Nathaniel Palmer   Mark _____/50

1. Brief introduction __/3

The feature I am tasked with in Super Spicy Gun Game is the enemies.

My feature so far has consisted of creating a tomato which is animated, and it dies when shot by a gun. My feature however is not simply limited to this and will cascade into many different enemy variants as the game develops.

As well as enemies I will be handling the unity Testing Framework and will be setting that up as well.

2. Use case diagram with scenario __14

Use Case Diagrams
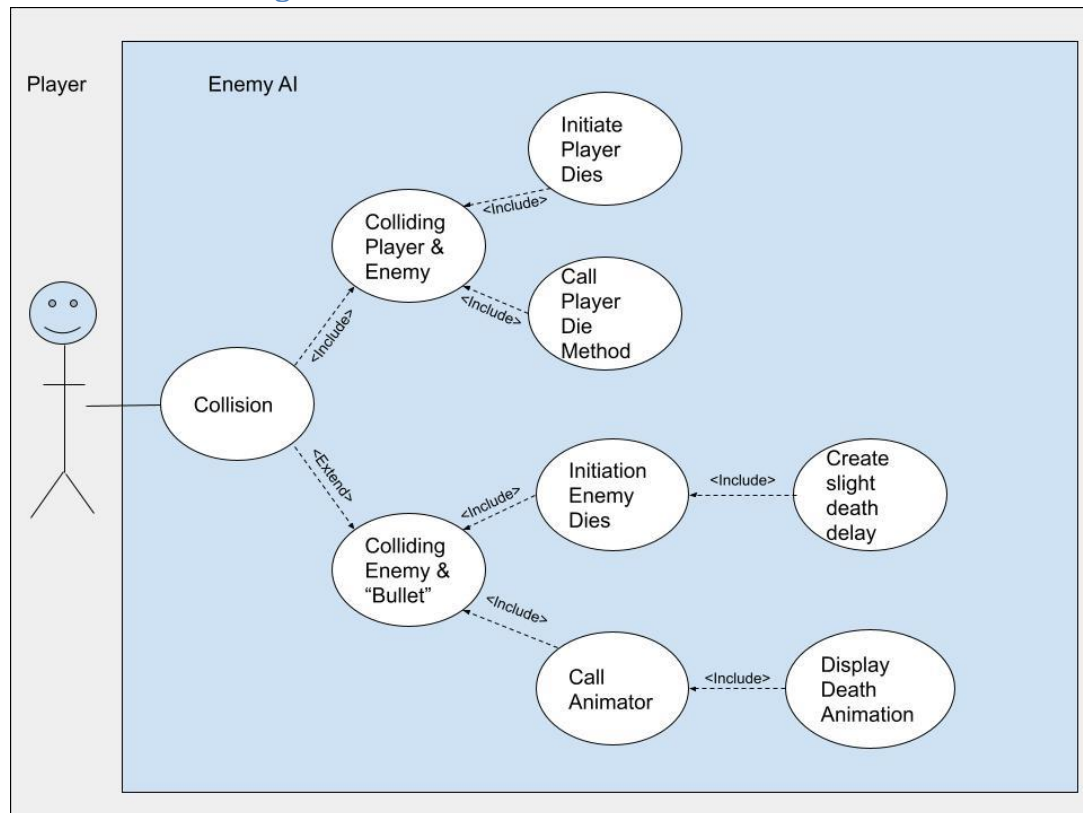
Scenarios

Name: Enemy Action
Summary: The Player interacts with the enemy by either dying or killing the enemy
Actors: Player.
Preconditions: Game has started and is in a level phase.
Basic sequence:

> **Step 1:** Collision Relationship Occurs
> **Step 2:** Player and Enemy game objects collide.

Step 3: Player game object destroyed by calling method within Player script.

Exceptions:

Step 1: Player Shoots enemy with a gun and bullet collides with enemy.

Step 2: Enemy Animator and GameObject.destroy() are called.

Step 3: Death animation displayed; destroy object is delayed for animation to play.

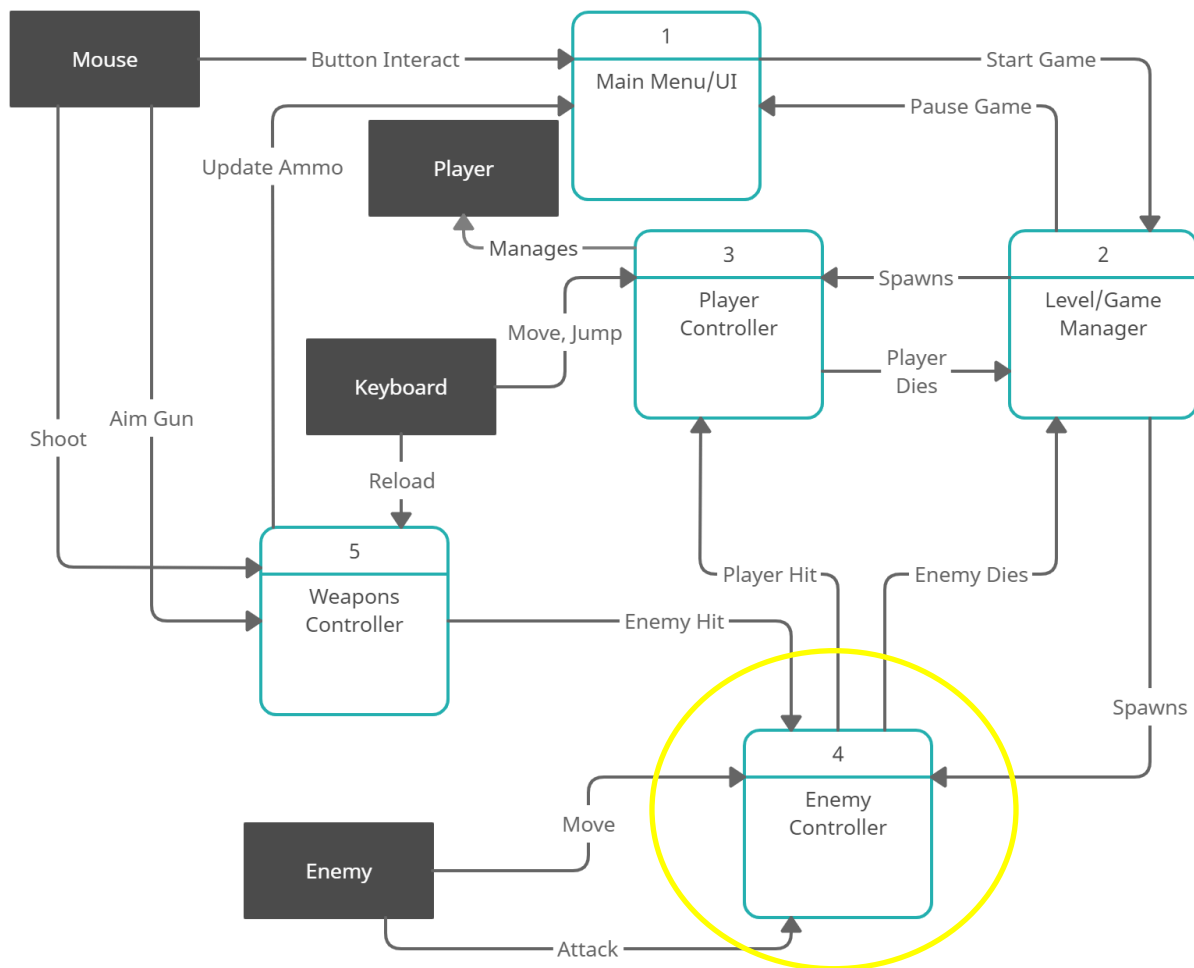**Post conditions:** Enemy or Player game objects are destroyed.
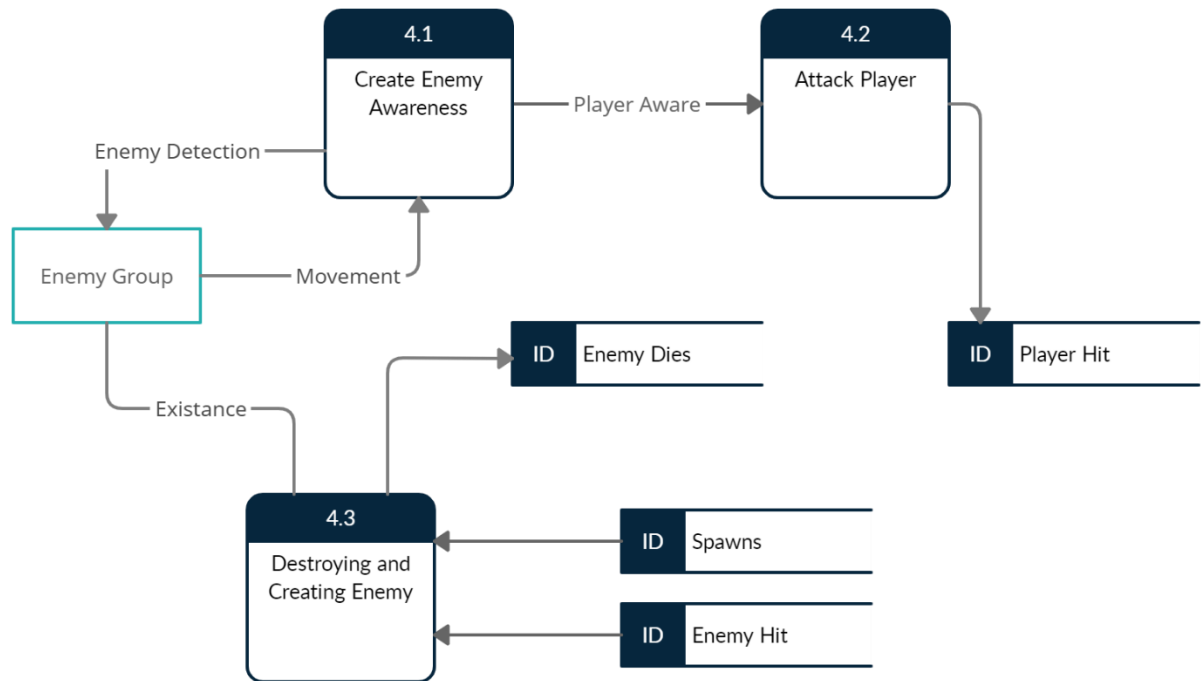
Priority: 2*

ID: C01

*The priorities are 1 = must have, 2 = essential, 3 = nice to have.

3. Data Flow diagram(s) from Level 0 to process description for your feature _____14

Data Flow Diagrams

Process Descriptions

Enemy Awareness:

- When enemy detects non-player barrier
  - Avoid and redirect movement.
- When enemy detects player barrier
  - Pursue while within area of sight.
  - Destroy when touch player.
- Receives bullet or melee collision.
  - Takes lethal or partial damage.
- When enemy destroyed
  - Enters spawner
    - Produces additional enemies while within range limit

4. Acceptance Tests _____9

Player Detection: Detects and destroys player

Enemy Awareness: Navigates the area, avoiding non-player objects

Enemy Destroy: Dies when hit by bullet

Input	Output	Notes
Player	Player Die	Kills player when touching them
Bullet	Enemy Die	Dies when hit by bullet

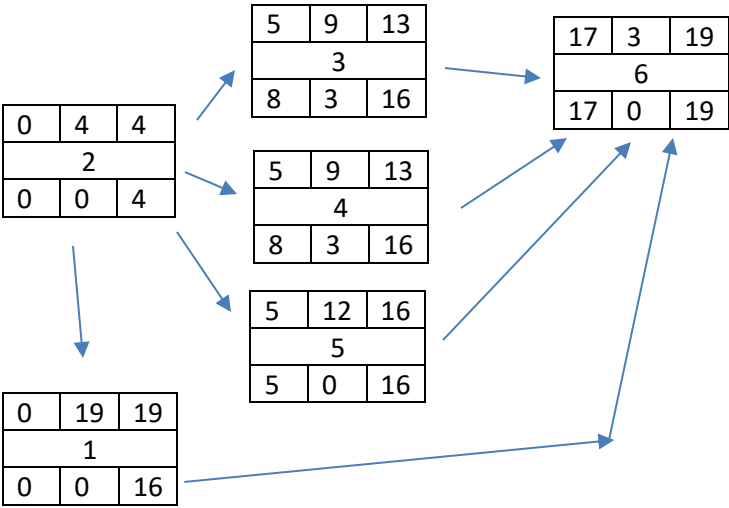| Game Object	Is or Is not Player	Avoids non-player game objects and directs to a different direction of movement

5. Timeline _____/10

Work items

Task	Duration (wks)	Predecessor Task(s)
1. Learning Tools	19	-
2. Enemy Ideas and Collab	4	1
3. Animation	9	2, 3
4. Scripting	9	2, 3
5. Unity Tooling	12	2, 3,4
6. Game Testing	3	5

Pert diagram

5	9	13
	3	
8	3	16

17	3	19
	6	
17	0	19

0	4	4
	2	
0	0	4

5	9	13
	4	
8	3	16

5	12	16
	5	
5	0	16

0	19	19
	1	
0	0	16

Gantt timeline

Nathaniel																											
Learning Tools	8	6																									
Enemy Ideas/Collaboration	10	5.5																									
Animation	20	6																									
Scripting	15	2.25																									
Unity Tooling	6	2																									
Game Testing	10																										
totals	69	21.75																									

Legend:

Black = Completed, Yellow = Scheduled, Red = Still needed