Task 5:

https://www.youtube.com/watch?v=laiMDwYlplA

Task 6:

When comparing Vector3 distance type code to a star pathfinding, one can note that vector 3 distance uses a straight line method to move from one object to another until the required distance between the two objects is met no matter what might be in the way of its pathing, it will always move in a straight line manner. On the other hand a star pathfinding works differently as it is trying to calculate the shortest route whilst at same time trying to fins the path to its adjacent node, and it also take into consideration any obstacles that might be in the way of its pathing therefore it creates a path around them whilst trying to keep its shortest route.

Task 7:

The way I stored the player score was with the use of unity inbuilt player prefs. This works by saving your variables by setting values to a file then getting those values from the file when you need to display them or use them. Player prefs gives you the ability to store data persistently, which aids when you want to keep that data saved from one scene to the other, as I did in the timer. When you want to store persistent data from one scene to the other is a good idea to use player prefs as this does the job. The only downside of player prefs is that they are easily editable, so one does not want to store sensitive player information in them as they are easily accessible by other players.

Task 9:

Distributed too: mother, father & brother.

Explanation: Before starting the game, I explained that to win the game there will be three levels that they had to play through without dying so they can win. The aim of level 1 is too eat six foods before getting to the finish line. The aim of level 2, is too is to eat three foo objects without getting hit by the enemy snake, and I also explained that the snake will grow if it eats food. And for the last level they had to eat another 3 foods without getting caught but in this level obstacles will move so they had to be careful of that. Once all three are finished they have won the game.

Observations Made:

- Enemy snake was too fast in some situations and they could not keep up. (1)
- At certain places the food spawned to close to the wall, and the player thinks he is not going to hit the wall, but indeed he does. (2)
- I could have made the are a bit bigger as sometimes it looked to cluttered and not many options where the player can get lost. (3)
- Some feedback from that was that I should improve how the game looks. (4)
- The moving obstacles should have been a bit faster and cover a bigger area as it didn't effect their gameplay that much. (5)
- The food amount that they had to eat from one level to another was too little. (6)

Game Report:

Overall I think that the game I managed to create fulfilled most of the criteria of the assignment, but if I had to re do it I would change some stuff based on what I observed. First off, I would start by making the camera size a size fifteen or twenty instead of ten, this would have given me more room to work with and I would have been able to make a more complicated maze, with more food spawned, which would make it less simple to play and at the same time give the player something to think about whilst playing (solving the maze). This would also reduce the visual clutter on the screen as the obstacles looked a bit to large for a camera size ten (3). I would also re arrange the food spawn system to give a bigger offset in the x-axis and y-axis so that the spawned food would not have been that close to the wall, therefore this would be great in making the player experience better and also would not be misleading to him (2). I agree with the observation made that the enemy snake was too fast, as in some instance since the game scene was not that big the player did not have a lot of options to go around and the enemy snake would catch up quite easily, this could have been easily solved by increasing his wait time in the move towards method (1). Another thing that I would change would be, the moving obstacle speed would be increased by double that it is at the moment, and made them twice the size as well, as they were almost negligible in the players decisions. Another option would be to randomize the waypoint that they should go to next, which would have been better as the player does not know the pattern of the movement (5). To make the game more challenging the required food amount from one level to the other could have easily been higher as it was evident that it was too easy, but as I was in the making of the game I did not notice that it was that easy, also a bigger camera size would have helped as it would have given me more room to work with (6). Finally one of their comments was to improve some of the UI objects and also how the snake looks, obviously if this was not a time restricted assignment, this can be easily improved.

Reasoning why I did not have 15 commits:

I did not want to fill my github with a bunch of small commits that barely had changes and since the big chunk of the assignment was done within a 2 week time span (as other assignments where due before it), I was doing big parts of coding at the same time, that is why I did not manage 15 commits.

Github Link:

https://github.com/noasulMSD61A/SoftComputingAssignment2