Game 2: Gallery shooter
Design Document

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Description of game and theme

My game will be a very classic alien/space-themed gallery shooter, inspired by arcade games like Galaxian, Galaga, and Space Invaders. You play as an alien in your own spaceship, and fire at waves of oncoming spaceships.

There will be two kinds of enemy spaceships – ones that passively approach the player at a slow speed (bright red), and ones that approach the player at the same speed but fire at them at a consistent interval (bright green). The player can move side-to-side, and the shooting ships will change their aim when that is the case. The player takes damage when colliding with an enemy ship or when hit by the enemy ship shots.

The enemies appear in waves, and there will be five waves altogether to represent one level. The player will get a few seconds of rest between waves. After the player has defeated all five waves without losing all of their health, they have beat the level, and the level resets and progresses to an identical next level, much like Galaxian.

Asset pack(s)

As for the art of the game, I plan to use the Kenny Assets art packs Alien UFO Pack for the player character, and the Space Shooter Redux pack for the enemy ships. I also plan to use the Sci-fi Sounds Pack and Impact Sounds Pack for the sound effects of the game. If I have extra time, I may compose some background music using BeepBox.

Wave description

A level is made up of five waves of enemies, and include two different types of enemies. The enemy ships spawn outside the game screen, and move into the area, on a path leading to where the player character was when the ship spawned. The first wave has only passively moving red ships; the second wave has only green ships, firing at the player; the third wave has a mix of both; the fourth wave has both kinds, with the red ships' speed increasing; and the final level has both kinds, with increased speed for both ships.

Scoring system

The score will be displayed at the top of the screen, opposite from the health, as a plain number. When destroyed, red ships will award the player 50 points, and green ships will award the player 150 points. The player does not lose any points when taking damage. Their score is kept when progressing to the next level.

Health system

The player has five hearts, represented by little icons of the alien player in the corner of the screen. The player's health will go down by one heart when they collide with an enemy ship, or when they are shot by

the bright green enemy ships. Their health is reset to full when they progress to the next level.

Level reset

A level consists of five waves, and if the player defeats all five waves with health remaining, they have beat the level and it resets. Modeling after Galaxian, the next level is exactly the same, and there is only one level to the game. When they beat a level, the game shows text indicating that, and then resets the game, but keeps the player's score. If time permits, I want to be able to display the level number at the top of the screen.

Game screen diagram

LEVEL 1

Score: 200

health bar

score

passive enemy +50 pts

active shooting enemy +150 pts

follows path towards player

enemy projectile

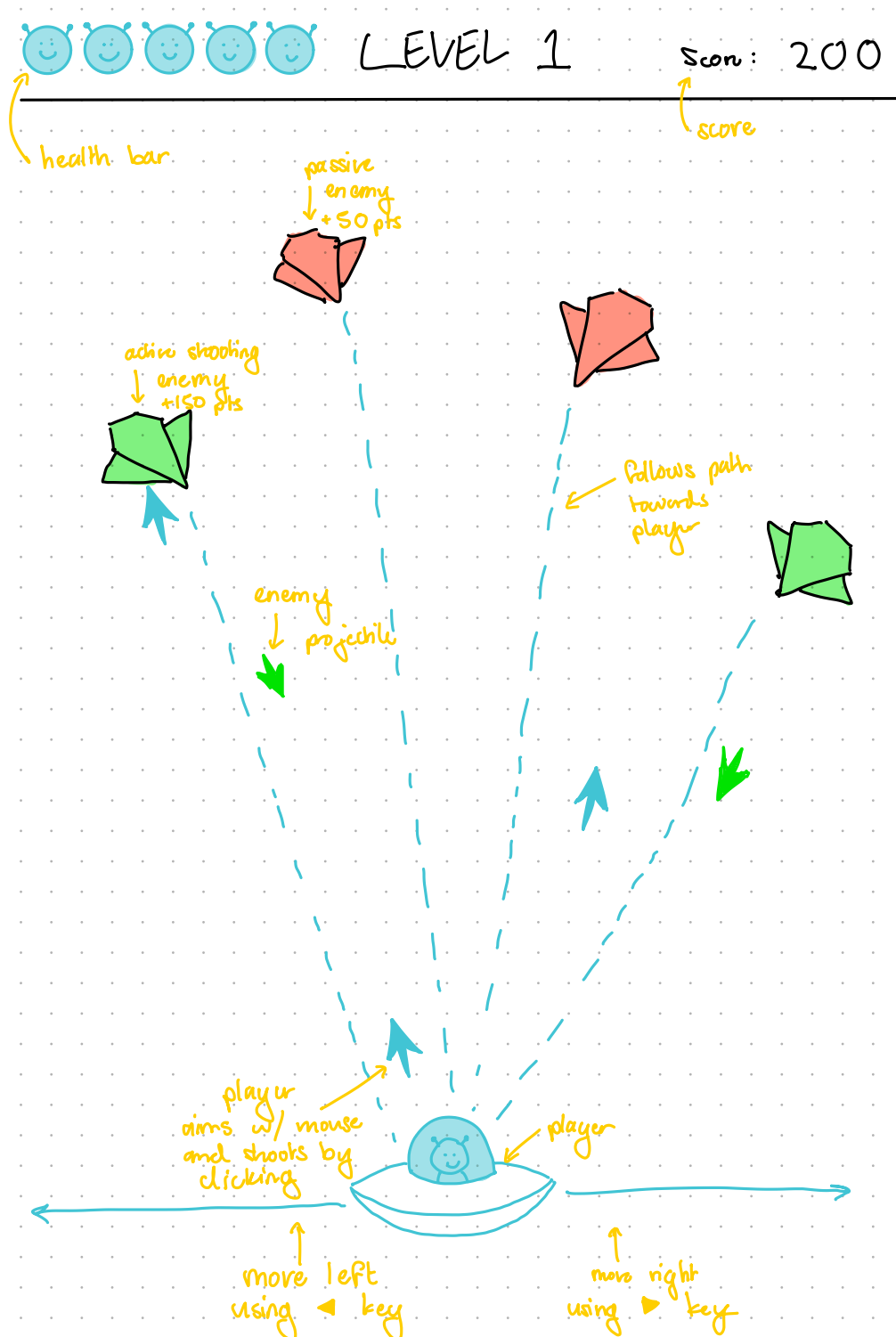player aims w/ mouse and shoots by clicking

player

move left using ◄ key

move right using ► key

Figure 1: Game screen diagram