# Game Summary

The game I have made is a side-scrolling, physics-based truck driving game. It uses the Phaser 3 engine coupled with the Matter.JS physics engine to create a fun 2d game experience.

## Objectives

The main objective of the game is to earn as much money as possible. This is achieved by carrying crates of different values on the back of a truck, from the start of the map, to the destination. Along the way, the player will have to control the speed of the truck as it goes over obstacles so as to avoid losing crates. The money earned at the end of each level is calculated by multiplying the number of each type of crate by their value.

## Rules

The only rule of the game is to keep the crates in the truck until the end of the map.

## Gameplay

The game starts on the main menu where there are buttons to take the player to a loadout screen or a highscores page. Once the player enters the loadout screen, they will be able to select crates of different values to load onto the struck. The user’s money is displayed on this screen. A green marker is placed on the image of a truck to show where the crate will be placed. A maximum of 4 crates can be added. Below each crate two values are displayed: the cost of the crate, and the reward for getting the crate to the end of the level. When a crate is hovered, information about it appears in a box below it. When a crate is clicked, the user’s money is reduced by the cost of the crate. If the player’s money is not enough to buy a crate, the crate cannot be clicked.

Once the player is ready, they click the “Start” button. The game is a side scroller; pressing the right arrow key moves the truck forward, pressing the left one slows the truck down or reverses it. The background has a parallax effect to make parts of the background look closer or further away. The player is trying to keep the crates of the truck inside the truck until the end of the level, while trying not to drive too fast over obstacles. When the player reaches the end of the level, another screen will pop up showing the player’s rewards for completing the level. The player’s new money will be a calculation of the reward for each crate multiplied by the number of the type of crate. There will also be a reward for the speed at which the level is completed. Once finished, there will be an button to proceed to the next level. There are currently a total of a three levels, each with different obstacles and different scenery.

Some other small features of the game: when a TNT crate collides with the ground, an explosion is caused, which adds force the truck away from the explosion. The colour of the truck can also be selected before the game starts.

# Storyboard

[gameplay screenshots]

# Implementation specification