**EnemyProjectile (pointer to Player, PlayArea)**

**Aggregation to Enemy**

+ GetEnemyDamage() : int

+ GetEnemyProjectileBoundingBox() : FloatRect

+ setPosition(Vector2f) : void

+ Intersect() : bool

+ Update() : void

+ Draw(RenderWindow& window) : void

- enemyProjectileText : Texture

- enemyProjectileSprite : Sprite

- enemyProjectileSpeed : float

- enemyProjectileNormalSpeed : float

- enemyProjectileDamage : int

- <Enemy\*> enemies : vector

**Enemy (pointer to Player, PlayArea)**

+ GetEnemyBoundingBox() : FloatRect

+ SetPosition() : void

+ GetPosition() : Vector2f

+ Intersect() : bool

+ GetEnemyHP() : int

+ GetEnemyDamage() : int

+ TakeDamage(int damage) : void

+ SetSprite() : void

+ IsDead() : bool

+ Update() : void

+ Draw(RenderWindow& window) : void

- enemyText : Texture

- enemyHurtText : Texture

- enemySprite : Sprite

- enemyBoundingBox : FloatRect

- enemySpeed : float

- enemyNormalSpeed : float

- enemyHp : int

- enemyDMG : int

**BackGround**

+ Update() : void

+ Draw(RenderWindow& window) : void

- bg1Tex : Texture

- bg2Tex : Texture

- bgSize : Vector2f

- bg1Sprite : Sprite

- bg2Sprite : Sprite

- bgSpeed : float

- bgY : float

- bg1Y : float

- bg2Y : float

- windowBgDiff : float

**Starfield**

+ Update() : void

+ Draw(RenderWindow& window) : void

- star1Tex : Texture

- star2Tex : Texture

- star1Sprite : Sprite

- star2Sprite : Sprite

- starSpeed : float

- sfY : float

- sf1Y : float

- sf2Y : float

- windowBgDiff : float

**Projectile (pointer to Player, PlayArea)**

+ GetProjectileDamage() : int

+ GetProjectileBoundingBox() : FloatRect

+ SetPosition(Vector2f) : void

+ Intersect() : bool

+ Update() : void

+ Draw(RenderWindow& window) : void

- projectileText : Texture

- projectileSprite : Sprite

- projectileSpeed : float

- projectileNormalSpeed : float

- projectileDamage : int

**Player (pointer to PlayArea)**

+ GetPosition() : Vector2f

+ GetPlayerBoundingBox() : FloatRect

+ SetPosition() : void

+ GetPlayerHP() : int

+ TakeDamage(int damage) : void

+ TakeHealth(int health) : void

+ IsDead() : bool

+ Update() : void

+ PlayerInput() : void

+ Draw(RenderWindow& window) : void

+ PlayerFocus() : bool

+ GetPlayerFocusFactor() : float

+ font : Font

+ text : Text

+ focus : Text

- playerText : Texture

- playerHurtText : Texture

- playerPickupText : Texture

- playerSprite : Sprite

- playerBoundingBox : FloatRect

- playerSpeed : float

- playerNormalSpeed : float

- playerFocusFactor : float

- playerHP : int

- playerFullHP : int

**PlayArea**

+ GetTopBoundingBox() : FloatRect

+ GetBottomBoundingBox() : FloatRect

+ GetRightBoundingBox() : FloatRect

+ GetLeftBoundingBox() : FloatRect

+ SetPositions() : void

+ Draw(RenderWindow& window) : void

- topBorder : RectangleShape

- bottomBorder : RectangleShape

- rightBorder : RectangleShape

- leftBorder : RectangleShape

- topBoundingBox : FloatRect

- bottomBoundingBox : FloatRect

- rightBoundingBox : FloatRect

- width : int

- height : int

- borderSize : int