UML Class Diagram

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GameManager

- player: Player
- gameState: GameState = PLAYING
- gameCamera: Camera

+ GameManager(): constructor
+ runFrame(): void
+ checkCollisions(): void
+ handleInput(): void

{ Has as members }

<<interface>>
Entity

- position:Vector2 = <0, 0>
- velocity:Vector2 = <0, 0>
- width: int
- height: int
- healthy: int = 0
- entityType: enum = noCollision

+ getPosition():Vector2
+ getVelocity():Vector2
+ getWidth(): int
+ getHeight(): int
+ getHealth(): int
+ onCollision(hitEntity: *Entity): void
+ spawn(position: Vector2): void
+ kill(): void

{ Calls }

{ Has as a member }

CollisionHandler (?)

+ static checkCollisions(entities: Entity*): void

{ Inherits from }

EnemyManager

- enemyArr: Enemy[]
- currentWave: int = 0
- enemyCount: int = 0
- aliveEnemyCount: int = 0

+ updateWaves(): void
+ getEnemies(): *Enemy[]

Player : Entity

+ moveInDirection(dir: Vector2): void
+ dodgeInDirection(dir: Vector2): void
+ attack(): void
+ counter(): void

Enemy: Entity

- ammo: int (?)

+ getAmmo(): int (?)
+ attack(): void
+ takeDamage(): void