Pension Runner Design Document

Group 2

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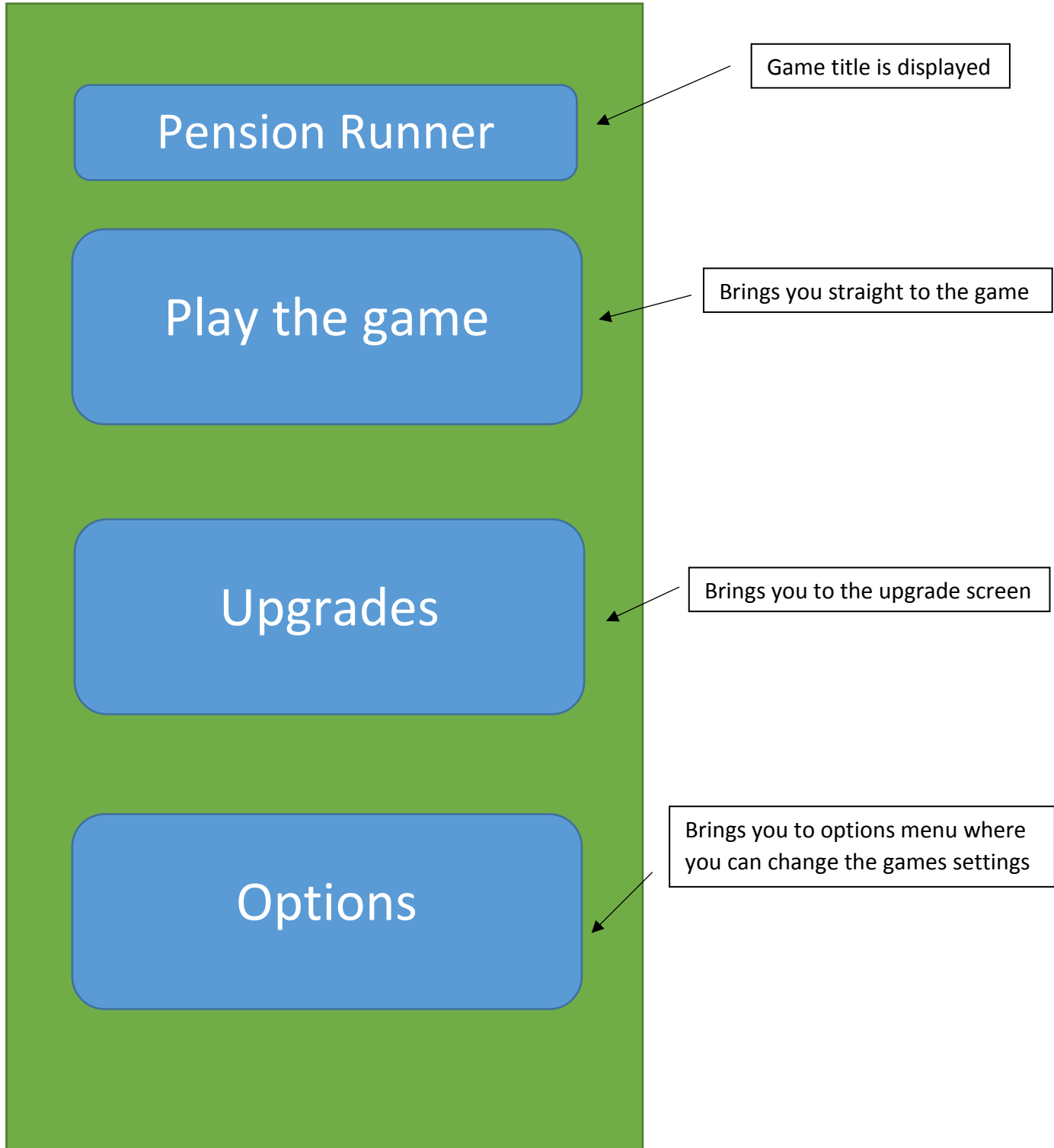
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Title Screen

The title screen will have the name of the game and the company logo. There will be text saying "Touch to start". And when you touch or click the screen you will be brought to the main menu.

Example outline of game screen

Pension Runner

Tap To Start

Tap here to go to main menu
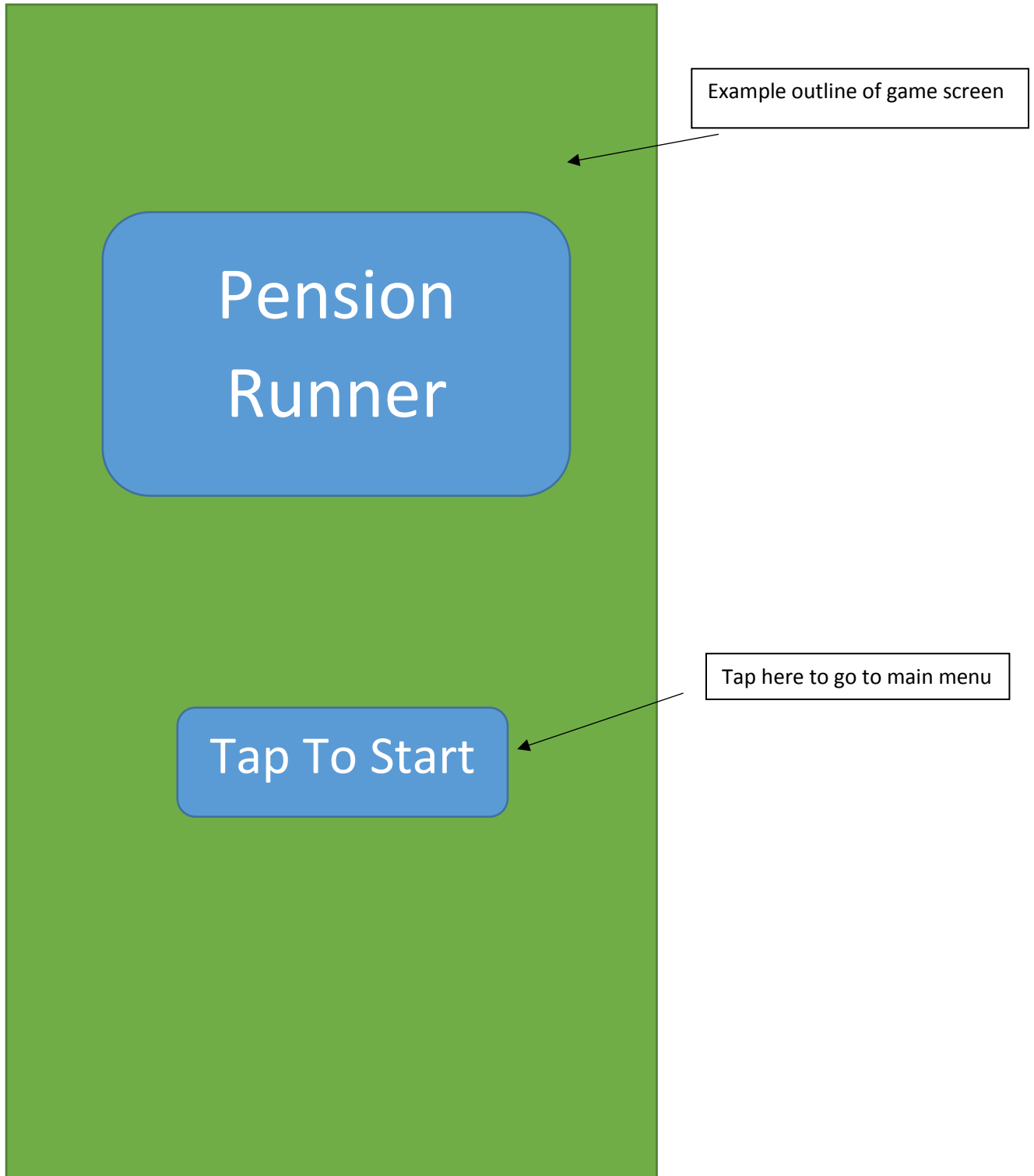
Main Menu

The main menu will display after the player clicks or taps on the title screen. On the display will be an option to go straight to the game, to go to the options menu or to the upgrade screen.

Pension Runner	← Game title is displayed
Play the game	← Brings you straight to the game
Upgrades	← Brings you to the upgrade screen
Options	← Brings you to options menu where you can change the games settings

Options screen

The player will have 3 options when they get to the options screen.

- Mute sound effects
- Mute music
- View credits

Mute sound effects:

There is an option to mute the sound effects of the game. The player will click or tap the on or off button to make their choice.

Mute music:

The player also has the option to mute the music in the game. The player will click or tap on the on or off button to make their choice.

Credits:

Credits will be displayed at the bottom of the screen.
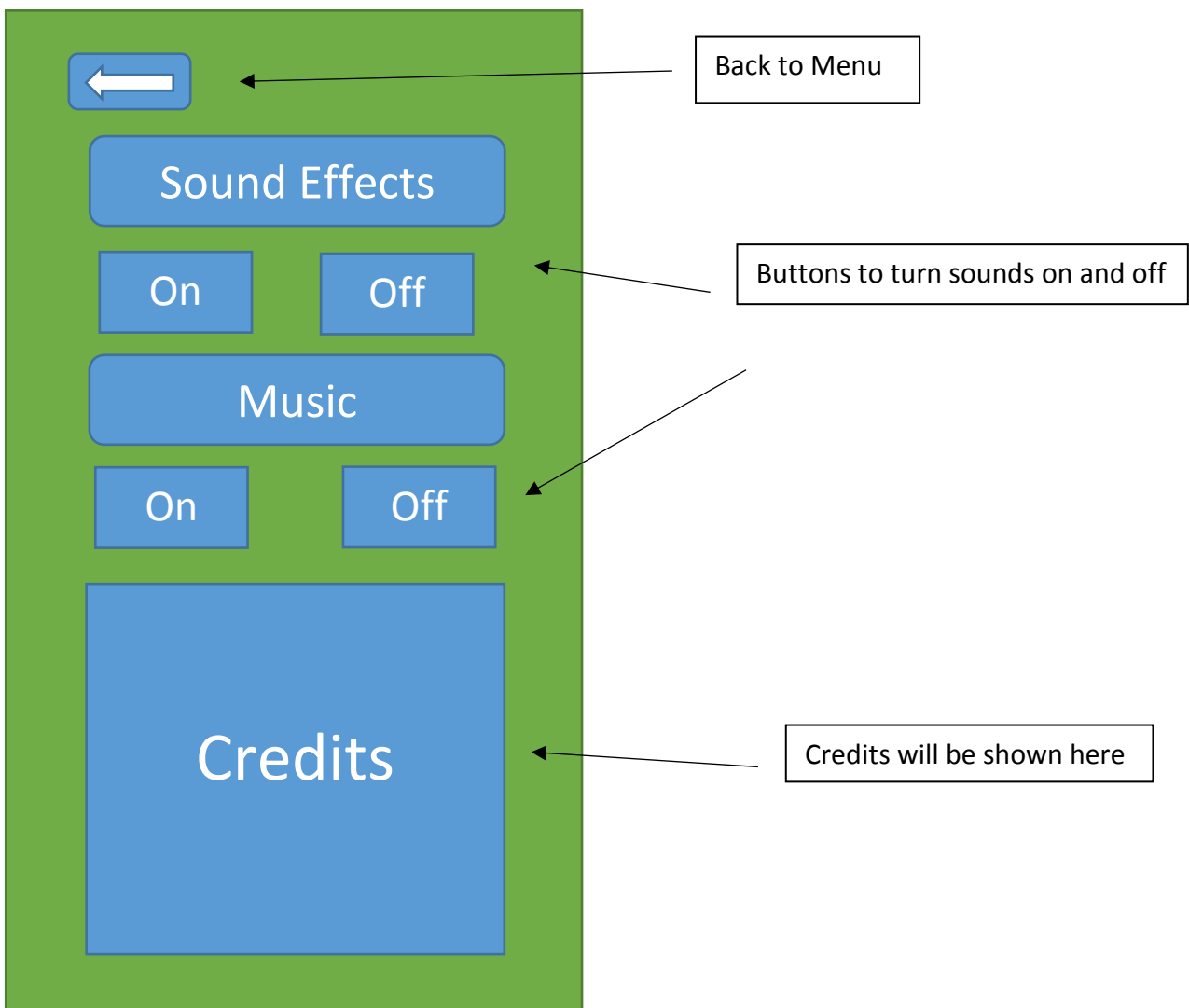
Main Gameplay Screen

Player:

On the main gameplay screen the player is represented by their current car that they either start with or have upgraded. The car can move left and right, and has a boost function to increase speed.

Obstacles:

Traffic cone:

There will be an obstacle represented by a traffic cone. When the player hits the cone their speed will be decreased, but if they hit too many they will lose the game.

Manhole:

Another obstacle will be an open manhole. When the player hits the manhole, their handling will be lowered for a set amount of time.

Tyre spikes:

The tyre spikes will spread across two lanes to prevent the player from speeding between obstacles

Pickups:

Fuel tank:

Rare spawn that adds fuel to your tank automatically when you run into it.

Slow down:

This pickup allows the player to slow down time for a few seconds to allow them to avoid obstacles easily.

Out of bounds:

Out of bounds will be represented by a dirt track at the edges of the screen. When the player drives on this their speed will be reduced until they return to the road.

Acceleration:

Pressing the up arrow button will increase the players speed as long as the player holds the up arrow.

Deceleration:

Pressing the down arrow will act like the brakes in a car and slow you down.

Grannies:

Hitting grannies will increase your money as you collect their pension.

Game over:

The player gets a game over when they hit too many obstacles or run out of fuel. When the player loses they are given the option to play again or return to the main menu.
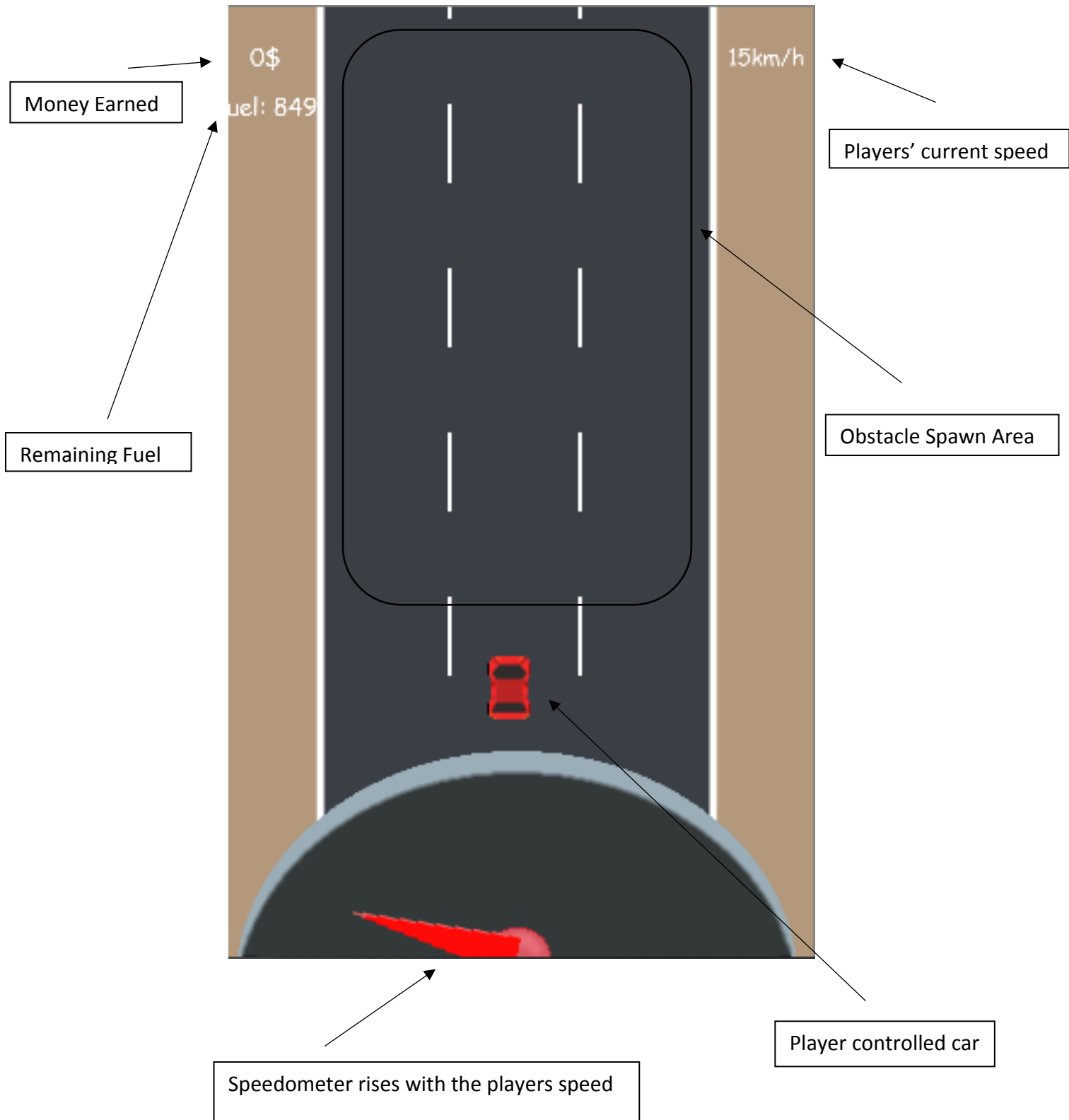
Scoring and Money

o Money

The game will have a money system implemented into the gameplay. The player will be able to earn money by running over grannies in the game. The player will be earning more money from the grannies by running over them at higher speeds. The final formula for the game when player collides with a granny will equal to the following: money = money + (0.25*(carSpeed*5)), where the original money amount starts at 0(for first play through) and carSpeed is equal base speed.

o Scoring

The game will have a scoring system, where the player will be able to earn points during a run. This should incentivise the player to go faster and avoid obstacles, as the player will earn points for: length of the current run (the player earns points every second of the run) and by speed (The player will earn extra points for going at higher speeds). The score may be displayed during the run (TBD) and it will be displayed at the end run screen once you die. We'll have a high score displayed at the end screen.

Gameplay Screen Layout

Money Earned

Remaining Fuel

0$

uel: 849

15km/h

Players' current speed

Obstacle Spawn Area

Player controlled car

Speedometer rises with the players speed

Upgrade Screen

Upgrades to car

- o Acceleration

    The player can upgrade their acceleration which allows their car to speed up faster

- o Handling

    This upgrade will give the player more control to their movement.

- o Fuel

    The player will start out with a low amount of fuel, and when they upgrade they will increase the amount of fuel

- o Defence

    When you upgrade your defence, the amount of speed you lose when you hit obstacles

The player will be able to spend money to upgrade the different aspects of their car listed above. The upgrade screen will be presented as if you are in a mechanics shop and you are buying from the mechanic
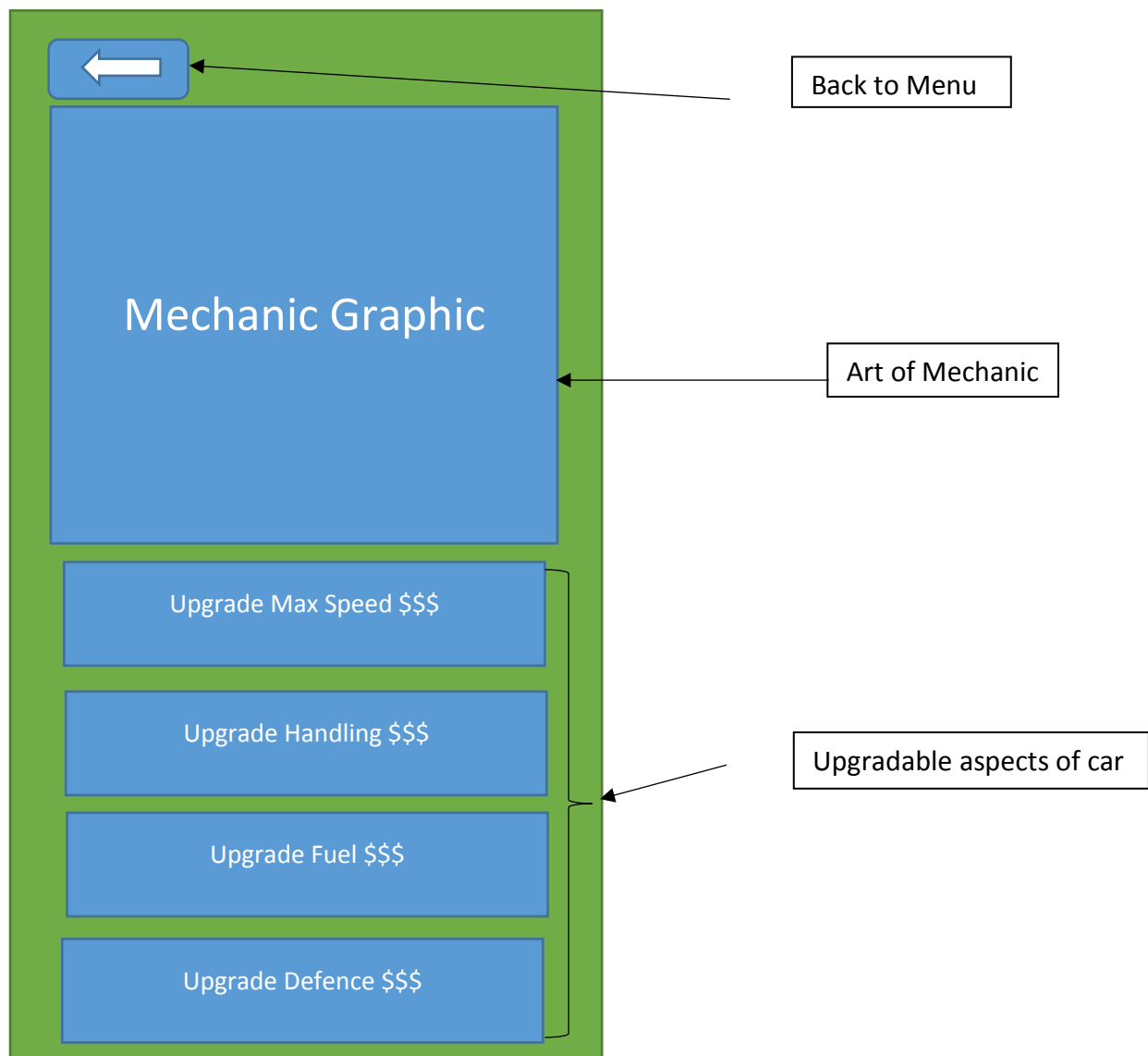
Core and Core loop

The core of the game is speed. This is reinforced by the controllable speed of the car. The mechanics are set up to make the player want to go faster. The player earns more money from hitting a granny at a higher speed. This money is used to upgrade the car in the upgrades screen which increases the variables of the car.

Core loop: