Safari Sprint

Jungle Dashers
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Genre

Our game is an auto-runner, similar to Arcade-styled games like the Dinosaur Run Chrome game.

Game Description

The game is set in a Safari, where the player, after encountering a hungry lioness, runs for their life. On their way they encounter a multitude of dangerous obstacles and deadly enemies that try to stop them in their tracks. The player must use their acrobatic skills to avoid them if they hope to survive.

Technical Features

The player

The player is stationary while obstacles move toward the player. The controls include [SPACEBAR] to jump, [down_arrow OR S] to crouch. Mouse coordinates are tracked for the shooting mechanics; clicking [LEFT_MOUSE_BTN] spawns a dart directed towards the click location.

The obstacles

As the player “moves forward” they will encounter dangerous hazards and enemies they must avoid.

The enemies

The player will encounter several types of enemies. The types of enemies included in the game are the vulture and the panther.

Vulture - Flies straight at the head of the player. Must duck to avoid, or shoot it down.

Panther - A charging enemy that runs undauntingly at the player. Must be jumped over or shot down.

Scoring

Scoring is determined by tick count, as every ten ticks yield one point for the player. Avoiding enemies also gives the player ten points while dodging the rocks that spawn alongside them yields five points. Scoring also determines the rate at which new enemies spawn in.

Artistic Assets

Sprites:
- Title sprite
- Player
- Rock
- Hedgehog
- Vulture
    - Swooping down
    - Crawling on floor
- Panther

Sounds:
- In game music
- Jump SFX
- Death SFX
- Shooting SFX
- Kill SFX

Implementation Plan

We have used the complete Dragonfly engine developed by Professor Claypool. As our submissions for Project 2C do not include most of the optional features, such as particles, which we will use for our scrolling background.

We created a GitHub repository to assist with version control and provide easier collaboration.

We started by focusing on player movement and controls before finalizing any of the enemies. Having an idea of how high the player could jump helped us in designing the height of our enemy sprites.

After working on the movement, the jumping and ducking specifically, we then worked on the shooting mechanic as well as implementing the enemy types the player had to avoid. We also developed a scoring system which was used to design the difficulty curve, with higher scores yielding a higher enemy spawn rate with a hard limit to the spawn timer.

All the sprites were developed by hand, however the Game Over splash screen was borrowed from Saucer Shoot.

The music and the SFX was downloaded from soundcloud and pixabay with free public license with all creators attributed within our submissions.

Distribution of Work

Player movement
- Jumping - Vahe
- Ducking - Vahe
- Shooting - Vahe

World generation
- Generation of infinite, poolable tiles - Vahe
- Generation of Trees and background - Vahe

Obstacles
- Rock - Justin

Enemies
- Vulture - Justin
- Panther - Justin

Scoring implementation - Justin
- Points awarded on step & on enemy killed/dodged
- Spawn rate increases the higher the points are

Sprites
- Game Start - Justin
- Game Over - Modified from Saucer Shoot; Justin
- Player - Vahe
    - Walk - Vahe
    - Duck - Vahe
- Bullet - Vahe
- Ground tile - Vahe
- Rock - Justin
- Vulture - Justin
- Panther - Justin
- Sun - Vahe
- Trees - Vahe

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Music - Vahe

- In game music

SFX - Vahe

- Jump SFX
- Death SFX
- Shooting/Killing SFX
- Walking SFX