



PARADISE CITY

V 1.0

REAL-TIME CITY SIMULATOR

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Chapter 1

Main Page



**PARADISE CITY
MACIX
ENTERTAINMENT**

Important links

- [Release](#)
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Abstract

Paradise City is a real-time simulation which presents behaviors occur in big city. In the project many actions are performing independently of each other. The main goal is created the full of life environment with a lot of characters and vehicles. Specific people have their own sequences of the behaviors which is executed in proper order.

Application

The created project is a kind of benchmark. The user can use the existing settings to test their own computer hardware. This allows to rate the advantages and disadvantages of individual components. Additionally, the developer can get to know the test environment used better. The obtained knowledge will enable the creation of more efficient programs using Unity in the future.

Features

The list below presents most important properties:

- Beautiful city with many buildings, street props and decorations.
- Traffic with different types of vehicles.
- Rural area surrounded by wild trees.
- Group of people doing many special actions.
- Day and night cycle providing extra feelings.
- Special sounds effects that imitate big city life.
- Main menu that allows switch simulation settings.
- Simple manager that enables changing camera control keys.

Game visualization

The pictures below show the most important aspects of the program:



SETTINGS WINDOW



CONTROL WINDOW



CITY CENTER



CITY AT NIGHT



REALISTIC REFLECTIONS



CROWDED STREETS



COUNTRYSIDE



Used technologies

The list of used solutions:

- Unity 2019.4.2f1 - Efficient and expanded game engine.
- Visual Studio Code 1.52.1 - Primary, lightweight IDE.
- Blender 2.83 - 3D computer graphics software used for creating visual effects.
- GIMP 2.10 - Open source image editor.
- Mixamo 2020 - Web service that provides animations with characters.
- Audacity 2.3.2 - Easy-to-use audio editing software.
- MakeHuman 1.2.0 - 3D graphics middleware for prototyping humanoids.

Credits

The author of the project have using some arts shared by CC0 or CC BY license. Without this support, the game would not be possible. A complete list of the used materials and their creators can be found in the credits text file. Moreover, many free resources from the unity asset store were included. Information can also be obtained by selecting the appropriate tab from the game menu.

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

DayColors	42
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AdjustPedestrianLights	13
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GenerateObject	72
HumanBehavior	74
MenuSettingsManager	86
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SettingsDatabase	93
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Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

AdjustPedestrianLights	Manages switching the pedestrian lights	13
AdjustReflectionProbe	Manages the state of the reflection probe	18
AdjustStreetLights	Manages the intensity of the streetlights	21
AdjustTrafficLights	Manages switching the traffic lights	24
CameraMovement	Manages the movement of the camera	30
DayAndNightCycle	Controls day and night cycle by changing the intensity of the lighting	33
DayColors	Describes the colors that make up the lighting	42
DrawPath	Draws the auxiliary paths in the editor	43
SettingsDatabase.GameConfiguration	44
GameSettingsManager	Manages settings that could be changed while the game	50
GenerateObject	Generates the objects in the specific positions after starting the program	72
HumanBehavior	Controls the behavior of the character	74
SettingsDatabase.MenuConfiguration	86
MenuSettingsManager	Manages settings that could be changed via the main menu	86
SettingsDatabase	Stores information about configuration files and their parameters	93
VehicleBehavior.TrafficPoint	99
VehicleBehavior	Controls the behavior of the vehicle	100

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

Assets/Scripts/AdjustPedestrianLights.cs	109
Assets/Scripts/AdjustReflectionProbe.cs	109
Assets/Scripts/AdjustStreetLights.cs	109
Assets/Scripts/AdjustTrafficLights.cs	109
Assets/Scripts/CameraMovement.cs	110
Assets/Scripts/DayAndNightCycle.cs	110
Assets/Scripts/DrawPath.cs	110
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Assets/Scripts/SettingsDatabase.cs	111
Assets/Scripts/VehicleBehavior.cs	111

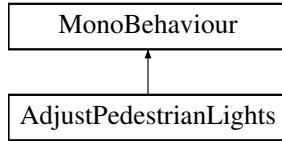
Chapter 5

Class Documentation

5.1 AdjustPedestrianLights Class Reference

Manages switching the pedestrian lights.

Inheritance diagram for AdjustPedestrianLights:



Public Types

- enum class [PedestrianActionType](#) { [StartingLighting](#) , [LightingStop](#) , [LightingWalk](#) }

Private Member Functions

- void [Start](#) ()
- void [Update](#) ()
- void [SetPedestrianLights](#) (Texture texture, Color color)
Sets proper color of the pedestrian lights.
- void [SwitchPedestrianLights](#) ()
Switches states of the pedestrian lights basing on the current state.
- void [StartPedestrianLight](#) ()
Sets the beginning state of the pedestrian lights.
- void [SetWalking](#) ()
Sets walking texture for the pedestrian lights.
- void [SetStopping](#) ()
Sets stopping texture for the pedestrian lights.

Private Attributes

- Color `_green` = new Color(0.176f, 0.788f, 0.215f)
- Color `_red` = new Color(0.8f, 0.196f, 0.196f)
- Renderer `_light`
- MaterialPropertyBlock `_matBlock`
- Texture `_walkTexture`
- Texture `_stopTexture`
- `AdjustTrafficLights _trafficLights`
- `PedestrianActionType _curState`
- float `_curTime`
- float `_startTime`
- float `_cycleTime`
- float `_waitingTime`
- AudioSource `_audioSrc`
- bool `_isPlaying`

5.1.1 Detailed Description

Manages switching the pedestrian lights.

5.1.2 Member Enumeration Documentation

5.1.2.1 PedestrianActionType

enum `AdjustPedestrianLights.PedestrianActionType` [strong]

Enumerator

StartingLighting	
LightingStop	
LightingWalk	

5.1.3 Member Function Documentation

5.1.3.1 SetPedestrianLights()

```
void AdjustPedestrianLights.SetPedestrianLights (
    Texture texture,
    Color color ) [private]
```

Sets proper color of the pedestrian lights.

Parameters

<i>texture</i>	An object that represents a texture.
<i>color</i>	A structure that represents a color.

5.1.3.2 SetStopping()

```
void AdjustPedestrianLights.SetStopping ( ) [private]
```

Sets stopping texture for the pedestrian lights.

5.1.3.3 SetWalking()

```
void AdjustPedestrianLights.SetWalking ( ) [private]
```

Sets walking texture for the pedestrian lights.

5.1.3.4 Start()

```
void AdjustPedestrianLights.Start ( ) [private]
```

5.1.3.5 StartPedestrianLight()

```
void AdjustPedestrianLights.StartPedestrianLight ( ) [private]
```

Sets the beginning state of the pedestrian lights.

5.1.3.6 SwitchPedestrianLights()

```
void AdjustPedestrianLights.SwitchPedestrianLights ( ) [private]
```

Switches states of the pedestrian lights basing on the current state.

5.1.3.7 Update()

```
void AdjustPedestrianLights.Update ( ) [private]
```

5.1.4 Member Data Documentation

5.1.4.1 _audioSrc

```
 AudioSource AdjustPedestrianLights._audioSrc [private]
```

5.1.4.2 _curState

```
PedestrianActionType AdjustPedestrianLights._curState [private]
```

5.1.4.3 _curTime

```
float AdjustPedestrianLights._curTime [private]
```

5.1.4.4 _cycleTime

```
float AdjustPedestrianLights._cycleTime [private]
```

5.1.4.5 _green

```
Color AdjustPedestrianLights._green = new Color(0.176f, 0.788f, 0.215f) [private]
```

5.1.4.6 _isPlaying

```
bool AdjustPedestrianLights._isPlaying [private]
```

5.1.4.7 light

```
Renderer AdjustPedestrianLights._light [private]
```

5.1.4.8 matBlock

```
MaterialPropertyBlock AdjustPedestrianLights._matBlock [private]
```

5.1.4.9 red

```
Color AdjustPedestrianLights._red = new Color(0.8f, 0.196f, 0.196f) [private]
```

5.1.4.10 startTime

```
float AdjustPedestrianLights._startTime [private]
```

5.1.4.11 stopTexture

```
Texture AdjustPedestrianLights._stopTexture [private]
```

5.1.4.12 trafficLights

```
AdjustTrafficLights AdjustPedestrianLights._trafficLights [private]
```

5.1.4.13 waitingTime

```
float AdjustPedestrianLights._waitingTime [private]
```

5.1.4.14 `_walkTexture`

```
Texture AdjustPedestrianLights._walkTexture [private]
```

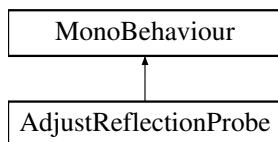
The documentation for this class was generated from the following file:

- Assets/Scripts/AdjustPedestrianLights.cs

5.2 AdjustReflectionProbe Class Reference

Manages the state of the reflection probe.

Inheritance diagram for AdjustReflectionProbe:



Private Member Functions

- void `Start ()`
Loads proper textures depending on the current quality settings.
- void `Update ()`
Sets proper textures depending on the current time of a day.
- void `Init ()`
Loads proper textures depending on the current quality settings.
- void `LoadProperTextures ()`
Creates and sets the temporary blended texture from two different maps.
- void `AdjustReflection ()`
Sets proper textures depending on the current time of a day.
- void `SetProperCubemap (Texture texture1, Texture texture2, bool isReversed)`
Creates and sets the temporary blended texture from two different maps.

Private Attributes

- `DayAndNightCycle _dayAndNightCycle`
- `ReflectionProbe _reflectionProbe`
- `Texture _twilightTex`
- `Texture _dayTex`
- `Texture _nightTex`
- `float _currentTime`
- `float _secondsInAFullDay`
- `float _blendFac`
- `int _curLvl`

5.2.1 Detailed Description

Manages the state of the reflection probe.

5.2.2 Member Function Documentation

5.2.2.1 AdjustReflection()

```
void AdjustReflectionProbe.AdjustReflection ( ) [private]
```

Sets proper textures depending on the current time of a day.

5.2.2.2 Init()

```
void AdjustReflectionProbe.Init ( ) [private]
```

5.2.2.3 LoadProperTextures()

```
void AdjustReflectionProbe.LoadProperTextures ( ) [private]
```

Loads proper textures depending on the current quality settings.

5.2.2.4 SetProperCubemap()

```
void AdjustReflectionProbe.SetProperCubemap (
    Texture texture1,
    Texture texture2,
    bool isReversed ) [private]
```

Creates and sets the temporary blended texture from two different maps.

Parameters

<i>texture1</i>	An object that represents the first texture.
<i>texture1</i>	An object that represents the second texture.
<i>isReversed</i>	A boolean that informs if the blended texture will be reversed.

5.2.2.5 Start()

```
void AdjustReflectionProbe.Start ( ) [private]
```

5.2.2.6 Update()

```
void AdjustReflectionProbe.Update ( ) [private]
```

5.2.3 Member Data Documentation

5.2.3.1 _blendFac

```
float AdjustReflectionProbe._blendFac [private]
```

5.2.3.2 _curLvl

```
int AdjustReflectionProbe._curLvl [private]
```

5.2.3.3 _currentTime

```
float AdjustReflectionProbe._currentTime [private]
```

5.2.3.4 _dayAndNightCycle

```
DayAndNightCycle AdjustReflectionProbe._dayAndNightCycle [private]
```

5.2.3.5 _dayTex

```
Texture AdjustReflectionProbe._dayTex [private]
```

5.2.3.6 _nightTex

```
Texture AdjustReflectionProbe._nightTex [private]
```

5.2.3.7 `_reflectionProbe`

```
ReflectionProbe AdjustReflectionProbe._reflectionProbe [private]
```

5.2.3.8 `_secondsInAFullDay`

```
float AdjustReflectionProbe._secondsInAFullDay [private]
```

5.2.3.9 `_twilightTex`

```
Texture AdjustReflectionProbe._twilightTex [private]
```

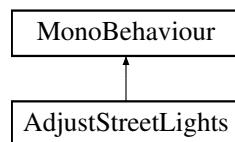
The documentation for this class was generated from the following file:

- Assets/Scripts/[AdjustReflectionProbe.cs](#)

5.3 AdjustStreetLights Class Reference

Manages the intensity of the streetlights.

Inheritance diagram for AdjustStreetLights:



Public Attributes

- float [LightIntensity](#) = 0f
- Color [EmissionColor](#)

Private Member Functions

- void [Start \(\)](#)
- void [Update \(\)](#)
- void [Init \(\)](#)
- void [AdjustLight \(\)](#)

Sets proper intensity of the lights depending on the current time of a day.

Private Attributes

- DayAndNightCycle _dayAndNightCycle
- MaterialPropertyBlock _matBlock
- Renderer _lightRenderer
- Light _spotLight
- float _currentTime
- float _secondsInAFullDay
- float _r
- float _g
- float _b

5.3.1 Detailed Description

Manages the intensity of the streetlights.

5.3.2 Member Function Documentation

5.3.2.1 AdjustLight()

```
void AdjustStreetLights.AdjustLight ( ) [private]
```

Sets proper intensity of the lights depending on the current time of a day.

5.3.2.2 Init()

```
void AdjustStreetLights.Init ( ) [private]
```

5.3.2.3 Start()

```
void AdjustStreetLights.Start ( ) [private]
```

5.3.2.4 Update()

```
void AdjustStreetLights.Update ( ) [private]
```

5.3.3 Member Data Documentation

5.3.3.1 `_b`

```
float AdjustStreetLights._b [private]
```

5.3.3.2 `_currentTime`

```
float AdjustStreetLights._currentTime [private]
```

5.3.3.3 `_dayAndNightCycle`

```
DayAndNightCycle AdjustStreetLights._dayAndNightCycle [private]
```

5.3.3.4 `_g`

```
float AdjustStreetLights._g [private]
```

5.3.3.5 `_lightRenderer`

```
Renderer AdjustStreetLights._lightRenderer [private]
```

5.3.3.6 `_matBlock`

```
MaterialPropertyBlock AdjustStreetLights._matBlock [private]
```

5.3.3.7 `_r`

```
float AdjustStreetLights._r [private]
```

5.3.3.8 `_secondsInAFullDay`

```
float AdjustStreetLights._secondsInAFullDay [private]
```

5.3.3.9 `_spotLight`

```
Light AdjustStreetLights._spotLight [private]
```

5.3.3.10 `EmissionColor`

```
Color AdjustStreetLights.EmissionColor
```

5.3.3.11 `LightIntensity`

```
float AdjustStreetLights.LightIntensity = 0f
```

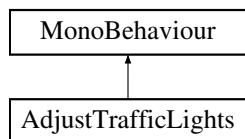
The documentation for this class was generated from the following file:

- Assets/Scripts/[AdjustStreetLights.cs](#)

5.4 `AdjustTrafficLights` Class Reference

Manages switching the traffic lights.

Inheritance diagram for `AdjustTrafficLights`:



Public Types

- enum class [TrafficActionType](#) {
 StartingLighting , LightingYellowFirst , LightingGreen , LightingYellowSecond ,
 LightingRed }

Public Attributes

- float `LongWaitingTime`
- float `ShortWaitingTime`

Package Attributes

- bool `IsActive`

Private Member Functions

- void `Start ()`
- void `Init ()`
- void `Update ()`
- void `SetTrafficLights` (ref Renderer renderer, Color color)
Sets proper color of the traffic lights.
- void `SwitchTrafficLights ()`
Switches states of the traffic lights basing on the current state.
- void `StartTrafficLight ()`
Sets the beginning state of the traffic lights.
- void `LightYellowFirst ()`
Sets yellow color of the traffic lights the first time.
- void `LightGreen ()`
Sets green color of the traffic lights.
- void `LightYellowSecond ()`
Sets yellow color of the traffic lights the second time.
- void `LightRed ()`
Sets red color of the traffic lights.

Private Attributes

- Color `_green` = new Color(0.176f, 0.788f, 0.215f)
- Color `_greenDark` = new Color(0.022f, 0.099f, 0.027f)
- Color `_yellow` = new Color(0.905f, 0.705f, 0.086f)
- Color `_yellowDark` = new Color(0.3f, 0.232f, 0.028f)
- Color `_red` = new Color(0.8f, 0.196f, 0.196f)
- Color `_redDark` = new Color(0.25f, 0.058f, 0.058f)
- Renderer `_greenLight`
- Renderer `_yellowLight`
- Renderer `_redLight`
- MaterialPropertyBlock `_matBlock`
- `TrafficActionType _curState`
- float `_curTime`
- float `_startTime`
- float `_cycleTime`

5.4.1 Detailed Description

Manages switching the traffic lights.

5.4.2 Member Enumeration Documentation

5.4.2.1 TrafficActionType

```
enum AdjustTrafficLights.TrafficActionType [strong]
```

Enumerator

StartingLighting	
LightingYellowFirst	
LightingGreen	
LightingYellowSecond	
LightingRed	

5.4.3 Member Function Documentation

5.4.3.1 Init()

```
void AdjustTrafficLights.Init () [private]
```

5.4.3.2 LightGreen()

```
void AdjustTrafficLights.LightGreen () [private]
```

Sets green color of the traffic lights.

5.4.3.3 LightRed()

```
void AdjustTrafficLights.LightRed () [private]
```

Sets red color of the traffic lights.

5.4.3.4 LightYellowFirst()

```
void AdjustTrafficLights.LightYellowFirst ( ) [private]
```

Sets yellow color of the traffic lights the first time.

5.4.3.5 LightYellowSecond()

```
void AdjustTrafficLights.LightYellowSecond ( ) [private]
```

Sets yellow color of the traffic lights the second time.

5.4.3.6 SetTrafficLights()

```
void AdjustTrafficLights.SetTrafficLights (
    ref Renderer renderer,
    Color color ) [private]
```

Sets proper color of the traffic lights.

Parameters

<i>renderer</i>	An object that represents a renderer.
<i>color</i>	A structure that represents a color.

5.4.3.7 Start()

```
void AdjustTrafficLights.Start ( ) [private]
```

5.4.3.8 StartTrafficLight()

```
void AdjustTrafficLights.StartTrafficLight ( ) [private]
```

Sets the beginning state of the traffic lights.

5.4.3.9 SwitchTrafficLights()

```
void AdjustTrafficLights.SwitchTrafficLights ( ) [private]
```

Switches states of the traffic lights basing on the current state.

5.4.3.10 Update()

```
void AdjustTrafficLights.Update ( ) [private]
```

5.4.4 Member Data Documentation

5.4.4.1 _curState

```
TrafficActionType AdjustTrafficLights._curState [private]
```

5.4.4.2 _curTime

```
float AdjustTrafficLights._curTime [private]
```

5.4.4.3 _cycleTime

```
float AdjustTrafficLights._cycleTime [private]
```

5.4.4.4 _green

```
Color AdjustTrafficLights._green = new Color(0.176f, 0.788f, 0.215f) [private]
```

5.4.4.5 _greenDark

```
Color AdjustTrafficLights._greenDark = new Color(0.022f, 0.099f, 0.027f) [private]
```

5.4.4.6 `_greenLight`

```
Renderer AdjustTrafficLights._greenLight [private]
```

5.4.4.7 `_matBlock`

```
MaterialPropertyBlock AdjustTrafficLights._matBlock [private]
```

5.4.4.8 `_red`

```
Color AdjustTrafficLights._red = new Color(0.8f, 0.196f, 0.196f) [private]
```

5.4.4.9 `_redDark`

```
Color AdjustTrafficLights._redDark = new Color(0.25f, 0.058f, 0.058f) [private]
```

5.4.4.10 `_redLight`

```
Renderer AdjustTrafficLights._redLight [private]
```

5.4.4.11 `_startTime`

```
float AdjustTrafficLights._startTime [private]
```

5.4.4.12 `_yellow`

```
Color AdjustTrafficLights._yellow = new Color(0.905f, 0.705f, 0.086f) [private]
```

5.4.4.13 `_yellowDark`

```
Color AdjustTrafficLights._yellowDark = new Color(0.3f, 0.232f, 0.028f) [private]
```

5.4.4.14 `_yellowLight`

```
Renderer AdjustTrafficLights._yellowLight [private]
```

5.4.4.15 `IsActive`

```
bool AdjustTrafficLights.IsActive [package]
```

5.4.4.16 `LongWaitingTime`

```
float AdjustTrafficLights.LongWaitingTime
```

5.4.4.17 `ShortWaitingTime`

```
float AdjustTrafficLights.ShortWaitingTime
```

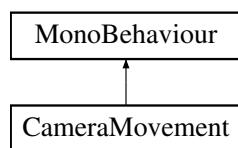
The documentation for this class was generated from the following file:

- Assets/Scripts/[AdjustTrafficLights.cs](#)

5.5 CameraMovement Class Reference

Manages the movement of the camera.

Inheritance diagram for CameraMovement:



Package Attributes

- KeyCode [MoveForward](#)
- KeyCode [MoveBack](#)
- KeyCode [MoveLeft](#)
- KeyCode [MoveRight](#)
- KeyCode [Climb](#)
- KeyCode [Drop](#)
- KeyCode [MoveFaster](#)
- KeyCode [MoveSlower](#)

Private Member Functions

- void [Update \(\)](#)
- void [ControlCamera \(\)](#)

Controls the camera movement depending on the current inputs.

Private Attributes

- float [CameraSensitivity](#) = 200f
- float [ClimbSpeed](#) = 5f
- float [NormalMoveSpeed](#) = 10f
- float [SlowMoveFactor](#) = 0.25f
- float [FastMoveFactor](#) = 4f
- float [_rotationX](#) = 0f
- float [_rotationY](#) = 0f

5.5.1 Detailed Description

Manages the movement of the camera.

5.5.2 Member Function Documentation

5.5.2.1 ControlCamera()

```
void CameraMovement.ControlCamera ( ) [private]
```

Controls the camera movement depending on the current inputs.

5.5.2.2 Update()

```
void CameraMovement.Update ( ) [private]
```

5.5.3 Member Data Documentation

5.5.3.1 _rotationX

```
float CameraMovement._rotationX = 0f [private]
```

5.5.3.2 `_rotationY`

```
float CameraMovement._rotationY = 0f [private]
```

5.5.3.3 `CameraSensitivity`

```
float CameraMovement.CameraSensitivity = 200f [private]
```

5.5.3.4 `Climb`

```
KeyCode CameraMovement.Climb [package]
```

5.5.3.5 `ClimbSpeed`

```
float CameraMovement.ClimbSpeed = 5f [private]
```

5.5.3.6 `Drop`

```
KeyCode CameraMovement.Drop [package]
```

5.5.3.7 `FastMoveFactor`

```
float CameraMovement.FastMoveFactor = 4f [private]
```

5.5.3.8 `MoveBack`

```
KeyCode CameraMovement.MoveBack [package]
```

5.5.3.9 `MoveFaster`

```
KeyCode CameraMovement.MoveFaster [package]
```

5.5.3.10 MoveForward

```
KeyCode CameraMovement.MoveForward [package]
```

5.5.3.11 MoveLeft

```
KeyCode CameraMovement.MoveLeft [package]
```

5.5.3.12 MoveRight

```
KeyCode CameraMovement.MoveRight [package]
```

5.5.3.13 MoveSlower

```
KeyCode CameraMovement.MoveSlower [package]
```

5.5.3.14 NormalMoveSpeed

```
float CameraMovement.NormalMoveSpeed = 10f [private]
```

5.5.3.15 SlowMoveFactor

```
float CameraMovement.SlowMoveFactor = 0.25f [private]
```

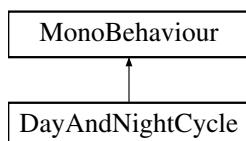
The documentation for this class was generated from the following file:

- Assets/Scripts/[CameraMovement.cs](#)

5.6 DayAndNightCycle Class Reference

Controls day and night cycle by changing the intensity of the lighting.

Inheritance diagram for DayAndNightCycle:



Public Attributes

- DayColors TwilightColors
- DayColors DayColors
- DayColors NightColors
- Light Sun
- Light Moon
- Material SkyMaterial
- float SecondsInAFullDay = 0f

Package Attributes

- int CurrentDay = 1
- float CurrentTime = 0.5f

Private Member Functions

- void Start ()
- void Update ()
- void Init ()
- void CalculateColors ()
Calculates the differences between the colors that will be changed.
- void UpdateTime ()
Updates time of the game and counts another days.
- void UpdateLight ()
Updates the light in simulation by changing the colors and intensity.

Private Attributes

- float _lightIntensity
- float _flareStrength
- float _blendFac
- float _rS
- float _rE
- float _rG
- float _rF
- float _gS
- float _gE
- float _gG
- float _gF
- float _bS
- float _bE
- float _bG
- float _bF
- float _twilightDayDiffRS
- float _twilightDayDiffRE
- float _twilightDayDiffRG
- float _twilightDayDiffRF
- float _twilightDayDiffGS
- float _twilightDayDiffGE
- float _twilightDayDiffGG

- float `_twilightDayDiffGF`
- float `_twilightDayDiffBS`
- float `_twilightDayDiffBE`
- float `_twilightDayDiffBG`
- float `_twilightDayDiffBF`
- float `_twilightNightDiffRS`
- float `_twilightNightDiffRE`
- float `_twilightNightDiffRG`
- float `_twilightNightDiffRF`
- float `_twilightNightDiffGS`
- float `_twilightNightDiffGE`
- float `_twilightNightDiffGG`
- float `_twilightNightDiffGF`
- float `_twilightNightDiffBS`
- float `_twilightNightDiffBE`
- float `_twilightNightDiffBG`
- float `_twilightNightDiffBF`
- bool `display`

5.6.1 Detailed Description

Controls day and night cycle by changing the intensity of the lighting.

5.6.2 Member Function Documentation

5.6.2.1 CalculateColors()

```
void DayAndNightCycle.CalculateColors ( ) [private]
```

Calculates the differences between the colors that will be changed.

5.6.2.2 Init()

```
void DayAndNightCycle.Init ( ) [private]
```

5.6.2.3 Start()

```
void DayAndNightCycle.Start ( ) [private]
```

5.6.2.4 **Update()**

```
void DayAndNightCycle.Update ( ) [private]
```

5.6.2.5 **UpdateLight()**

```
void DayAndNightCycle.UpdateLight ( ) [private]
```

Updates the light in simulation by changing the colors and intensity.

5.6.2.6 **UpdateTime()**

```
void DayAndNightCycle.UpdateTime ( ) [private]
```

Updates time of the game and counts another days.

5.6.3 Member Data Documentation

5.6.3.1 **_bE**

```
float DayAndNightCycle._bE [private]
```

5.6.3.2 **_bF**

```
float DayAndNightCycle._bF [private]
```

5.6.3.3 **_bG**

```
float DayAndNightCycle._bG [private]
```

5.6.3.4 **_blendFac**

```
float DayAndNightCycle._blendFac [private]
```

5.6.3.5 `_bS`

```
float DayAndNightCycle._bS [private]
```

5.6.3.6 `_flareStrength`

```
float DayAndNightCycle._flareStrength [private]
```

5.6.3.7 `_gE`

```
float DayAndNightCycle._gE [private]
```

5.6.3.8 `_gF`

```
float DayAndNightCycle._gF [private]
```

5.6.3.9 `_gG`

```
float DayAndNightCycle._gG [private]
```

5.6.3.10 `_gS`

```
float DayAndNightCycle._gS [private]
```

5.6.3.11 `_lightIntensity`

```
float DayAndNightCycle._lightIntensity [private]
```

5.6.3.12 `_rE`

```
float DayAndNightCycle._rE [private]
```

5.6.3.13 _rF

```
float DayAndNightCycle._rF [private]
```

5.6.3.14 _rG

```
float DayAndNightCycle._rG [private]
```

5.6.3.15 _rS

```
float DayAndNightCycle._rS [private]
```

5.6.3.16 _twilightDayDiffBE

```
float DayAndNightCycle._twilightDayDiffBE [private]
```

5.6.3.17 _twilightDayDiffBF

```
float DayAndNightCycle._twilightDayDiffBF [private]
```

5.6.3.18 _twilightDayDiffBG

```
float DayAndNightCycle._twilightDayDiffBG [private]
```

5.6.3.19 _twilightDayDiffBS

```
float DayAndNightCycle._twilightDayDiffBS [private]
```

5.6.3.20 _twilightDayDiffGE

```
float DayAndNightCycle._twilightDayDiffGE [private]
```

5.6.3.21 _twilightDayDiffGF

```
float DayAndNightCycle._twilightDayDiffGF [private]
```

5.6.3.22 _twilightDayDiffGG

```
float DayAndNightCycle._twilightDayDiffGG [private]
```

5.6.3.23 _twilightDayDiffGS

```
float DayAndNightCycle._twilightDayDiffGS [private]
```

5.6.3.24 _twilightDayDiffRE

```
float DayAndNightCycle._twilightDayDiffRE [private]
```

5.6.3.25 _twilightDayDiffRF

```
float DayAndNightCycle._twilightDayDiffRF [private]
```

5.6.3.26 _twilightDayDiffRG

```
float DayAndNightCycle._twilightDayDiffRG [private]
```

5.6.3.27 _twilightDayDiffRS

```
float DayAndNightCycle._twilightDayDiffRS [private]
```

5.6.3.28 _twilightNightDiffBE

```
float DayAndNightCycle._twilightNightDiffBE [private]
```

5.6.3.29 _twilightNightDiffBF

```
float DayAndNightCycle._twilightNightDiffBF [private]
```

5.6.3.30 _twilightNightDiffBG

```
float DayAndNightCycle._twilightNightDiffBG [private]
```

5.6.3.31 _twilightNightDiffBS

```
float DayAndNightCycle._twilightNightDiffBS [private]
```

5.6.3.32 _twilightNightDiffGE

```
float DayAndNightCycle._twilightNightDiffGE [private]
```

5.6.3.33 _twilightNightDiffGF

```
float DayAndNightCycle._twilightNightDiffGF [private]
```

5.6.3.34 _twilightNightDiffGG

```
float DayAndNightCycle._twilightNightDiffGG [private]
```

5.6.3.35 _twilightNightDiffGS

```
float DayAndNightCycle._twilightNightDiffGS [private]
```

5.6.3.36 _twilightNightDiffRE

```
float DayAndNightCycle._twilightNightDiffRE [private]
```

5.6.3.37 _twilightNightDiffRF

```
float DayAndNightCycle._twilightNightDiffRF [private]
```

5.6.3.38 _twilightNightDiffRG

```
float DayAndNightCycle._twilightNightDiffRG [private]
```

5.6.3.39 _twilightNightDiffRS

```
float DayAndNightCycle._twilightNightDiffRS [private]
```

5.6.3.40 CurrentDay

```
int DayAndNightCycle.CurrentDay = 1 [package]
```

5.6.3.41 CurrentTime

```
float DayAndNightCycle.CurrentTime = 0.5f [package]
```

5.6.3.42 DayColors

[DayColors](#) DayAndNightCycle.DayColors

5.6.3.43 display

```
bool DayAndNightCycle.display [private]
```

5.6.3.44 Moon

[Light](#) DayAndNightCycle.Moon

5.6.3.45 NightColors

```
DayColors DayAndNightCycle.NightColors
```

5.6.3.46 SecondsInAFullDay

```
float DayAndNightCycle.SecondsInAFullDay = 0f
```

5.6.3.47 SkyMaterial

```
Material DayAndNightCycle.SkyMaterial
```

5.6.3.48 Sun

```
Light DayAndNightCycle.Sun
```

5.6.3.49 TwilightColors

```
DayColors DayAndNightCycle.TwilightColors
```

The documentation for this class was generated from the following file:

- Assets/Scripts/[DayAndNightCycle.cs](#)

5.7 DayColors Class Reference

Describes the colors that make up the lighting.

Public Attributes

- Color [SkyColor](#)
- Color [EquatorColor](#)
- Color [GroundColor](#)
- Color [FogColor](#)

5.7.1 Detailed Description

Describes the colors that make up the lighting.

5.7.2 Member Data Documentation

5.7.2.1 EquatorColor

```
Color DayColors.EquatorColor
```

5.7.2.2 FogColor

```
Color DayColors.FogColor
```

5.7.2.3 GroundColor

```
Color DayColors.GroundColor
```

5.7.2.4 SkyColor

```
Color DayColors.SkyColor
```

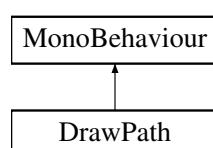
The documentation for this class was generated from the following file:

- Assets/Scripts/[DayAndNightCycle.cs](#)

5.8 DrawPath Class Reference

Draws the auxiliary paths in the editor.

Inheritance diagram for DrawPath:



Private Member Functions

- void [OnDrawGizmos \(\)](#)

5.8.1 Detailed Description

Draws the auxiliary paths in the editor.

5.8.2 Member Function Documentation

5.8.2.1 [OnDrawGizmos\(\)](#)

```
void DrawPath.OnDrawGizmos ( ) [private]
```

The documentation for this class was generated from the following file:

- Assets/Scripts/[DrawPath.cs](#)

5.9 SettingsDatabase.GameConfiguration Struct Reference

Properties

- int [ProfileIndex](#) [get, set]
- int [QualityLevel](#) [get, set]
- float [DayDuration](#) [get, set]
- float [SoundsVolume](#) [get, set]
- bool [IsPostProcess](#) [get, set]
- float [GrassDensity](#) [get, set]
- float [DrawingDist](#) [get, set]
- string [QualityLabel](#) [get, set]
- string [PostProcessLabel](#) [get, set]
- string [PedestriansLabel](#) [get, set]
- string [StaticVehiclesLabel](#) [get, set]
- string [VehiclesLabel](#) [get, set]
- string [GrassLabel](#) [get, set]
- string [DistLabel](#) [get, set]
- bool [QualityInBtnState](#) [get, set]
- bool [PostInProcessBtnState](#) [get, set]
- bool [PedestriansInBtnState](#) [get, set]
- bool [StaticVehiclesInBtnState](#) [get, set]
- bool [VehiclesInBtnState](#) [get, set]
- bool [GrassInBtnState](#) [get, set]
- bool [DistInBtnState](#) [get, set]
- bool [QualityDeBtnState](#) [get, set]
- bool [PostDeProcessBtnState](#) [get, set]
- bool [PedestriansDeBtnState](#) [get, set]

- bool `StaticVehiclesDeBtnState` [get, set]
- bool `VehiclesDeBtnState` [get, set]
- bool `GrassDeBtnState` [get, set]
- bool `DistDeBtnState` [get, set]
- KeyCode `MoveForward` [get, set]
- KeyCode `MoveBack` [get, set]
- KeyCode `MoveLeft` [get, set]
- KeyCode `MoveRight` [get, set]
- KeyCode `Climb` [get, set]
- KeyCode `Drop` [get, set]
- KeyCode `MoveFaster` [get, set]
- KeyCode `MoveSlower` [get, set]

5.9.1 Property Documentation

5.9.1.1 Climb

```
KeyCode SettingsDatabase.GameConfiguration.Climb [get], [set]
```

5.9.1.2 DayDuration

```
float SettingsDatabase.GameConfiguration.DayDuration [get], [set]
```

5.9.1.3 DistDeBtnState

```
bool SettingsDatabase.GameConfiguration.DistDeBtnState [get], [set]
```

5.9.1.4 DistInBtnState

```
bool SettingsDatabase.GameConfiguration.DistInBtnState [get], [set]
```

5.9.1.5 DistLabel

```
string SettingsDatabase.GameConfiguration.DistLabel [get], [set]
```

5.9.1.6 DrawingDist

```
float SettingsDatabase.GameConfiguration.DrawingDist [get], [set]
```

5.9.1.7 Drop

```
KeyCode SettingsDatabase.GameConfiguration.Drop [get], [set]
```

5.9.1.8 GrassDeBtnState

```
bool SettingsDatabase.GameConfiguration.GrassDeBtnState [get], [set]
```

5.9.1.9 GrassDensity

```
float SettingsDatabase.GameConfiguration.GrassDensity [get], [set]
```

5.9.1.10 GrassInBtnState

```
bool SettingsDatabase.GameConfiguration.GrassInBtnState [get], [set]
```

5.9.1.11 GrassLabel

```
string SettingsDatabase.GameConfiguration.GrassLabel [get], [set]
```

5.9.1.12 IsPostProcess

```
bool SettingsDatabase.GameConfiguration.IsPostProcess [get], [set]
```

5.9.1.13 MoveBack

```
KeyCode SettingsDatabase.GameConfiguration.MoveBack [get], [set]
```

5.9.1.14 MoveFaster

```
KeyCode SettingsDatabase.GameConfiguration.MoveFaster [get], [set]
```

5.9.1.15 MoveForward

```
KeyCode SettingsDatabase.GameConfiguration.MoveForward [get], [set]
```

5.9.1.16 MoveLeft

```
KeyCode SettingsDatabase.GameConfiguration.MoveLeft [get], [set]
```

5.9.1.17 MoveRight

```
KeyCode SettingsDatabase.GameConfiguration.MoveRight [get], [set]
```

5.9.1.18 MoveSlower

```
KeyCode SettingsDatabase.GameConfiguration.MoveSlower [get], [set]
```

5.9.1.19 PedestriansDeBtnState

```
bool SettingsDatabase.GameConfiguration.PedestriansDeBtnState [get], [set]
```

5.9.1.20 PedestriansInBtnState

```
bool SettingsDatabase.GameConfiguration.PedestriansInBtnState [get], [set]
```

5.9.1.21 PedestriansLabel

```
string SettingsDatabase.GameConfiguration.PedestriansLabel [get], [set]
```

5.9.1.22 PostDeProcessBtnState

```
bool SettingsDatabase.GameConfiguration.PostDeProcessBtnState [get], [set]
```

5.9.1.23 PostInProcessBtnState

```
bool SettingsDatabase.GameConfiguration.PostInProcessBtnState [get], [set]
```

5.9.1.24 PostProcessLabel

```
string SettingsDatabase.GameConfiguration.PostProcessLabel [get], [set]
```

5.9.1.25 ProfileIndex

```
int SettingsDatabase.GameConfiguration.ProfileIndex [get], [set]
```

5.9.1.26 QualityDeBtnState

```
bool SettingsDatabase.GameConfiguration.QualityDeBtnState [get], [set]
```

5.9.1.27 QualityInBtnState

```
bool SettingsDatabase.GameConfiguration.QualityInBtnState [get], [set]
```

5.9.1.28 QualityLabel

```
string SettingsDatabase.GameConfiguration.QualityLabel [get], [set]
```

5.9.1.29 QualityLevel

```
int SettingsDatabase.GameConfiguration.QualityLevel [get], [set]
```

5.9.1.30 SoundsVolume

```
float SettingsDatabase.GameConfiguration.SoundsVolume [get], [set]
```

5.9.1.31 StaticVehiclesDeBtnState

```
bool SettingsDatabase.GameConfiguration.StaticVehiclesDeBtnState [get], [set]
```

5.9.1.32 StaticVehiclesInBtnState

```
bool SettingsDatabase.GameConfiguration.StaticVehiclesInBtnState [get], [set]
```

5.9.1.33 StaticVehiclesLabel

```
string SettingsDatabase.GameConfiguration.StaticVehiclesLabel [get], [set]
```

5.9.1.34 VehiclesDeBtnState

```
bool SettingsDatabase.GameConfiguration.VehiclesDeBtnState [get], [set]
```

5.9.1.35 VehiclesInBtnState

```
bool SettingsDatabase.GameConfiguration.VehiclesInBtnState [get], [set]
```

5.9.1.36 VehiclesLabel

```
string SettingsDatabase.GameConfiguration.VehiclesLabel [get], [set]
```

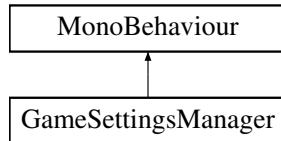
The documentation for this struct was generated from the following file:

- Assets/Scripts/[SettingsDatabase.cs](#)

5.10 GameSettingsManager Class Reference

Manages settings that could be changed while the game.

Inheritance diagram for GameSettingsManager:



Public Types

- enum class [GameState](#) {
 [Game](#) , [Menu](#) , [Settings](#) , [Control](#) ,
 [Key](#) , [Error](#) }

Public Member Functions

- void [PlayClickSound](#) ()

Plays click sound after press button.
- void [ShowKeyMessage](#) (Button button)

Shows the message about selecting key in the control menu.
- void [GetNewKey](#) ()

Gets the new key via control panel in the game menu.
- string [KeyCodeToString](#) (KeyCode keyCode)

Converts selected key code to the string.
- void [HideKeyMessage](#) ()

Hides information about selected key code.
- void [HideGameWarning](#) ()

Hides warning about damaged game configuration file.
- void [ShowMenu](#) ()

Shows the game menu and pauses the simulation.
- void [ResumeGame](#) ()

Hides the game menu and resumes the simulation.
- void [ShowSettings](#) ()

Shows the settings window in the game menu.
- void [ShowControl](#) ()

Shows the control window in the game menu.
- void [ReturnToGameMenu](#) ()

Shows the main window in the game menu and hides the other windows.
- void [IncreaseQualitySettings](#) ()

Increases current quality settings of the simulation.
- void [DecreaseQualitySettings](#) ()

Decreases current quality settings of the simulation.
- void [IncreasePostProcessing](#) ()

Increases current post-processing level.
- void [DecreasePostProcessing](#) ()

Decreases current post-processing level.

- Decreases current post-processing level.
 - void [IncreasePedestrians \(\)](#)
Increases the number of the pedestrian in the simulation.
 - void [DecreasePedestrians \(\)](#)
Decreases the number of the pedestrian in the simulation.
 - void [IncreaseStaticVehicles \(\)](#)
Increases the number of the static vehicles in the simulation.
 - void [DecreaseStaticVehicles \(\)](#)
Decreases the number of the static vehicles in the simulation.
 - void [IncreaseVehicles \(\)](#)
Increases the number of the mobile vehicles in the simulation.
 - void [DecreaseVehicles \(\)](#)
Decreases the number of the mobile vehicles in the simulation.
 - void [IncreaseGrassDensity \(\)](#)
Increases the grass density in the simulation.
 - void [DecreaseGrassDensity \(\)](#)
Decreases the grass density in the simulation.
 - void [IncreaseDrawingDistance \(\)](#)
Increases the drawing distance in the simulation.
 - void [DecreaseDrawingDistance \(\)](#)
Decreases the drawing distance in the simulation.
 - void [SwitchPostProcessing \(\)](#)
Turns on or turns off the post-processing in the simulation.
 - void [AdjustDayDuration \(\)](#)
Changes the duration of the day via slider.
 - void [AdjustAudioVolume \(\)](#)
Changes the audio volume via slider.
 - void [ExitSimulation \(\)](#)
Quits the simulation and displays the main menu.

Public Attributes

- PostProcessProfile[] [Profiles](#)

Static Public Attributes

- const string [MoveForwardButton](#) = "MoveForwardButton"
- const string [MoveBackButton](#) = "MoveBackButton"
- const string [MoveLeftButton](#) = "MoveLeftButton"
- const string [MoveRightButton](#) = "MoveRightButton"
- const string [ClimbButton](#) = "ClimbButton"
- const string [DropButton](#) = "DropButton"
- const string [MoveFasterButton](#) = "MoveFasterButton"
- const string [MoveSlowerButton](#) = "MoveSlowerButton"

Package Attributes

- Text `MoveForwardText`
- Text `MoveBackText`
- Text `MoveLeftText`
- Text `MoveRightText`
- Text `ClimbText`
- Text `DropText`
- Text `MoveFasterText`
- Text `MoveSlowerText`

Properties

- PostProcessVolume `Volume` [get, set]
- PostProcessLayer `Layer` [get, set]
- Terrain `Terrain` [get, set]
- Image `PostProcessPanel` [get, set]
- Image `PostProcessCheck` [get, set]
- Button `IncreaseQualityBtn` [get, set]
- Button `DecreaseQualityBtn` [get, set]
- Button `IncreaseProcessBtn` [get, set]
- Button `DecreaseProcessBtn` [get, set]
- Button `IncreasePedestriansBtn` [get, set]
- Button `DecreasePedestriansBtn` [get, set]
- Button `IncreaseStaticVehiclesBtn` [get, set]
- Button `DecreaseStaticVehiclesBtn` [get, set]
- Button `IncreaseVehiclesBtn` [get, set]
- Button `DecreaseVehiclesBtn` [get, set]
- Button `IncreaseGrassBtn` [get, set]
- Button `DecreaseGrassBtn` [get, set]
- Button `IncreaseDistBtn` [get, set]
- Button `DecreaseDistBtn` [get, set]
- Button `MoveForwardBtn` [get, set]
- Button `MoveBackBtn` [get, set]
- Button `MoveLeftBtn` [get, set]
- Button `MoveRightBtn` [get, set]
- Button `ClimbBtn` [get, set]
- Button `DropBtn` [get, set]
- Button `MoveFasterBtn` [get, set]
- Button `MoveSlowerBtn` [get, set]
- Button `ControlBackBtn` [get, set]
- Button `LastClickedBtn` [get, set]
- Text `CurQualityText` [get, set]
- Text `CurProcessText` [get, set]
- Text `CurPedestriansText` [get, set]
- Text `CurStaticVehiclesText` [get, set]
- Text `CurVehiclesText` [get, set]
- Text `CurGrassText` [get, set]
- Text `CurDistText` [get, set]
- Text `ClockText` [get, set]
- Text `CurDayText` [get, set]
- Slider `TimeSld` [get, set]
- Slider `AudioSld` [get, set]
- `DayAndNightCycle DayAndNightCycle` [get, set]
- int `CurProfile` [get, set]
- bool `IsPostProcess` [get, set]

Private Member Functions

- void [Awake \(\)](#)
- void [Start \(\)](#)
- void [Update \(\)](#)
- void [Init \(\)](#)
- void [SetGameConfiguration \(\)](#)

Sets proper configuration before starting the simulation.
- void [InitSettings \(ref GameObject\[\] objects, string label\)](#)

Sets proper number of existing objects in the scene.
- void [SetEventListeners \(\)](#)

Sets the event listeners to the selected sliders.
- void [CollectGameObjects \(\)](#)

Collects proper game objects (people, cars).
- void [SwitchCursor \(\)](#)

Shows or hides the mouse cursor.
- void [SwitchGameMenu \(\)](#)

Switches the state of the menu in the simulation.
- void [SetNewKey \(ref KeyCode oldKeyCode, ref Text text, KeyCode newKeyCode\)](#)

Sets the new key obtained from the keyboard.
- bool [IsKeyValid \(KeyCode someKeyCode, KeyCode newKeyCode\)](#)

Checks if the selected key is valid.
- void [ShowKeyWarning \(\)](#)

Shows warning about inserted key code.
- void [UpdateClock \(\)](#)

Updates time of a day displayed on the blackboard.

Private Attributes

- Image [_backgroundImage](#)
- Image [_menuPanel](#)
- Image [_settingsPanel](#)
- Image [_controlPanel](#)
- Image [_warningPanel](#)
- Image [_keyWarningPanel](#)
- Image [_messagePanel](#)
- Text [_timeLabel](#)
- Text [_audioLabel](#)
- KeyCode [_menuKey](#) = KeyCode.Escape
- [GameState _curGameState](#)
- AudioClip [_click](#)
- GameObject[] [_allPeople](#)
- GameObject[] [_allMobileVehicles](#)
- GameObject[] [_allStaticVehicles](#)
- AudioSource[] [_allAudioSources](#)
- AudioSource [_clickSrc](#)
- CameraMovement [_cameraMovement](#)

5.10.1 Detailed Description

Manages settings that could be changed while the game.

5.10.2 Member Enumeration Documentation

5.10.2.1 GameState

```
enum GameSettingsManager.GameState [strong]
```

Enumerator

Game	
Menu	
Settings	
Control	
Key	
Error	

5.10.3 Member Function Documentation

5.10.3.1 AdjustAudioVolume()

```
void GameSettingsManager.AdjustAudioVolume ( )
```

Changes the audio volume via slider.

5.10.3.2 AdjustDayDuration()

```
void GameSettingsManager.AdjustDayDuration ( )
```

Changes the duration of the day via slider.

5.10.3.3 Awake()

```
void GameSettingsManager.Awake ( ) [private]
```

5.10.3.4 CollectGameObjects()

```
void GameSettingsManager.CollectGameObjects ( ) [private]
```

Collects proper game objects (people, cars).

5.10.3.5 DecreaseDrawingDistance()

```
void GameSettingsManager.DecreaseDrawingDistance ( )
```

Decreases the drawing distance in the simulation.

5.10.3.6 DecreaseGrassDensity()

```
void GameSettingsManager.DecreaseGrassDensity ( )
```

Decreases the grass density in the simulation.

5.10.3.7 DecreasePedestrians()

```
void GameSettingsManager.DecreasePedestrians ( )
```

Decreases the number of the pedestrian in the simulation.

5.10.3.8 DecreasePostProcessing()

```
void GameSettingsManager.DecreasePostProcessing ( )
```

Decreases current post-processing level.

5.10.3.9 DecreaseQualitySettings()

```
void GameSettingsManager.DecreaseQualitySettings ( )
```

Decreases current quality settings of the simulation.

5.10.3.10 DecreaseStaticVehicles()

```
void GameSettingsManager.DecreaseStaticVehicles ( )
```

Decreases the number of the static vehicles in the simulation.

5.10.3.11 DecreaseVehicles()

```
void GameSettingsManager.DecreaseVehicles ( )
```

Decreases the number of the mobile vehicles in the simulation.

5.10.3.12 ExitSimulation()

```
void GameSettingsManager.ExitSimulation ( )
```

Quits the simulation and displays the main menu.

5.10.3.13 GetNewKey()

```
void GameSettingsManager.GetNewKey ( )
```

Gets the new key via control panel in the game menu.

5.10.3.14 HideGameWarning()

```
void GameSettingsManager.HideGameWarning ( )
```

Hides warning about damaged game configuration file.

5.10.3.15 HideKeyMessage()

```
void GameSettingsManager.HideKeyMessage ( )
```

Hides information about selected key code.

5.10.3.16 IncreaseDrawingDistance()

```
void GameSettingsManager.IncreaseDrawingDistance ( )
```

Increases the drawing distance in the simulation.

5.10.3.17 IncreaseGrassDensity()

```
void GameSettingsManager.IncreaseGrassDensity ( )
```

Increases the grass density in the simulation.

5.10.3.18 IncreasePedestrians()

```
void GameSettingsManager.IncreasePedestrians ( )
```

Increases the number of the pedestrian in the simulation.

5.10.3.19 IncreasePostProcessing()

```
void GameSettingsManager.IncreasePostProcessing ( )
```

Increases current post-processing level.

5.10.3.20 IncreaseQualitySettings()

```
void GameSettingsManager.IncreaseQualitySettings ( )
```

Increases current quality settings of the simulation.

5.10.3.21 IncreaseStaticVehicles()

```
void GameSettingsManager.IncreaseStaticVehicles ( )
```

Increases the number of the static vehicles in the simulation.

5.10.3.22 IncreaseVehicles()

```
void GameSettingsManager.IncreaseVehicles ( )
```

Increases the number of the mobile vehicles in the simulation.

5.10.3.23 Init()

```
void GameSettingsManager.Init ( ) [private]
```

5.10.3.24 InitSettings()

```
void GameSettingsManager.InitSettings (
    ref GameObject[] objects,
    string label ) [private]
```

Sets proper number of existing objects in the scene.

Parameters

<i>objects</i>	The objects that represent the proper group of the elements.
<i>label</i>	A label that informs about current quality settings.

5.10.3.25 IsKeyValid()

```
bool GameSettingsManager.IsKeyValid (
    KeyCode someKeyCode,
    KeyCode newKeyCode ) [private]
```

Checks if the selected key is valid.

Parameters

<i>someKeyCode</i>	A value that represents selected key code.
<i>newKeyCode</i>	A value that represents a new key code from the keyboard.

Returns

The boolean that is true if the key code is valid or false if not.

5.10.3.26 KeyCodeToString()

```
string GameSettingsManager.KeyCodeToString (   
    KeyCode keyCode )
```

Converts selected key code to the string.

Parameters

<code>keyCode</code>	A value that represents a key code.
----------------------	-------------------------------------

Returns

The proper string from the key code.

5.10.3.27 PlayClickSound()

```
void GameSettingsManager.PlayClickSound ( )
```

Plays click sound after press button.

5.10.3.28 ResumeGame()

```
void GameSettingsManager.ResumeGame ( )
```

Hides the game menu and resumes the simulation.

5.10.3.29 ReturnToGameMenu()

```
void GameSettingsManager.ReturnToGameMenu ( )
```

Shows the main window in the game menu and hides the other windows.

5.10.3.30 SetEventListeners()

```
void GameSettingsManager.SetEventListeners ( ) [private]
```

Sets the event listeners to the selected sliders.

5.10.3.31 SetGameConfiguration()

```
void GameSettingsManager.SetGameConfiguration ( ) [private]
```

Sets proper configuration before starting the simulation.

5.10.3.32 SetNewKey()

```
void GameSettingsManager.SetNewKey (
    ref KeyCode oldKeyCode,
    ref Text text,
    KeyCode newKeyCode ) [private]
```

Sets the new key obtained from the keyboard.

Parameters

<i>oldKeyCode</i>	A value that represents the old key code.
<i>text</i>	A label that represents a description of the key code.
<i>newKeyCode</i>	A value that represents the new key code.

5.10.3.33 ShowControl()

```
void GameSettingsManager.ShowControl ( )
```

Shows the control window in the game menu.

5.10.3.34 ShowKeyMessage()

```
void GameSettingsManager.ShowKeyMessage (
    Button button )
```

Shows the message about selecting key in the control menu.

Parameters

<i>button</i>	An object that represents a clicked button.
---------------	---

5.10.3.35 ShowKeyWarning()

```
void GameSettingsManager.ShowKeyWarning ( ) [private]
```

Shows warning about inserted key code.

5.10.3.36 ShowMenu()

```
void GameSettingsManager.ShowMenu ( )
```

Shows the game menu and pauses the simulation.

5.10.3.37 ShowSettings()

```
void GameSettingsManager.ShowSettings ( )
```

Shows the settings window in the game menu.

5.10.3.38 Start()

```
void GameSettingsManager.Start ( ) [private]
```

5.10.3.39 SwitchCursor()

```
void GameSettingsManager.SwitchCursor ( ) [private]
```

Shows or hides the mouse cursor.

5.10.3.40 SwitchGameMenu()

```
void GameSettingsManager.SwitchGameMenu ( ) [private]
```

Switches the state of the menu in the simulation.

5.10.3.41 **SwitchPostProcessing()**

```
void GameSettingsManager.SwitchPostProcessing ( )
```

Turns on or turns off the post-processing in the simulation.

5.10.3.42 **Update()**

```
void GameSettingsManager.Update ( ) [private]
```

5.10.3.43 **UpdateClock()**

```
void GameSettingsManager.UpdateClock ( ) [private]
```

Updates time of a day displayed on the blackboard.

5.10.4 Member Data Documentation

5.10.4.1 **_allAudioSources**

```
 AudioSource [ ] GameSettingsManager._allAudioSources [private]
```

5.10.4.2 **_allMobileVehicles**

```
 GameObject [ ] GameSettingsManager._allMobileVehicles [private]
```

5.10.4.3 **_allPeople**

```
 GameObject [ ] GameSettingsManager._allPeople [private]
```

5.10.4.4 **_allStaticVehicles**

```
 GameObject [ ] GameSettingsManager._allStaticVehicles [private]
```

5.10.4.5 `_audioLabel`

```
Text GameSettingsManager._audioLabel [private]
```

5.10.4.6 `_backgroundImage`

```
Image GameSettingsManager._backgroundImage [private]
```

5.10.4.7 `_cameraMovement`

```
CameraMovement GameSettingsManager._cameraMovement [private]
```

5.10.4.8 `_click`

```
AudioClip GameSettingsManager._click [private]
```

5.10.4.9 `_clickSrc`

```
 AudioSource GameSettingsManager._clickSrc [private]
```

5.10.4.10 `_controlPanel`

```
 Image GameSettingsManager._controlPanel [private]
```

5.10.4.11 `_curGameState`

```
 GameState GameSettingsManager._curGameState [private]
```

5.10.4.12 `_keyWarningPanel`

```
 Image GameSettingsManager._keyWarningPanel [private]
```

5.10.4.13 _menuKey

```
KeyCode GameSettingsManager._menuKey = KeyCode.Escape [private]
```

5.10.4.14 _menuPanel

```
Image GameSettingsManager._menuPanel [private]
```

5.10.4.15 _messagePanel

```
Image GameSettingsManager._messagePanel [private]
```

5.10.4.16 _settingsPanel

```
Image GameSettingsManager._settingsPanel [private]
```

5.10.4.17 _timeLabel

```
Text GameSettingsManager._timeLabel [private]
```

5.10.4.18 _warningPanel

```
Image GameSettingsManager._warningPanel [private]
```

5.10.4.19 ClimbButton

```
const string GameSettingsManager.ClimbButton = "ClimbButton" [static]
```

5.10.4.20 ClimbText

```
Text GameSettingsManager.ClimbText [package]
```

5.10.4.21 DropButton

```
const string GameSettingsManager.DropButton = "DropButton" [static]
```

5.10.4.22 DropText

```
Text GameSettingsManager.DropText [package]
```

5.10.4.23 MoveBackButton

```
const string GameSettingsManager.MoveBackButton = "MoveBackButton" [static]
```

5.10.4.24 MoveBackText

```
Text GameSettingsManager.MoveBackText [package]
```

5.10.4.25 MoveFasterButton

```
const string GameSettingsManager.MoveFasterButton = "MoveFasterButton" [static]
```

5.10.4.26 MoveFasterText

```
Text GameSettingsManager.MoveFasterText [package]
```

5.10.4.27 MoveForwardButton

```
const string GameSettingsManager.MoveForwardButton = "MoveForwardButton" [static]
```

5.10.4.28 MoveForwardText

```
Text GameSettingsManager.MoveForwardText [package]
```

5.10.4.29 MoveLeftButton

```
const string GameSettingsManager.MoveLeftButton = "MoveLeftButton" [static]
```

5.10.4.30 MoveLeftText

```
Text GameSettingsManager.MoveLeftText [package]
```

5.10.4.31 MoveRightButton

```
const string GameSettingsManager.MoveRightButton = "MoveRightButton" [static]
```

5.10.4.32 MoveRightText

```
Text GameSettingsManager.MoveRightText [package]
```

5.10.4.33 MoveSlowerButton

```
const string GameSettingsManager.MoveSlowerButton = "MoveSlowerButton" [static]
```

5.10.4.34 MoveSlowerText

```
Text GameSettingsManager.MoveSlowerText [package]
```

5.10.4.35 Profiles

```
PostProcessProfile [] GameSettingsManager.Profiles
```

5.10.5 Property Documentation

5.10.5.1 AudioSld

```
Slider GameSettingsManager.AudioSld [get], [set]
```

5.10.5.2 ClimbBtn

```
Button GameSettingsManager.ClimbBtn [get], [set]
```

5.10.5.3 ClockText

```
Text GameSettingsManager.ClockText [get], [set]
```

5.10.5.4 ControlBackBtn

```
Button GameSettingsManager.ControlBackBtn [get], [set]
```

5.10.5.5 CurDayText

```
Text GameSettingsManager.CurDayText [get], [set]
```

5.10.5.6 CurDistText

```
Text GameSettingsManager.CurDistText [get], [set]
```

5.10.5.7 CurGrassText

```
Text GameSettingsManager.CurGrassText [get], [set]
```

5.10.5.8 CurPedestriansText

```
Text GameSettingsManager.CurPedestriansText [get], [set]
```

5.10.5.9 CurProcessText

```
Text GameSettingsManager.CurProcessText [get], [set]
```

5.10.5.10 CurProfile

```
int GameSettingsManager.CurProfile [get], [set]
```

5.10.5.11 CurQualityText

```
Text GameSettingsManager.CurQualityText [get], [set]
```

5.10.5.12 CurStaticVehiclesText

```
Text GameSettingsManager.CurStaticVehiclesText [get], [set]
```

5.10.5.13 CurVehiclesText

```
Text GameSettingsManager.CurVehiclesText [get], [set]
```

5.10.5.14 DayAndNightCycle

```
DayAndNightCycle GameSettingsManager.DayAndNightCycle [get], [set]
```

5.10.5.15 DecreaseDistBtn

```
Button GameSettingsManager.DecreaseDistBtn [get], [set]
```

5.10.5.16 DecreaseGrassBtn

```
Button GameSettingsManager.DecreaseGrassBtn [get], [set]
```

5.10.5.17 DecreasePedestriansBtn

```
Button GameSettingsManager.DecreasePedestriansBtn [get], [set]
```

5.10.5.18 DecreaseProcessBtn

```
Button GameSettingsManager.DecreaseProcessBtn [get], [set]
```

5.10.5.19 DecreaseQualityBtn

```
Button GameSettingsManager.DecreaseQualityBtn [get], [set]
```

5.10.5.20 DecreaseStaticVehiclesBtn

```
Button GameSettingsManager.DecreaseStaticVehiclesBtn [get], [set]
```

5.10.5.21 DecreaseVehiclesBtn

```
Button GameSettingsManager.DecreaseVehiclesBtn [get], [set]
```

5.10.5.22 DropBtn

```
Button GameSettingsManager.DropBtn [get], [set]
```

5.10.5.23 IncreaseDistBtn

```
Button GameSettingsManager.IncreaseDistBtn [get], [set]
```

5.10.5.24 IncreaseGrassBtn

```
Button GameSettingsManager.IncreaseGrassBtn [get], [set]
```

5.10.5.25 IncreasePedestriansBtn

```
Button GameSettingsManager.IncreasePedestriansBtn [get], [set]
```

5.10.5.26 IncreaseProcessBtn

```
Button GameSettingsManager.IncreaseProcessBtn [get], [set]
```

5.10.5.27 IncreaseQualityBtn

```
Button GameSettingsManager.IncreaseQualityBtn [get], [set]
```

5.10.5.28 IncreaseStaticVehiclesBtn

```
Button GameSettingsManager.IncreaseStaticVehiclesBtn [get], [set]
```

5.10.5.29 IncreaseVehiclesBtn

```
Button GameSettingsManager.IncreaseVehiclesBtn [get], [set]
```

5.10.5.30 IsPostProcess

```
bool GameSettingsManager.IsPostProcess [get], [set]
```

5.10.5.31 LastClickedBtn

```
Button GameSettingsManager.LastClickedBtn [get], [set]
```

5.10.5.32 Layer

```
PostProcessLayer GameSettingsManager.Layer [get], [set]
```

5.10.5.33 MoveBackBtn

```
Button GameSettingsManager.MoveBackBtn [get], [set]
```

5.10.5.34 MoveFasterBtn

```
Button GameSettingsManager.MoveFasterBtn [get], [set]
```

5.10.5.35 MoveForwardBtn

```
Button GameSettingsManager.MoveForwardBtn [get], [set]
```

5.10.5.36 MoveLeftBtn

```
Button GameSettingsManager.MoveLeftBtn [get], [set]
```

5.10.5.37 MoveRightBtn

```
Button GameSettingsManager.MoveRightBtn [get], [set]
```

5.10.5.38 MoveSlowerBtn

```
Button GameSettingsManager.MoveSlowerBtn [get], [set]
```

5.10.5.39 PostProcessCheck

```
Image GameSettingsManager.PostProcessCheck [get], [set]
```

5.10.5.40 PostProcessPanel

```
Image GameSettingsManager.PostProcessPanel [get], [set]
```

5.10.5.41 Terrain

```
Terrain GameSettingsManager.Terrain [get], [set]
```

5.10.5.42 TimeSld

```
Slider GameSettingsManager.TimeSld [get], [set]
```

5.10.5.43 Volume

```
PostProcessVolume GameSettingsManager.Volume [get], [set]
```

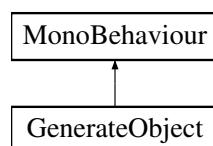
The documentation for this class was generated from the following file:

- Assets/Scripts/[GameSettingsManager.cs](#)

5.11 GenerateObject Class Reference

Generates the objects in the specific positions after starting the program.

Inheritance diagram for GenerateObject:



Public Member Functions

- GameObject [GenerateDriver](#) (Transform parent, Transform manPoint, Transform womanPoint)
Generates the driver in the mobile car.

Private Member Functions

- void [Awake](#) ()
- void [Init](#) ()
- string [DrawGender](#) ()
Draws the gender of the person (male or female).
- int [DrawVehicle](#) ()
Draws some type of the vehicle.

Private Attributes

- int `_vehiclesNum`

5.11.1 Detailed Description

Generates the objects in the specific positions after starting the program.

5.11.2 Member Function Documentation

5.11.2.1 Awake()

```
void GenerateObject.Awake ( ) [private]
```

5.11.2.2 DrawGender()

```
string GenerateObject.DrawGender ( ) [private]
```

Draws the gender of the person (male or female).

Returns

The label that represents the gender.

5.11.2.3 DrawVehicle()

```
int GenerateObject.DrawVehicle ( ) [private]
```

Draws some type of the vehicle.

Returns

The number that represents the type of the vehicle.

5.11.2.4 GenerateDriver()

```
GameObject GenerateObject.GenerateDriver (
    Transform parent,
    Transform manPoint,
    Transform womanPoint )
```

Generates the driver in the mobile car.

Parameters

<i>parent</i>	A transform that represents a vehicle.
<i>manPoint</i>	A transform that represents position for a male driver.
<i>womanPoint</i>	A transform that represents position for a female driver.

Returns

The object that represents the driver.

5.11.2.5 Init()

```
void GenerateObject.Init ( ) [private]
```

5.11.3 Member Data Documentation**5.11.3.1 _vehiclesNum**

```
int GenerateObject._vehiclesNum [private]
```

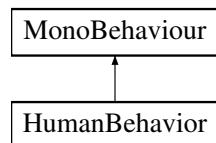
The documentation for this class was generated from the following file:

- Assets/Scripts/[GenerateObject.cs](#)

5.12 HumanBehavior Class Reference

Controls the behavior of the character.

Inheritance diagram for HumanBehavior:

**Public Types**

- enum class [Human ActionType](#) {
 [Idling](#) , [Walking](#) , [Rotating](#) , [Turning](#) ,
 [Sitting](#) , [Waiting](#) , [Standing](#) , [Admiring](#) ,
 [Watching](#) }

Public Member Functions

- void [PreparePeople \(\)](#)
Sets the navigation points for the individual people.
- void [TriggerStanding \(\)](#)
Sets the proper animation when the person is standing up.
- void [TriggerSitting \(\)](#)
Sets the proper animation when the person is sitting down.
- void [ResetPerson \(\)](#)
Resets the state of the person and sets start position.

Public Attributes

- float [AngleAccuracy](#)
- float [CheckingDistance](#)
- float [WaitingTime](#)
- float [ActionTime](#)
- float [RotationSpeed](#)
- float [SittingOffset](#)
- float [CollisionOffset](#)
- float [SpeakingGap](#)

Private Member Functions

- void [Awake \(\)](#)
- void [Update \(\)](#)
- void [Init \(\)](#)
- void [WaitAWhile \(\)](#)
Stops the person in the specific position and waits.
- void [GoToDestination \(\)](#)
Navigates the person to the destination.
- void [RotateToDestination \(\)](#)
Rotates the person to the specific object.
- bool [GetRotateDirection \(Quaternion from, Quaternion to\)](#)
Gets the proper rotation direction.
- void [TurnCharacter \(\)](#)
Sets the turning animation while the person is sitting.
- void [SitOnBench \(\)](#)
Corrects the end position of the sitting.
- void [WaitOnBench \(\)](#)
Counts some time when the character is sitting.
- void [StandUpAndSetDestination \(\)](#)
Corrects the navigation of the character after standing up.
- void [AdmireMonument \(\)](#)
Sets the proper animation when the character is admiring the monument.
- void [WatchThroughWindow \(\)](#)
Sets the proper animation when the character is watching through the window.
- void [SetNextHumanDestination \(\)](#)
Sets the next destination of the character.
- void [SetNewHumanPath \(int destIndex\)](#)

- Sets the proper path for the person.
- void [PlayExcuseMe \(\)](#)
Plays "excuse me" sound when the people collide to each other.
- IEnumerator [WaitForExcuseMe \(\)](#)
Waits some time to play another "excuse me" sound.
- void [SwitchHumanActions \(\)](#)
Switches the person actions during the simulation.

Private Attributes

- Transform[] [_destinations](#)
- float [_standardOffset](#)
- NavMeshAgent [_agent](#)
- Animator [_animator](#)
- Quaternion [_lookRotation](#)
- bool [_isWalking](#)
- bool [_isRotatingRight](#)
- bool [_isRotatingLeft](#)
- bool [_isTurning](#)
- bool [_isAdmiring](#)
- bool [_isWatching](#)
- string [_animWalk](#) = "isWalking"
- string [_animRotateRight](#) = "isRotatingRight"
- string [_animRotateLeft](#) = "isRotatingLeft"
- string [_animTurning](#) = "isTurning"
- string [_animAdmiring](#) = "isAdmiring"
- string [_animWatching](#) = "isWatching"
- string [_animIdle](#) = "idle"
- string [_animReset](#) = "reset"
- int [_curDestination](#)
- float [_curTime](#)
- float [_translationTime](#)
- HumanActionType [_curAction](#)
- Transform[] [_humanTypes](#)
- Transform[] [_navPoints](#)
- Transform [_thisNavPoint](#)
- NavMeshPath [_path](#)
- string [_gender](#)
- AudioSource [_audioSrc](#)
- AudioClip [_excuseMe](#)
- bool [_isExcuseMe](#)

5.12.1 Detailed Description

Controls the behavior of the character.

5.12.2 Member Enumeration Documentation

5.12.2.1 HumanActionType

```
enum HumanBehavior.HumanActionType [strong]
```

Enumerator

Idling	
Walking	
Rotating	
Turning	
Sitting	
Waiting	
Standing	
Admiring	
Watching	

5.12.3 Member Function Documentation**5.12.3.1 AdmireMonument()**

```
void HumanBehavior.AdmireMonument ( ) [private]
```

Sets the proper animation when the character is admiring the monument.

5.12.3.2 Awake()

```
void HumanBehavior.Awake ( ) [private]
```

5.12.3.3 GetRotateDirection()

```
bool HumanBehavior.GetRotateDirection (
    Quaternion from,
    Quaternion to ) [private]
```

Gets the proper rotation direction.

Parameters

<i>from</i>	A structure that represents a start rotation.
<i>to</i>	A structure that represents an end rotation.

Returns

The boolean that is true if the rotation is clock wise or false if not.

5.12.3.4 GoToDestination()

```
void HumanBehavior.GoToDestination ( ) [private]
```

Navigates the person to the destination.

5.12.3.5 Init()

```
void HumanBehavior.Init ( ) [private]
```

5.12.3.6 PlayExcuseMe()

```
void HumanBehavior.PlayExcuseMe ( ) [private]
```

Plays "excuse me" sound when the people collide to each other.

5.12.3.7 PreparePeople()

```
void HumanBehavior.PreparePeople ( )
```

Sets the navigation points for the individual people.

5.12.3.8 ResetPerson()

```
void HumanBehavior.ResetPerson ( )
```

Resets the state of the person and sets start position.

5.12.3.9 RotateToDestination()

```
void HumanBehavior.RotateToDestination ( ) [private]
```

Rotates the person to the specific object.

5.12.3.10 SetNewHumanPath()

```
void HumanBehavior.SetNewHumanPath ( int destIndex ) [private]
```

Sets the proper path for the person.

Parameters

<i>destIndex</i>	A number that represents the index of the route.
------------------	--

5.12.3.11 SetNextHumanDestination()

```
void HumanBehavior.SetNextHumanDestination ( ) [private]
```

Sets the next destination of the character.

5.12.3.12 SitOnBench()

```
void HumanBehavior.SitOnBench ( ) [private]
```

Corrects the end position of the sitting.

5.12.3.13 StandUpAndSetDestination()

```
void HumanBehavior.StandUpAndSetDestination ( ) [private]
```

Corrects the navigation of the character after standing up.

5.12.3.14 SwitchHumanActions()

```
void HumanBehavior.SwitchHumanActions ( ) [private]
```

Switches the person actions during the simulation.

5.12.3.15 TriggerSitting()

```
void HumanBehavior.TriggerSitting ( )
```

Sets the proper animation when the person is sitting down.

5.12.3.16 TriggerStanding()

```
void HumanBehavior.TriggerStanding ( )
```

Sets the proper animation when the person is standing up.

5.12.3.17 TurnCharacter()

```
void HumanBehavior.TurnCharacter ( ) [private]
```

Sets the turning animation while the person is sitting.

5.12.3.18 Update()

```
void HumanBehavior.Update ( ) [private]
```

5.12.3.19 WaitAWhile()

```
void HumanBehavior.WaitAWhile ( ) [private]
```

Stops the person in the specific position and waits.

5.12.3.20 WaitForExcuseMe()

```
IEnumerator HumanBehavior.WaitForExcuseMe ( ) [private]
```

Waits some time to play another "excuse me" sound.

Returns

The number of seconds to another action.

5.12.3.21 WaitOnBench()

```
void HumanBehavior.WaitOnBench ( ) [private]
```

Counts some time when the character is sitting.

5.12.3.22 WatchThroughWindow()

```
void HumanBehavior.WatchThroughWindow ( ) [private]
```

Sets the proper animation when the character is watching through the window.

5.12.4 Member Data Documentation

5.12.4.1 _agent

```
NavMeshAgent HumanBehavior._agent [private]
```

5.12.4.2 _animAdmiring

```
string HumanBehavior._animAdmiring = "isAdmiring" [private]
```

5.12.4.3 _animator

```
Animator HumanBehavior._animator [private]
```

5.12.4.4 _animIdle

```
string HumanBehavior._animIdle = "idle" [private]
```

5.12.4.5 _animReset

```
string HumanBehavior._animReset = "reset" [private]
```

5.12.4.6 _animRotateLeft

```
string HumanBehavior._animRotateLeft = "isRotatingLeft" [private]
```

5.12.4.7 _animRotateRight

```
string HumanBehavior._animRotateRight = "isRotatingRight" [private]
```

5.12.4.8 _animTurning

```
string HumanBehavior._animTurning = "isTurning" [private]
```

5.12.4.9 _animWalk

```
string HumanBehavior._animWalk = "isWalking" [private]
```

5.12.4.10 _animWatching

```
string HumanBehavior._animWatching = "isWatching" [private]
```

5.12.4.11 _audioSrc

```
 AudioSource HumanBehavior._audioSrc [private]
```

5.12.4.12 _curAction

```
Human ActionType HumanBehavior._curAction [private]
```

5.12.4.13 _curDestination

```
int HumanBehavior._curDestination [private]
```

5.12.4.14 _curTime

```
float HumanBehavior._curTime [private]
```

5.12.4.15 _destinations

```
Transform [] HumanBehavior._destinations [private]
```

5.12.4.16 _excuseMe

```
AudioClip HumanBehavior._excuseMe [private]
```

5.12.4.17 _gender

```
string HumanBehavior._gender [private]
```

5.12.4.18 _humanTypes

```
Transform [] HumanBehavior._humanTypes [private]
```

5.12.4.19 _isAdmiring

```
bool HumanBehavior._isAdmiring [private]
```

5.12.4.20 _isExcuseMe

```
bool HumanBehavior._isExcuseMe [private]
```

5.12.4.21 _isRotatingLeft

```
bool HumanBehavior._isRotatingLeft [private]
```

5.12.4.22 _isRotatingRight

```
bool HumanBehavior._isRotatingRight [private]
```

5.12.4.23 _isTurning

```
bool HumanBehavior._isTurning [private]
```

5.12.4.24 _isWalking

```
bool HumanBehavior._isWalking [private]
```

5.12.4.25 _isWatching

```
bool HumanBehavior._isWatching [private]
```

5.12.4.26 _lookRotation

```
Quaternion HumanBehavior._lookRotation [private]
```

5.12.4.27 _navPoints

```
Transform [] HumanBehavior._navPoints [private]
```

5.12.4.28 _path

```
NavMeshPath HumanBehavior._path [private]
```

5.12.4.29 _standardOffset

```
float HumanBehavior._standardOffset [private]
```

5.12.4.30 _thisNavPoint

```
Transform HumanBehavior._thisNavPoint [private]
```

5.12.4.31 _translationTime

```
float HumanBehavior._translationTime [private]
```

5.12.4.32 ActionTime

```
float HumanBehavior.ActionTime
```

5.12.4.33 AngleAccuracy

```
float HumanBehavior.AngleAccuracy
```

5.12.4.34 CheckingDistance

```
float HumanBehavior.CheckingDistance
```

5.12.4.35 CollisionOffset

```
float HumanBehavior.CollisionOffset
```

5.12.4.36 RotationSpeed

```
float HumanBehavior.RotationSpeed
```

5.12.4.37 SittingOffset

```
float HumanBehavior.SittingOffset
```

5.12.4.38 SpeakingGap

```
float HumanBehavior.SpeakingGap
```

5.12.4.39 WaitingTime

```
float HumanBehavior.WaitingTime
```

The documentation for this class was generated from the following file:

- Assets/Scripts/[HumanBehavior.cs](#)

5.13 SettingsDatabase.MenuConfiguration Struct Reference

Properties

- float [MenuSoundsVolume](#) [get, set]
- float [MenuMusicVolume](#) [get, set]

5.13.1 Property Documentation

5.13.1.1 MenuMusicVolume

```
float SettingsDatabase.MenuConfiguration.MenuMusicVolume [get], [set]
```

5.13.1.2 MenuSoundsVolume

```
float SettingsDatabase.MenuConfiguration.MenuSoundsVolume [get], [set]
```

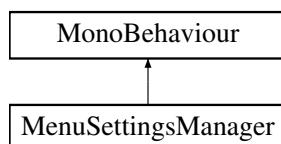
The documentation for this struct was generated from the following file:

- Assets/Scripts/[SettingsDatabase.cs](#)

5.14 MenuSettingsManager Class Reference

Manages settings that could be changed via the main menu.

Inheritance diagram for MenuSettingsManager:



Public Types

- enum class [MenuState](#) { [Menu](#) , [Settings](#) , [Credits](#) }

Public Member Functions

- void [SwitchMainMenu](#) ()
Switches the state of the main menu.
- void [PlayClickSound](#) ()
Plays click sound after press button.
- void [AdjustSoundsVolume](#) ()
Changes the sounds' volume via slider.
- void [AdjustMusicVolume](#) ()
Changes the music volume via slider.
- void [ShowSettings](#) ()
Shows settings window in the main menu.
- void [ShowCredits](#) ()
Shows credits window in the main menu.
- void [ReturnToMainMenu](#) ()
Shows the main window in the main menu and hides other windows.
- void [HideMenuWarning](#) ()
Hides warning about damaged menu configuration file.
- void [StartSimulation](#) ()
Starts the simulation and hides the main menu.
- void [ExitProgram](#) ()
Saves the menu configuration and quits the program.

Properties

- Slider [SoundsSld](#) [get, set]
- Slider [MusicSld](#) [get, set]
- AudioSource [MenuSoundsSrc](#) [get, set]
- AudioSource [MenuMusicSrc](#) [get, set]

Private Member Functions

- void [Awake](#) ()
- void [Update](#) ()
- void [Init](#) ()
- void [SetMenuConfiguration](#) ()
Sets proper configuration before starting the program.
- void [SetEventListeners](#) ()
Sets the event listeners to the selected sliders.

Private Attributes

- Image `_startPanel`
- Image `_menuPanel`
- Image `_settingsPanel`
- Image `_creditsPanel`
- Image `_warningPanel`
- Text `_soundsLabel`
- Text `_musicLabel`
- KeyCode `_menuKey` = KeyCode.Escape
- `MenuState _curMenuState`
- AudioClip `_click`

Static Private Attributes

- const int `_fpsLimit` = 100

5.14.1 Detailed Description

Manages settings that could be changed via the main menu.

5.14.2 Member Enumeration Documentation

5.14.2.1 MenuState

```
enum MenuSettingsManager.MenuState [strong]
```

Enumerator

Menu	
Settings	
Credits	

5.14.3 Member Function Documentation

5.14.3.1 AdjustMusicVolume()

```
void MenuSettingsManager.AdjustMusicVolume ( )
```

Changes the music volume via slider.

5.14.3.2 AdjustSoundsVolume()

```
void MenuSettingsManager.AdjustSoundsVolume ( )
```

Changes the sounds' volume via slider.

5.14.3.3 Awake()

```
void MenuSettingsManager.Awake ( ) [private]
```

5.14.3.4 ExitProgram()

```
void MenuSettingsManager.ExitProgram ( )
```

Saves the menu configuration and quits the program.

5.14.3.5 HideMenuWarning()

```
void MenuSettingsManager.HideMenuWarning ( )
```

Hides warning about damaged menu configuration file.

5.14.3.6 Init()

```
void MenuSettingsManager.Init ( ) [private]
```

5.14.3.7 PlayClickSound()

```
void MenuSettingsManager.PlayClickSound ( )
```

Plays click sound after press button.

5.14.3.8 **ReturnToMainMenu()**

```
void MenuSettingsManager.ReturnToMainMenu ( )
```

Shows the main window in the main menu and hides other windows.

5.14.3.9 **SetEventListeners()**

```
void MenuSettingsManager.SetEventListeners ( ) [private]
```

Sets the event listeners to the selected sliders.

5.14.3.10 **SetMenuConfiguration()**

```
void MenuSettingsManager.SetMenuConfiguration ( ) [private]
```

Sets proper configuration before starting the program.

5.14.3.11 **ShowCredits()**

```
void MenuSettingsManager.ShowCredits ( )
```

Shows credits window in the main menu.

5.14.3.12 **ShowSettings()**

```
void MenuSettingsManager.ShowSettings ( )
```

Shows settings window in the main menu.

5.14.3.13 **StartSimulation()**

```
void MenuSettingsManager.StartSimulation ( )
```

Starts the simulation and hides the main menu.

5.14.3.14 SwitchMainMenu()

```
void MenuSettingsManager.SwitchMainMenu ( )
```

Switches the state of the main menu.

5.14.3.15 Update()

```
void MenuSettingsManager.Update ( ) [private]
```

5.14.4 Member Data Documentation**5.14.4.1 _click**

```
AudioClip MenuSettingsManager._click [private]
```

5.14.4.2 _creditsPanel

```
Image MenuSettingsManager._creditsPanel [private]
```

5.14.4.3 _curMenuState

```
MenuState MenuSettingsManager._curMenuState [private]
```

5.14.4.4 _fpsLimit

```
const int MenuSettingsManager._fpsLimit = 100 [static], [private]
```

5.14.4.5 _menuKey

```
KeyCode MenuSettingsManager._menuKey = KeyCode.Escape [private]
```

5.14.4.6 `_menuPanel`

Image MenuSettingsManager._menuPanel [private]

5.14.4.7 `_musicLabel`

Text MenuSettingsManager._musicLabel [private]

5.14.4.8 `_settingsPanel`

Image MenuSettingsManager._settingsPanel [private]

5.14.4.9 `_soundsLabel`

Text MenuSettingsManager._soundsLabel [private]

5.14.4.10 `_startPanel`

Image MenuSettingsManager._startPanel [private]

5.14.4.11 `_warningPanel`

Image MenuSettingsManager._warningPanel [private]

5.14.5 Property Documentation

5.14.5.1 `MenuMusicSrc`

AudioSource MenuSettingsManager.MenuMusicSrc [get], [set]

5.14.5.2 MenuSoundsSrc

```
 AudioSource MenuSettingsManager.MenuSoundsSrc [get], [set]
```

5.14.5.3 MusicSld

```
 Slider MenuSettingsManager.MusicSld [get], [set]
```

5.14.5.4 SoundsSld

```
 Slider MenuSettingsManager.SoundsSld [get], [set]
```

The documentation for this class was generated from the following file:

- Assets/Scripts/[MenuSettingsManager.cs](#)

5.15 SettingsDatabase Class Reference

Stores information about configuration files and their parameters.

Classes

- struct [GameConfiguration](#)
- struct [MenuConfiguration](#)

Public Types

- enum class [ConfigType](#) { [Menu](#) , [Game](#) }
- enum class [LoadResult](#) { [Success](#) , [Error](#) , [NoFile](#) }

Static Public Member Functions

- static void [SetDefaultGameSettings](#) ()
Set default values for the settings of the simulation.
- static void [SetDefaultMenuSettings](#) ()
Set default values for the settings of the main menu.
- static void [CopyGameToConfig](#) ([GameSettingsManager](#) settingsManager, [CameraMovement](#) cameraMovement)
Copies the simulation parameters from the variables to the configuration structure.
- static void [CopyMenuToConfig](#) ([MenuSettingsManager](#) settingsManager)
Copies the menu parameters from the variables to the configuration structure.
- static void [SetGameFromConfig](#) (ref [GameSettingsManager](#) settingsManager, ref [CameraMovement](#) cameraMovement)
Sets the simulation parameters from the configuration structure to the variables.
- static void [SetMenuFromConfig](#) (ref [MenuSettingsManager](#) settingsManager)
Sets the menu parameters from the configuration structure to the variables.
- static bool [TrySaveConfig](#) (string path, string fileName, [ConfigType](#) type)
Tries save the information about the configuration to the file.
- static [LoadResult](#) [TryLoadConfig](#) (string path, string fileName, [ConfigType](#) type)
Tries load the information about the configuration from the file.

Static Public Attributes

- static readonly string `GameConfigName` = "/game_config"
- static readonly string `MenuConfigName` = "/menu_config"
- static readonly string `DatFormat` = ".dat"
- static readonly string `Disabled` = "Disabled"
- static readonly string `Low` = "Low"
- static readonly string `Medium` = "Medium"
- static readonly string `High` = "High"
- static readonly float `NearDist` = 300f
- static readonly float `NormalDist` = 900f
- static readonly float `FarDist` = 1500f
- static readonly float `DisabledGrass` = 0f
- static readonly float `PoorGrass` = 0.25f
- static readonly float `GreatGrass` = 1f
- static `GameConfiguration GameConfig`
- static `MenuConfiguration MenuConfig`

5.15.1 Detailed Description

Stores information about configuration files and their parameters.

5.15.2 Member Enumeration Documentation

5.15.2.1 ConfigType

enum `SettingsDatabase.ConfigType` [strong]

Enumerator

Menu	
Game	

5.15.2.2 LoadResult

enum `SettingsDatabase.LoadResult` [strong]

Enumerator

Success	
Error	
NoFile	

5.15.3 Member Function Documentation

5.15.3.1 CopyGameToConfig()

```
static void SettingsDatabase.CopyGameToConfig (
    GameSettingsManager settingsManager,
    CameraMovement cameraMovement ) [static]
```

Copies the simulation parameters from the variables to the configuration structure.

Parameters

<i>settingsManager</i>	An object that represents the game settings manager.
<i>cameraMovement</i>	An object that represents the camera movement.

5.15.3.2 CopyMenuToConfig()

```
static void SettingsDatabase.CopyMenuToConfig (
    MenuSettingsManager settingsManager ) [static]
```

Copies the menu parameters from the variables to the configuration structure.

Parameters

<i>settingsManager</i>	An object that represents the menu settings manager.
------------------------	--

5.15.3.3 SetDefaultGameSettings()

```
static void SettingsDatabase.SetDefaultGameSettings ( ) [static]
```

Set default values for the settings of the simulation.

5.15.3.4 SetDefaultMenuSettings()

```
static void SettingsDatabase.SetDefaultMenuSettings ( ) [static]
```

Set default values for the settings of the main menu.

5.15.3.5 SetGameFromConfig()

```
static void SettingsDatabase.SetGameFromConfig (
    ref GameSettingsManager settingsManager,
    ref CameraMovement cameraMovement ) [static]
```

Sets the simulation parameters from the configuration structure to the variables.

Parameters

<i>settingsManager</i>	An object that represents the game settings manager.
<i>cameraMovement</i>	An object that represents the camera movement.

5.15.3.6 SetMenuFromConfig()

```
static void SettingsDatabase.SetMenuFromConfig (
    ref MenuSettingsManager settingsManager ) [static]
```

Sets the menu parameters from the configuration structure to the variables.

Parameters

<i>settingsManager</i>	An object that represents the menu settings manager.
------------------------	--

5.15.3.7 TryLoadConfig()

```
static LoadResult SettingsDatabase.TryLoadConfig (
    string path,
    string fileName,
    ConfigType type ) [static]
```

Tries load the information about the configuration from the file.

Parameters

<i>path</i>	A label that represents the path to a file.
<i>fileName</i>	A label that the name of a file.
<i>type</i>	A structure that represents the type of the configuration.

Returns

The value that represents the result of the operation.

5.15.3.8 TrySaveConfig()

```
static bool SettingsDatabase.TrySaveConfig (
    string path,
    string fileName,
    ConfigType type ) [static]
```

Tries save the information about the configuration to the file.

Parameters

<i>path</i>	A label that represents the path to a file.
<i>fileName</i>	A label that the name of a file.
<i>type</i>	A structure that represents the type of the configuration.

Returns

The boolean that is true if the operation is succeeded or false if not.

5.15.4 Member Data Documentation

5.15.4.1 DatFormat

```
readonly string SettingsDatabase.DatFormat = ".dat" [static]
```

5.15.4.2 Disabled

```
readonly string SettingsDatabase.Disabled = "Disabled" [static]
```

5.15.4.3 DisabledGrass

```
readonly float SettingsDatabase.DisabledGrass = 0f [static]
```

5.15.4.4 FarDist

```
readonly float SettingsDatabase.FarDist = 1500f [static]
```

5.15.4.5 GameConfig

```
GameConfiguration SettingsDatabase.GameConfig [static]
```

5.15.4.6 GameConfigName

```
readonly string SettingsDatabase.GameConfigName = "/game_config" [static]
```

5.15.4.7 GreatGrass

```
readonly float SettingsDatabase.GreatGrass = 1f [static]
```

5.15.4.8 High

```
readonly string SettingsDatabase.High = "High" [static]
```

5.15.4.9 Low

```
readonly string SettingsDatabase.Low = "Low" [static]
```

5.15.4.10 Medium

```
readonly string SettingsDatabase.Medium = "Medium" [static]
```

5.15.4.11 MenuConfig

```
MenuConfiguration SettingsDatabase.MenuConfig [static]
```

5.15.4.12 MenuConfigName

```
readonly string SettingsDatabase.MenuConfigName = "/menu_config" [static]
```

5.15.4.13 NearDist

```
readonly float SettingsDatabase.NearDist = 300f [static]
```

5.15.4.14 NormalDist

```
readonly float SettingsDatabase.NormalDist = 900f [static]
```

5.15.4.15 PoorGrass

```
readonly float SettingsDatabase.PoorGrass = 0.25f [static]
```

The documentation for this class was generated from the following file:

- Assets/Scripts/[SettingsDatabase.cs](#)

5.16 VehicleBehavior.TrafficPoint Struct Reference

Public Attributes

- string [ID](#)
- [AdjustTrafficLights](#) [TrafficLights](#)

5.16.1 Member Data Documentation

5.16.1.1 ID

```
string VehicleBehavior.TrafficPoint.ID
```

5.16.1.2 TrafficLights

```
AdjustTrafficLights VehicleBehavior.TrafficPoint.TrafficLights
```

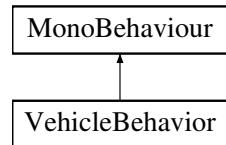
The documentation for this struct was generated from the following file:

- Assets/Scripts/[VehicleBehavior.cs](#)

5.17 VehicleBehavior Class Reference

Controls the behavior of the vehicle.

Inheritance diagram for VehicleBehavior:



Classes

- struct [TrafficPoint](#)

Public Types

- enum class [VehicleActionType](#) { [Stopping](#) , [Riding](#) }

Public Member Functions

- void [PrepareVehicles](#) ()
Sets the navigation points for the individual vehicles.
- void [SetWheels](#) ()
Sets proper direction of the wheels before the start.
- void [PrepareDriver](#) ()
Generates the driver in the specific position of the vehicle.
- void [ResetVehicle](#) ()
Resets the state of the vehicle and sets start position.

Public Attributes

- float [CheckingDistance](#)
- float [WaitingTime](#)
- float [StoppingDistance](#)

Static Public Attributes

- const string [StaticVehicle](#) = "StaticVehicle"

Private Member Functions

- void [Awake \(\)](#)
- void [Init \(\)](#)
- void [Update \(\)](#)
- void [SetRearLights \(Color color\)](#)
Sets proper color of the rear lights.
- void [StopVehicleAndWait \(\)](#)
Stops the vehicle in the specific position and waits.
- void [RideToDestination \(\)](#)
Navigates the vehicle to the destination.
- void [SetNextVehicleDestinaton \(\)](#)
Sets the next destination of the vehicle.
- void [SetNewVehiclePath \(int destIndex\)](#)
Sets proper path for the vehicle.
- void [SetVehicleAnimation \(\)](#)
Sets proper animation for the vehicle.
- bool [IsVehicleNear \(\)](#)
Checks if some vehicle in the same zone is near.
- void [PlayProperClip \(AudioClip clip\)](#)
Sets and plays the proper audio clip.
- void [SwitchVehicleActions \(\)](#)
Switches the vehicle actions during the simulation.

Private Attributes

- int [_curDestination](#)
- [VehicleActionType _curAction](#)
- Transform[] [_destinations](#)
- NavMeshAgent [_agent](#)
- Animator[] [_animators](#)
- bool [_isMoving](#)
- float [_curTime](#)
- float [_angularSpeed](#)
- NavMeshPath [_path](#)
- Transform [_frontPoint](#)
- Transform[] [_backPoints](#)
- TrafficPoint[] [_trafficPoints](#)
- Color [_rideColor](#) = new Color(0.2f, 0f, 0f)
- Color [_stopColor](#) = new Color(0.8f, 0f, 0f)
- Renderer [_rearLights](#)
- MaterialPropertyBlock [_matBlock](#)
- AudioSource [_audioSrc](#)
- AudioClip [_carDriveClip](#)
- AudioClip [_carIdleClip](#)
- AudioClip [_carHornClip](#)

5.17.1 Detailed Description

Controls the behavior of the vehicle.

5.17.2 Member Enumeration Documentation

5.17.2.1 VehicleActionType

```
enum VehicleBehavior.VehicleActionType [strong]
```

Enumerator

Stopping	
Riding	

5.17.3 Member Function Documentation

5.17.3.1 Awake()

```
void VehicleBehavior.Awake () [private]
```

5.17.3.2 Init()

```
void VehicleBehavior.Init () [private]
```

5.17.3.3 IsVehicleNear()

```
bool VehicleBehavior.IsVehicleNear () [private]
```

Checks if some vehicle in the same zone is near.

Returns

The boolean that is true if the vehicle is near or false if not.

5.17.3.4 PlayProperClip()

```
void VehicleBehavior.PlayProperClip (
    AudioClip clip) [private]
```

Sets and plays the proper audio clip.

Parameters

<i>clip</i>	An object that represents a clip.
-------------	-----------------------------------

5.17.3.5 PrepareDriver()

```
void VehicleBehavior.PrepareDriver ( )
```

Generates the driver in the specific position of the vehicle.

5.17.3.6 PrepareVehicles()

```
void VehicleBehavior.PrepareVehicles ( )
```

Sets the navigation points for the individual vehicles.

5.17.3.7 ResetVehicle()

```
void VehicleBehavior.ResetVehicle ( )
```

Resets the state of the vehicle and sets start position.

5.17.3.8 RideToDestination()

```
void VehicleBehavior.RideToDestination ( ) [private]
```

Navigates the vehicle to the destination.

5.17.3.9 SetNewVehiclePath()

```
void VehicleBehavior.SetNewVehiclePath ( int destIndex ) [private]
```

Sets proper path for the vehicle.

Parameters

<i>destIndex</i>	A number that represents the index of the route.
------------------	--

5.17.3.10 SetNextVehicleDestinaton()

```
void VehicleBehavior.SetNextVehicleDestinaton ( ) [private]
```

Sets the next destination of the vehicle.

5.17.3.11 SetRearLights()

```
void VehicleBehavior.SetRearLights ( Color color ) [private]
```

Sets proper color of the rear lights.

Parameters

<i>color</i>	A structure that represents a color.
--------------	--------------------------------------

5.17.3.12 SetVehicleAnimation()

```
void VehicleBehavior.SetVehicleAnimation ( ) [private]
```

Sets proper animation for the vehicle.

5.17.3.13 SetWheels()

```
void VehicleBehavior.SetWheels ( )
```

Sets proper direction of the wheels before the start.

5.17.3.14 StopVehicleAndWait()

```
void VehicleBehavior.StopVehicleAndWait ( ) [private]
```

Stops the vehicle in the specific position and waits.

5.17.3.15 SwitchVehicleActions()

```
void VehicleBehavior.SwitchVehicleActions ( ) [private]
```

Switches the vehicle actions during the simulation.

5.17.3.16 Update()

```
void VehicleBehavior.Update ( ) [private]
```

5.17.4 Member Data Documentation**5.17.4.1 _agent**

```
NavMeshAgent VehicleBehavior._agent [private]
```

5.17.4.2 _angularSpeed

```
float VehicleBehavior._angularSpeed [private]
```

5.17.4.3 _animators

```
Animator [ ] VehicleBehavior._animators [private]
```

5.17.4.4 _audioSrc

```
 AudioSource VehicleBehavior._audioSrc [private]
```

5.17.4.5 _backPoints

```
 Transform [ ] VehicleBehavior._backPoints [private]
```

5.17.4.6 _carDriveClip

```
AudioClip VehicleBehavior._carDriveClip [private]
```

5.17.4.7 _carHornClip

```
AudioClip VehicleBehavior._carHornClip [private]
```

5.17.4.8 _carIdleClip

```
AudioClip VehicleBehavior._carIdleClip [private]
```

5.17.4.9 _curAction

```
VehicleActionType VehicleBehavior._curAction [private]
```

5.17.4.10 _curDestination

```
int VehicleBehavior._curDestination [private]
```

5.17.4.11 _curTime

```
float VehicleBehavior._curTime [private]
```

5.17.4.12 _destinations

```
Transform [] VehicleBehavior._destinations [private]
```

5.17.4.13 _frontPoint

```
Transform VehicleBehavior._frontPoint [private]
```

5.17.4.14 _isMoving

```
bool VehicleBehavior._isMoving [private]
```

5.17.4.15 _matBlock

```
MaterialPropertyBlock VehicleBehavior._matBlock [private]
```

5.17.4.16 _path

```
NavMeshPath VehicleBehavior._path [private]
```

5.17.4.17 _rearLights

```
Renderer VehicleBehavior._rearLights [private]
```

5.17.4.18 _rideColor

```
Color VehicleBehavior._rideColor = new Color(0.2f, 0f, 0f) [private]
```

5.17.4.19 _stopColor

```
Color VehicleBehavior._stopColor = new Color(0.8f, 0f, 0f) [private]
```

5.17.4.20 _trafficPoints

```
TrafficPoint [] VehicleBehavior._trafficPoints [private]
```

5.17.4.21 CheckingDistance

```
float VehicleBehavior.CheckingDistance
```

5.17.4.22 StaticVehicle

```
const string VehicleBehavior.StaticVehicle = "StaticVehicle" [static]
```

5.17.4.23 StoppingDistance

```
float VehicleBehavior.StoppingDistance
```

5.17.4.24 WaitingTime

```
float VehicleBehavior.WaitingTime
```

The documentation for this class was generated from the following file:

- Assets/Scripts/[VehicleBehavior.cs](#)

Chapter 6

File Documentation

6.1 Assets/Scripts/AdjustPedestrianLights.cs File Reference

Classes

- class [AdjustPedestrianLights](#)
Manages switching the pedestrian lights.

6.2 Assets/Scripts/AdjustReflectionProbe.cs File Reference

Classes

- class [AdjustReflectionProbe](#)
Manages the state of the reflection probe.

6.3 Assets/Scripts/AdjustStreetLights.cs File Reference

Classes

- class [AdjustStreetLights](#)
Manages the intensity of the streetlights.

6.4 Assets/Scripts/AdjustTrafficLights.cs File Reference

Classes

- class [AdjustTrafficLights](#)
Manages switching the traffic lights.

6.5 Assets/Scripts/CameraMovement.cs File Reference

Classes

- class [CameraMovement](#)

Manages the movement of the camera.

6.6 Assets/Scripts/DayAndNightCycle.cs File Reference

Classes

- class [DayColors](#)
Describes the colors that make up the lighting.
- class [DayAndNightCycle](#)
Controls day and night cycle by changing the intensity of the lighting.

6.7 Assets/Scripts/DrawPath.cs File Reference

Classes

- class [DrawPath](#)
Draws the auxiliary paths in the editor.

6.8 Assets/Scripts/GameSettingsManager.cs File Reference

Classes

- class [GameSettingsManager](#)
Manages settings that could be changed while the game.

6.9 Assets/Scripts/GenerateObject.cs File Reference

Classes

- class [GenerateObject](#)
Generates the objects in the specific positions after starting the program.

6.10 Assets/Scripts/HumanBehavior.cs File Reference

Classes

- class [HumanBehavior](#)
Controls the behavior of the character.

6.11 Assets/Scripts/MenuSettingsManager.cs File Reference

Classes

- class [MenuSettingsManager](#)
Manages settings that could be changed via the main menu.

6.12 Assets/Scripts/SettingsDatabase.cs File Reference

Classes

- class [SettingsDatabase](#)
Stores information about configuration files and their parameters.
- struct [SettingsDatabase.MenuConfiguration](#)
- struct [SettingsDatabase.GameConfiguration](#)

6.13 Assets/Scripts/VehicleBehavior.cs File Reference

Classes

- class [VehicleBehavior](#)
Controls the behavior of the vehicle.
- struct [VehicleBehavior.TrafficPoint](#)

6.14 README.md File Reference

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