Chapter 3
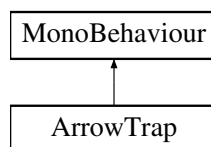
Class Documentation

3.1 ArrowTrap Class Reference

An class for arrowtrap trap

Inheritance diagram for ArrowTrap:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│    ArrowTrap    │
└─────────────────┘
```
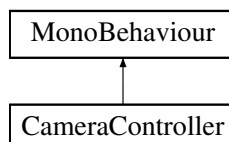
3.1.1 Detailed Description

An class for arrowtrap trap

3.2 CameraController Class Reference

A class representing controller of camera

Inheritance diagram for CameraController:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌──────────────────┐
│ CameraController │
└──────────────────┘
```
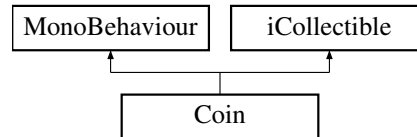
3.2.1 Detailed Description

A class representing controller of camera

3.3 Coin Class Reference

A class representing coin object

Inheritance diagram for Coin:

Public Member Functions

- void **Collect** ()

    Method for collecting the coins

Events

- static Action OnCoinCollected

3.3.1 Detailed Description

A class representing coin object

3.3.2 Event Documentation
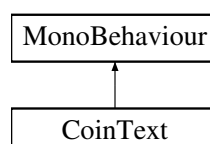
3.3.2.1 OnCoinCollected

```
Action Coin.OnCoinCollected  [static]
```

Event in case of collision with coin

3.4 CoinText Class Reference

A class for representing ammount of collected coins

Inheritance diagram for CoinText:

Public Member Functions

- void **IncrementCoinCount** ()

    Method for chaning number of coins

Public Attributes

- TextMeshProUGUI coinText

3.4.1 Detailed Description

A class for representing ammount of collected coins

3.4.2 Member Data Documentation
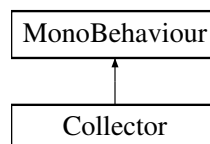
3.4.2.1 coinText

```
TextMeshProUGUI CoinText.coinText
```

gui of coin object

3.5 Collector Class Reference

A class representing collecting an object

Inheritance diagram for Collector:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│    Collector    │
└─────────────────┘
```
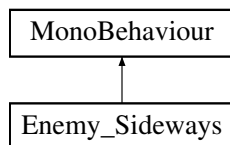
3.5.1 Detailed Description

A class representing collecting an object

3.6 Enemy_Sideways Class Reference

A Enemy Sideways class
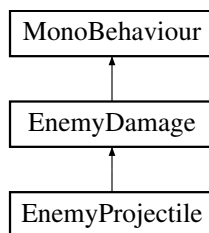
Inheritance diagram for Enemy_Sideways:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│ Enemy_Sideways  │
└─────────────────┘
```

3.6.1 Detailed Description

A Enemy Sideways class

3.7 EnemyDamage Class Reference

A enemy damage class

Inheritance diagram for EnemyDamage:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│   EnemyDamage   │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│ EnemyProjectile │
└─────────────────┘
```

Protected Member Functions

- void OnTriggerEnter2D (Collider2D collision)

    Method for damaging an object in case of collision

Protected Attributes

- float damage

3.7.1 Detailed Description

A enemy damage class

3.7.2 Member Function Documentation

3.7.2.1 OnTriggerEnter2D()

```
void EnemyDamage.OnTriggerEnter2D (
          Collider2D collision ) [protected]
```

Method for damaging an object in case of collision

Parameters

collision	Collider2D object representing collision

3.7.3 Member Data Documentation
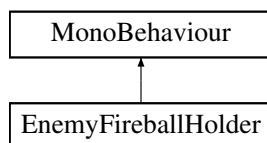
3.7.3.1 damage

```
float EnemyDamage.damage  [protected]
```

Damage of an enemy

3.8 EnemyFireballHolder Class Reference

A class for holding fireballs objects

Inheritance diagram for EnemyFireballHolder:

```
┌─────────────────────┐
│    MonoBehaviour    │
└─────────────────────┘
           ▲
┌─────────────────────┐
│  EnemyFireballHolder │
└─────────────────────┘
```
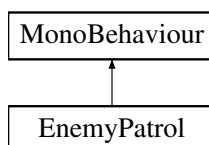
3.8.1 Detailed Description

A class for holding fireballs objects

3.9 EnemyPatrol Class Reference

A class representing enemy patrol behavior

Inheritance diagram for EnemyPatrol:

```
┌─────────────────────┐
│    MonoBehaviour    │
└─────────────────────┘
           ▲
┌─────────────────────┐
│     EnemyPatrol     │
└─────────────────────┘
```
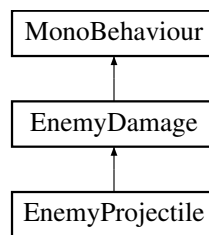
3.9.1 Detailed Description

A class representing enemy patrol behavior

3.10 EnemyProjectile Class Reference

A class representing enemy projectiles

Inheritance diagram for EnemyProjectile:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
┌─────────────────┐
│  EnemyDamage    │
└─────────────────┘
         ▲
┌─────────────────┐
│ EnemyProjectile │
└─────────────────┘
```

Public Member Functions

- void **ActivateProjectile** ()

    Method for activating projectile
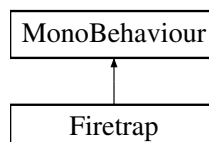
Additional Inherited Members

3.10.1 Detailed Description

A class representing enemy projectiles

3.11 Firetrap Class Reference

A class for FireTraps traps

Inheritance diagram for Firetrap:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
┌─────────────────┐
│    Firetrap     │
└─────────────────┘
```
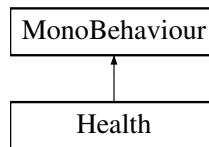
3.11.1 Detailed Description

A class for FireTraps traps

3.12 Health Class Reference

A class representing health system

Inheritance diagram for Health:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│     Health      │
└─────────────────┘
```

Public Member Functions

- void **TakeDamage** (float _damage)

  Method represents taking damage
- void **AddHealth** (float _value)

  Method for adding health (in case of collecting hearths)
- void **Respawn** ()

  Method for respawning

Properties

- float currentHealth [get]

3.12.1 Detailed Description

A class representing health system

3.12.2 Property Documentation
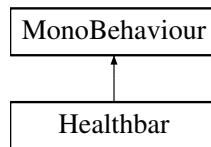
3.12.2.1 currentHealth

```
float Health.currentHealth  [get]
```

Current health

3.13 Healthbar Class Reference

A class representing healthbar

Inheritance diagram for Healthbar:

```
┌──────────────────┐
│  MonoBehaviour   │
└──────────────────┘
          ▲
          │
┌──────────────────┐
│    Healthbar     │
└──────────────────┘
```
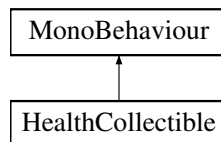
3.13.1 Detailed Description

A class representing healthbar

3.14 HealthCollectible Class Reference

A class for collectible health objects "hearts" in game
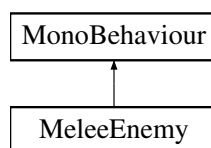
Inheritance diagram for HealthCollectible:

```
┌──────────────────┐
│  MonoBehaviour   │
└──────────────────┘
          ▲
          │
┌──────────────────┐
│ HealthCollectible│
└──────────────────┘
```

3.14.1 Detailed Description

A class for collectible health objects "hearts" in game

3.15 MeleeEnemy Class Reference

A class representing melee enemy.

Inheritance diagram for MeleeEnemy:

```
┌──────────────────┐
│  MonoBehaviour   │
└──────────────────┘
          ▲
          │
┌──────────────────┐
│    MeleeEnemy    │
└──────────────────┘
```
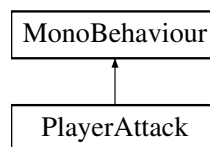
3.15.1 Detailed Description

A class representing melee enemy.

3.16 PlayerAttack Class Reference

A class representing player attack

Inheritance diagram for PlayerAttack:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│   PlayerAttack  │
└─────────────────┘
```
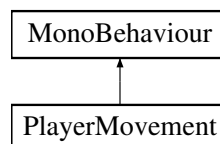
3.16.1 Detailed Description

A class representing player attack

3.17 PlayerMovement Class Reference

A class for player movements

Inheritance diagram for PlayerMovement:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
         │
┌─────────────────┐
│  PlayerMovement │
└─────────────────┘
```

Public Member Functions

- bool canAttack ()

    Method for checks if player can attack

3.17.1 Detailed Description

A class for player movements

3.17.2 Member Function Documentation

3.17.2.1 canAttack()

```
bool PlayerMovement.canAttack ( )
```
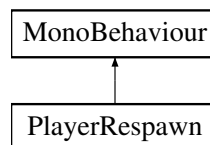
Method for checks if player can attack

Returns

> false if player is in situation that he cann't attack

3.18 PlayerRespawn Class Reference

A class representing player respawn

Inheritance diagram for PlayerRespawn:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
┌─────────────────┐
│  PlayerRespawn  │
└─────────────────┘
```

Public Member Functions

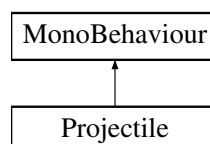- void **Respawn** ()
    Method for respawning

3.18.1 Detailed Description

A class representing player respawn

3.19 Projectile Class Reference

A class for projectiles

Inheritance diagram for Projectile:

```
┌─────────────────┐
│  MonoBehaviour  │
└─────────────────┘
         ▲
┌─────────────────┐
│    Projectile   │
└─────────────────┘
```

Public Member Functions

- void SetDirection (float _direction)
    Method for seting direction of projectile

3.19.1 Detailed Description

A class for projectiles

3.19.2 Member Function Documentation

3.19.2.1 SetDirection()

```
void Projectile.SetDirection (
            float _direction )
```

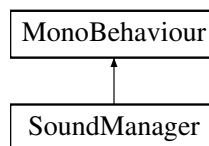Method for seting direction of projectile

Parameters

_direction	Given direction

3.20 SoundManager Class Reference

A class manages sound in game

Inheritance diagram for SoundManager:

Public Member Functions

- void PlaySound (AudioClip _sound)

  Method for playing sound

Properties

- static SoundManager **instance** `[get]`

3.20.1 Detailed Description

A class manages sound in game

3.20.2 Member Function Documentation

3.20.2.1 PlaySound()

```
void SoundManager.PlaySound (
            AudioClip _sound )
```

Method for playing sound

Parameters

_sound	Given sound