Speed Spy (Working Titled) Game Design Document Mandip Sangha And Mark Reffel Date January 26, 2017 Revision 0.2

Speed Spy is a game that the player control a vehicle dodging other vehicles and enemies while with the goal of obtaining the highest score possible. mix of Temple Run and the old spy racing games. Also I'm not sure on legality of justifying other games. I know this is documentation but still. Might be better off describing it in fuller detail vs referencing another game. The game itself is a 3d 2d game vertical scroller that has enemies, and resource pickups. Throughout the game the player controllers a vehicle move horizontally through their input and vertically by the game itself. The player will achieve points by traveling further vertically and by getting bonus points for destroying enemies vehicles. The vertical scroll speed increases by the distances the player has traveled (the exact distance is still to be decided on). The game ends when player's live equal zero.

Game Story

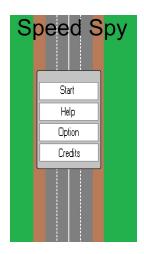
The doesn't have a story.

Game Screen

The game will have seven screens the start, option, credit, upgrade, help, game over, and live game screens.

Start Screen

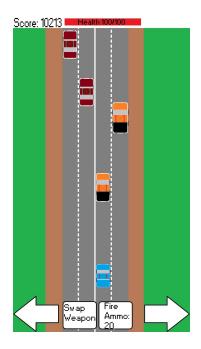
The start screen will have the game title at the top, middle of the screen. Followed by a start button and under that button a option, credit, and help button where each button does there respective actions. The screens background image will of the live game background with a border around the buttons.



Live Game Screen

This game screen will have the player's score in the top left corner, in the top right corner, the player lives and in the top middle the players health. The screens background will be a road with four lanes and two dirt lanes which player and enemies will be on. The vehicle that the player can control will use a swipe in the right or left direction to move the vehicle in that direction into one of the other lanes. On the bottom of the screen there will be two buttons. One of which will have a picture of the active weapon and its current ammo and the other button will switch the primary weapon with the secondary weapon.

I think we should make these swipe or gesture controlled instead of buttons as the cleaner the ui looks the better. The bottom two corners of the screen will have a button in each corner that moves the player horizontal and between those buttons will be two more buttons that fire player's selected weapon and the other will cycle through the players weapons. I also think these should be implemented so that the buttons have images of selected weapon and secondary. Also I think there should only be 2 weapons to swap between so players choose what to have equipped or something like that. And you could have either a switch button or two individual fire buttons. Those two buttons will also display number of ammo left for the weapon and which weapon is selected.



Help Screen

The help screen will provide the basic information on how to play the game. Design to be determined

Option Screen

This screen will display the game option such sound control for the music, to other option still to be determined. The exact design still to be determined. Some options might include music and sound effect toggles.

Credit Screen

The credit screen will provide the credits for who made the game. The page will display the credits in a list with a back button on the bottom right.

Upgrade Screen

This screen is one where the player will be able to buy upgrade for their vehicle and vehicle weapons with the points they have earned.

Gameover Screen

This screen will display the high scores that have been achieved as well as a way to start the game again or go to the start screen.

<u>Player</u>

The player sprite will be a car with the selected weapon attached. The player has three lives that it lose when it hits another vehicle or when it's health bar is depleted which depletes as the player is hit by enemy weapons or when it drives on the dirt. The player can move it sprite right or left going between its lane by pressing the arrow buttons on the by swipe screen in the direction. The player can fire his weapon by selecting the fire weapon button or swap button the weapon to switch their weapon to the secondary weapon. if they have addition weapons by selecting the swap button. The sprite itself is also vertically moved along up by the game.

Enemies

There will be many types of enemies some example are an enemies that collides with the player. Enemy cars that fire weapons back at the player. Enemy drones that fly over the player firing weapons at it. More to be add at another date.

The game offers a number of different types of enemies that will appear as the player progress further in distance. With the general theme throughout all the enemies types being that they can be dodge and will run off the screen. All of the enemy type also increase in health as the distance the player travel increases.

Collision Car

This enemy type is the basic enemy type. This type drive in both oncoming traffic and with the flow of traffic. The main damage this type can do is collide with the player's vehicle which is apart of all vehicle.

Machine Gun Sport Car

This type of enemy use a sports car with machine guns on it as a model. This type drive in both oncoming traffic and with the flow of traffic. The main damage this enemy does is fire its machine guns at the player's vehicle.

Drone Launcher Pickup

This type of enemy use a pickup vehicle as it model with small separate drone model that starts off in the pickup flatbed. This enemy type launches the drone and it only spawns in the lanes that are going with the flow of the traffic.

Drone

The drone itself attacks only by flying directly into the player's vehicle.

Spike Drop Van

This type enemy use a van as its model. This type only spawn in lane with the flow of traffic and it drops spikes from its van behind itself.

Helicopter

This enemy type is unique from the other types as it can not be simple be dodged and must be destroyed use one the player's weapons. This type of enemy use is a helicopter as a model and flies around the screen firing projectiles at the player's vehicle. This type is also unique in that it can't collide with the player's vehicle.

Weapon

There will be a number of weapons that the both the player and enemies will have access too. For instance the machine gun, the missile, the flamethrower are some of basic weapon with more to be add at a later date.

Machine Gun

This weapon will fire two streams of bullets vertically up the screen from the player's vehicle position. The weapon themselves will have two machine gun models mounted on the hood of the player's vehicle. The player will be able to carry a 100 ammo for the weapon after first being unlocked and can be upgraded to carry a max 1000 ammo.

Missile

This weapon will fire a missile at the enemy vehicles. The weapon itself will have a missile launcher model place on top of the vehicle from which the missile will be fired from. When the weapon is first unlocked the player will hold 10 ammo for it and we be able to upgrade the capacity to hold 50 ammo. The missile themselves will be unguided missile that move vertically only after the first unlock and can upgrade into homing missiles.

Flamethrower

This weapon is one where it produced fire it in front of the player's vehicle. The flamethrower will have a model of a cylinder that sticks out of the vehicles from bumper. The flamethrowers ammo capacity at the start will be 10000 and can be upgrade to a max of 50000.

Laser

The laser is a weapon that fire a straight continuous line in front of the player's vehicle. This weapon start with a charge/ammo capacity of 50 and can be upgrade to a max 250. The model for this weapon is fixed on top and in the middle of vehicle's hood.

<u>Upgrades</u>

The upgrades will be things that the player can buy at the cost of their accumulated points. Some examples of the upgrades will be increasing the armor, unlock new weapons, getting better tires are just few upgrades that will be available.

The player will be able to perform upgrades to their vehicle by drive into the back of a truck where a upon the upgrade menu will be presented.

You also never mention where the upgrades screen is or how it is reached. O think it should load before the gameplay so users can upgrade then go race. I.e. once a user clicks start they select a level or something if those are also an idea you wanted to add. Mostly different sprites and then an upgrade screen.

Player Friendly NPC

Throughout the game the player will run into friendly vehicle that help the player.

Ambulance

The ambulance NPC will use a model of an ambulance. This NPC will drop health restore item pick ups when the vehicle is destroyed.

Upgrade Truck

The upgrade truck will use a 18 wheel truck as its model. This NPC will take the player to the upgrade screen when the player's vehicle comes into contact with the truck. While

think this idea is cool to allow in game upgrades as a player is playing it would likely require a decent fluid transition that would have to be made as somewhat of a cut scene of the players car driving into the back of the truck. Also I think it would be best represented as an 18 wheeler but Ya. Might be harder to make the fluid cut scene transition so maybe we'll see. Plus how would user know that truck allows for to upgrade your car if you drive into it.

Army Truck

The army truck will use an old army vehicle as its model. The NPC will provide the player with random ammo pick ups on its destruction.

Pick Up Items

Throughout the game player will be able to pick up items that help them in their gameplay.

Health Restore

This pick up item will use a crate with a red plus on it as its model. The item will restore a part of the player health with the amount depending on the upgrades which can increase by 5% as an example. and distance the player has. I also think the upgrades is a good idea. Could have upgrade that makes you get 5% more ammo or health from crates or something and it can be increased. Etc.

Ammo Box

This pick up item will use a crate with the image of the ammo that it holds as its model. The item will resupply the player with the type of ammo it hold. The amount resupplied will depend on amount the it has been upgrade from the default value. the distance the player has travelled. I think these should be fixed amount of ammo as we want a player to be somewhat punished for missing an ammo crate when the opportunity arises and we will just have them spaced evenly so that a player who is skilled and conservative shouldn't have issues. Also think killing certain enemies should release ammo or health as a reward. Could sense what player needs more either ammo or health. And it be the harder enemies like a helicopter.

Mystery box

This pick up item will use a crate with a question mark on it indicating that the player does not know what is contained in it. This could contain health. Ammo. Or additional

points to spend on upgrades. Rare item drop and would randomly spawn at a time another normal item drop would appear.

Sound Effects

Music

Model General Theme