Aidan Esposito - Final Game Documentation

Week 1: 3/7/24 - 3/14/24: (Some progress lost due to crash)

* Imported basic character assets and map assets to get started
* Coded scripts for character animation and character movement
* Made main character with 2d rigidbody and scripts attached
* Added movement and idle animations to the main character
* Started work on weapon firing script for main character
* Started work on basic stage layout and opening room
* Created ball object to be fired out of main character
* Started work on first enemy type, the crab
* Bug fixed and cleaned up any code I may have missed

Week 2: 3/14/24 - 3/21/24

* Imported enemy assets for the crab models and animations
* Set up animations for idle, movement, and attack for the crab
* Fixed issue with bullets spawning under the stage
* Started script for bullets to interact and delete enemies
* Started script for spawning enemies around the environment
* Created Crab script to allow for movement to player and attacking
* Started fixes on player animation code
* Fixed tileset with breaks and rough edges around the playing area
* Started work on title screen and control screen for the game
* Started planning on enemy damage, live counter, and game over screen and plan to finish before the deadline.

Week 3/4: 3/14/24 - 4/4/24

* Finished crab enemy 100% adding functionality of chasing player and being able to be killed by bullets
* Created spawners that spawn crabs
* Added hidden score variables that modify features of the game
* Expanded work on title screen and work on controls screen
* Added hits to the player (up to 3)
* Added game over screen for when the player gets hit more than 3 times
* Started work on enemy #2, planned to be something that fires bullets from a distance
* Added second area to map, inside of a dungeon like area
* Added functionality that if 10 crabs are killed, new area unlocks.
* Remapped tiles and tile mapping to clean up misshapen tiles
* Added enemy tag for bullets to interact with
* Remade player animations for future use

Week 5: 4/4/24 - 4/11/24

* Continued work on enemy #2, the drone
* Added animations for the drone and its movements
* Created drone script to deal with taking damage, firing bullets, and general actions
* Created drone assets to be used throughout the project
* Created drone spawning element that allows for spawning in similar to crabs
* Created drone spawning script to allow for drone spawning
* Continued work modeling and cleaning tile map in room #2
* Continued work on title screen and controls screen
* Changed gameplay so that fire of bullets is controlled to mouse aiming and left clicking of mouse
* Brought in assets for third future enemy: the pumpkin
* Started scripts for third enemy
* Bug fixed spawning issues with spawners, still planning to add not being able to spawn on top of player and only spawn when player is in a certain radius

Week 6: 4/11/24 - 4/18/24

* Finished work on enemy #2, the drone
* Added tag for player bullets allowing for player bullets to only interact with enemies
* Added tag for enemy bullets allowing for interaction with player and not enemies themselves
* Changed enemy bullet color to red
* Created drone spawning totem to allow for easy spawn in
* Changed spawn commands to allow for spawning not to happen on top of player
* Changed spawn commands to not allow for spawn outside of a certain radius of the player
* Fixed player bullet collision issue that pushed player back when bullets are fired
* Started work on powerup feature that would allow for a powerup that grants some short speed and fire boost
* Imported coin asset to use for powerup base
* Created title screen with background and working buttons
* Created start button for title screen that starts the main scene
* Created quit button for title screen that quits the application
* Created controls button that loads the controls page
* Created controls page that demonstrate how to play the game through images and text
* Added back button to controls page to go back to title screen
* Continued work on possible enemy #3

Assets and Tutorials Used:

* Character Model: <https://assetstore.unity.com/packages/2d/characters/top-down-2d-rpg-assets-pack-188718>
* Starting Environment / Map textures: <https://assetstore.unity.com/packages/2d/environments/pixel-art-top-down-basic-187605>
* Animation and movement tutorial: :<https://www.sharpcoderblog.com/blog/building-a-top-down-shooter-game-in-unity>
* Crab Enemy: <https://camacebra.itch.io/crab-pixel-art>
* Drone Enemy: <https://chiecola.itch.io/won-won-drone?download>
* Chatgpt: <https://chat.openai.com/>