

MASSIVE MISCHIEF

GAME DESIGN DOCUMENT

5.2024

1. OVERVIEW

MASSIVE MISCHIEF is a 2D runner with a third-person, back camera perspective and shooter elements.

The player will control Abano, a short girl that boasts a smug expression and has ears that stick out, guiding her criminal escape from the feds that have a warrant for her arrest.



Running fast down the city road, she will need to **dodge**, **jump** and **slide** through various obstacles and hazards that spawn up the road, all while dealing with enemies that hover on the **sky** above her by using her trusty **revolver**.

2. GAMEPLAY

The game provides player with a challenge that requires quick reflexes, multitasking between two sets of dangers, making quick decisions based on those elements to survive as long as possible.

The game runs in a 1440x1080 resolution window (4:3 ratio) that houses the ground and sky portions. The player can then alternate between the two by holding spacebar to look up.

		JUMP			
ATTACK LEFT	Q	W	E	ATTACK RIGHT	MOUSE TO AIM M1 TO SHOOT
LEFT	A	S	D	RIGHT	
		SLIDE			SPACEBAR (HOLD) LOOK UP

The road the player is placed on and automatically progresses through is divided into 3 lanes the player can stand on. Ground obstacles continually spawn at the end of the road, becoming closer as time passes, and always constricted to one of the lanes, never placed in between.

2. GAMEPLAY

This runner works on a **regenerating health system**, and has few instakills. Player "health" is represented by the sounds and visual cue of **police sirens** that stand behind the player at all times.

The more damage you take, i.e. the more obstacles you bump on, the closer this "**kill-zone**" gets to the player.

Stay out of damage for a while, and the sirens start to retreat back to the original position (think of the Call of Duty health system).

Bump on too many obstacles and the kill-zone touches the player, it's a game-over.

By how much the sirens close in on the player, or in the context of the game, how farther the player is pushed back is called the push factor of an obstacle. Sky enemies also have a push value assigned to their ranged attacks.

2. GAMEPLAY

Sky enemies spawn and occupy the upper section of the game, only being visible and shootable when the player holds **SPACEBAR to look up**. There will be sound cues to indicate both the spawning and attacks of these entities, since they sit outside the ground screen.

When the player is holding spacebar, the **crosshair** appears and the player can use the mouse to aim and shoot at these flying enemies. There is **no ammo limitation**, but there's a **delay between shots** to prevent spamming and make shots important to aim.

Sky enemies are not static and move around freely in the sky section, each having different patterns and speeds, making shooting them harder.

Sky enemies have a health value that goes down with every shot. There are however, specific "weak points" for each of them with smaller, harder to hit hitboxes that the player can target to bring them down quicker.

3. OBSTACLES

Obstacles spawn in one of the three lanes and come in many types that can be evaded in different ways.

All obstacles can be dodged normally to the side by simply changing lanes, however some of them give the player more versatile ways to dodge, like **jumping** or **sliding** across them.

A special obstacle with more tricky behavior is the Agent. The agent will spawn with a "neutral" sprite stance, and only when getting closer to the player will change into one of two states, "facing right" or "facing left". This variation in stance allows the player to hit the corresponding key (either Q or E) to defeat the agent when in close proximity. The agent is an instakill obstacle, touching him means game-over regardless of health state.

4. SKY ENEMIES

Enemies that spawn in the sky utilize ranged attacks to push the player into the kill zone. Helicopters full of agents with RPGs, SMG wielding agents hanging from drones, anything they can do to pressure the player from above.

Different types of enemies will have different attack patterns and ways damage is dealt, different movement patterns on the sky, different health values, hitboxes and critical hit points.

Quicker moving, smaller enemies will have fewer health points and a small hitbox to match with the sprite. it's critical hit spots will also be small and harder to hit, but way fewer shots will be needed to bring them down

Enemies with rockets will prepare for their attack with visual and audio cues that point to one of the lanes, signaling that their attack will soon hit, allowing the player to dodge it in time.