed to pass the level or has passed the level successfully. At which point they can view their score for that level and select the option to quit the game or try again.