# HVWC Multiplayer Platform 1.0

Generated by Doxygen 1.8.6

Thu Jan 30 2014 15:17:39

### **Contents**

| 1 | Hiera | archical | Index      |         |          |          |        |      |      |      |      |      |  |      |  |   |  | 1 |
|---|-------|----------|------------|---------|----------|----------|--------|------|------|------|------|------|--|------|--|---|--|---|
|   | 1.1   | Class I  | Hierarchy  |         |          |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 1 |
| 2 | Clas  | s Index  |            |         |          |          |        |      |      |      |      |      |  |      |  |   |  | 3 |
|   | 2.1   | Class I  | _ist       |         |          |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  | - |  | 3 |
| 3 | Clas  | s Docu   | mentation  | n       |          |          |        |      |      |      |      |      |  |      |  |   |  | 5 |
|   | 3.1   | Animat   | tionContro | oller C | lass R   | efere    | ence   |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 5 |
|   |       | 3.1.1    | Detailed   | Desc    | cription | ١        |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 5 |
|   |       | 3.1.2    | Member     | Fund    | ction Do | ocum     | nentat | tion | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 5 |
|   |       |          | 3.1.2.1    | Act     | ivateAr  | nimat    | tion   |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 5 |
|   |       |          | 3.1.2.2    | Act     | ivateAr  | nimat    | tion   |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       | 3.1.3    | Property   | Doc     | umenta   | ation    |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       |          | 3.1.3.1    | Ani     | mation   | ıs       |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       |          | 3.1.3.2    | Cui     | rrentAn  | nimat    | ion    |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   | 3.2   | MainM    | enu.Avata  | ar Cla  | ss Refe  | erenc    | ce .   |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       | 3.2.1    | Detailed   | Desc    | cription | ١        |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       | 3.2.2    | Member     | Data    | Docur    | nenta    | ation  |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       |          | 3.2.2.1    | ico     | n        |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 6 |
|   |       |          | 3.2.2.2    | nar     | me       |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   |       |          | 3.2.2.3    | pre     | fab .    |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   | 3.3   | C3Void   | eChat Cla  | ass R   | eferen   | ce .     |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   |       | 3.3.1    | Detailed   | Desc    | cription | ١        |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   |       | 3.3.2    | Member     | Fund    | ction Do | ocum     | nental | tion | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   |       |          | 3.3.2.1    | Joi     | nVoice   |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   | 3.4   | Chat C   | lass Refe  | rence   | <b>.</b> |          |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 7 |
|   |       | 3.4.1    | Detailed   | Desc    | cription | ١        |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 8 |
|   |       | 3.4.2    | Member     | Fund    | ction Do | ocum     | nental | tion | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 8 |
|   |       |          | 3.4.2.1    | Sei     | ndChat   | ı        |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 8 |
|   |       |          | 3.4.2.2    | Sei     | ndChat   | ı        |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 8 |
|   |       | 3.4.3    | Member     | Data    | Docur    | menta    | ation  |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 8 |
|   |       |          | 3.4.3.1    | Me      | ssages   | <b>.</b> |        |      | <br> | <br> | <br> | <br> |  | <br> |  |   |  | 8 |

iv CONTENTS

| 3.5 | ClickTe | eleport Clas | ss Reference           | . 9  |
|-----|---------|--------------|------------------------|------|
|     | 3.5.1   | Detailed D   | Description            | . 9  |
|     | 3.5.2   | Member E     | Data Documentation     | . 9  |
|     |         | 3.5.2.1      | radius                 | . 9  |
| 3.6 | MainM   | enu Class I  | Reference              | . 9  |
|     | 3.6.1   | Detailed D   | Description            | . 10 |
|     | 3.6.2   | Member D     | Data Documentation     | . 10 |
|     |         | 3.6.2.1      | avatars                | . 10 |
|     |         | 3.6.2.2      | background             | . 10 |
|     |         | 3.6.2.3      | CustomSkin             | . 10 |
|     |         | 3.6.2.4      | selectedAvatar         | . 10 |
|     |         | 3.6.2.5      | spawnRadius            | . 10 |
| 3.7 | Namel   | Tag Class R  | Reference              | . 10 |
|     | 3.7.1   | Detailed D   | Description            | . 11 |
|     | 3.7.2   | Member D     | Data Documentation     | . 11 |
|     |         | 3.7.2.1      | fadeDistance           | . 11 |
|     |         | 3.7.2.2      | nameTagColor           | . 11 |
| 3.8 | Networ  | rkManager    | Class Reference        | . 11 |
|     | 3.8.1   | Detailed D   | Description            | . 12 |
|     | 3.8.2   | Member F     | Function Documentation | . 12 |
|     |         | 3.8.2.1      | Connect                | . 12 |
|     |         | 3.8.2.2      | CreateRoom             | . 12 |
|     |         | 3.8.2.3      | Instantiate            | . 13 |
|     |         | 3.8.2.4      | JoinRandomRoom         | . 13 |
|     |         | 3.8.2.5      | JoinRoom               | . 13 |
|     |         | 3.8.2.6      | LeaveRoom              | . 13 |
|     |         | 3.8.2.7      | LoadLevel              | . 13 |
|     |         | 3.8.2.8      | LoadLevel              | . 13 |
|     | 3.8.3   | Member D     | Data Documentation     | . 13 |
|     |         | 3.8.3.1      | version                | . 13 |
|     | 3.8.4   | Property I   | Documentation          | . 14 |
|     |         | 3.8.4.1      | Connected              | . 14 |
|     |         | 3.8.4.2      | Instance               | . 14 |
|     |         | 3.8.4.3      | IsMessageQueueRunning  | . 14 |
|     |         | 3.8.4.4      | OfflineMode            | . 14 |
|     |         | 3.8.4.5      | PlayerName             | . 14 |
|     |         | 3.8.4.6      | Room                   | . 14 |
|     |         | 3.8.4.7      | RoomList               | . 14 |
| 3.9 | Networ  | rkPlayer Cla | ass Reference          | . 14 |
|     | 3.9.1   | Detailed D   | Description            | . 15 |

CONTENTS

| 3.10 | Player  | Controller Class Reference       | 15 |
|------|---------|----------------------------------|----|
|      | 3.10.1  | Detailed Description             | 16 |
|      | 3.10.2  | Member Enumeration Documentation | 16 |
|      |         | 3.10.2.1 CharacterState          | 16 |
|      | 3.10.3  | Member Function Documentation    | 16 |
|      |         | 3.10.3.1 Fly                     | 16 |
|      | 3.10.4  | Member Data Documentation        | 16 |
|      |         | 3.10.4.1 animationController     | 16 |
|      |         | 3.10.4.2 flying                  | 16 |
|      |         | 3.10.4.3 flySpeed                | 17 |
|      |         | 3.10.4.4 gravity                 | 17 |
|      |         | 3.10.4.5 grounded                | 17 |
|      |         | 3.10.4.6 groundingDistance       | 17 |
|      |         | 3.10.4.7 groundLayers            | 17 |
|      |         | 3.10.4.8 heightOffset            | 17 |
|      |         | 3.10.4.9 runSpeed                | 17 |
|      |         | 3.10.4.10 walkSpeed              | 17 |
|      | 3.10.5  | Property Documentation           | 17 |
|      |         | 3.10.5.1 CharState               | 17 |
| 3.11 | PlayerH | HUD Class Reference              | 17 |
|      | 3.11.1  | Detailed Description             | 18 |
|      | 3.11.2  | Member Data Documentation        | 18 |
|      |         | 3.11.2.1 C3_Tex                  | 18 |
|      |         | 3.11.2.2 CustomSkin              | 18 |
|      |         | 3.11.2.3 ExitTex                 | 18 |
|      |         | 3.11.2.4 HelpTex                 | 18 |
|      |         | 3.11.2.5 loadingScreen           | 18 |
|      |         | 3.11.2.6 MapTex                  | 19 |
|      |         | 3.11.2.7 VolumeTex               | 19 |
| 3.12 | PlayerL | ist Class Reference              | 19 |
|      | 3.12.1  | Detailed Description             | 19 |
|      | 3.12.2  | Property Documentation           | 19 |
|      |         | 3.12.2.1 LocalPlayer             | 19 |
|      |         | 3.12.2.2 Players                 | 19 |
|      |         | 3.12.2.3 RemotePlayers           | 20 |
| 3.13 | Proxim  | ityTrigger Class Reference       | 20 |
|      | 3.13.1  | Detailed Description             | 20 |
|      | 3.13.2  | Member Data Documentation        | 20 |
|      |         | 3.13.2.1 url                     | 20 |
| 3.14 | QuickP  | layBypass Class Reference        | 20 |

vi CONTENTS

| Ind | ex   |        |            |         |        |        |   |      |  |      |      |      |      |      |      | 23 |
|-----|------|--------|------------|---------|--------|--------|---|------|--|------|------|------|------|------|------|----|
|     |      |        | 3.17.2.1   | url .   |        |        |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 22 |
|     |      | 3.17.2 | Member     | Data Do | ocume  | ntatio | n | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 22 |
|     |      | 3.17.1 | Detailed   | Descrip | tion   |        |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 22 |
|     | 3.17 | WebLin | nk Class F | eferenc | e      |        |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 21 |
|     |      | 3.16.1 | Detailed   | Descrip | tion . |        |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 21 |
|     | 3.16 | Telepo | rtToObject | Class F | Refere | nce    |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 21 |
|     |      | 3.15.1 | Detailed   | Descrip | tion . |        |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 21 |
|     | 3.15 | Telepo | rtObject C | lass Re | ferenc | е.     |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 21 |
|     |      | 3.14.1 | Detailed   | Descrip | tion . |        |   | <br> |  | <br> | <br> | <br> | <br> | <br> | <br> | 21 |

## **Chapter 1**

## **Hierarchical Index**

### 1.1 Class Hierarchy

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

| inMenu.Avatar       |                |
|---------------------|----------------|
| noBehaviour         |                |
| AnimationController | !              |
| C3VoiceChat         |                |
| Chat                |                |
| ClickTeleport       |                |
| MainMenu            |                |
| NameTag             | 10             |
| NetworkManager      | 1              |
| NetworkPlayer       | 14             |
| PlayerController    | 1!             |
| PlayerHUD           | 1              |
| PlayerList          | 19             |
| ProximityTrigger    | 20             |
| QuickPlayBypass     | 20             |
| TeleportObject      | 2 <sup>-</sup> |
| TeleportToObject    | 2              |
| WebLink             | 2              |

2 **Hierarchical Index** 

## **Chapter 2**

## **Class Index**

### 2.1 Class List

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

| AnimationController   |    |
|---|----|
| This class handles the activation and deactivation of animations on the player                | 5  |
| MainMenu.Avatar   |    |
| This class constructs an Avatar object  | 6  |
| C3VoiceChat   |    |
| This class allows for the creation or joining of rooms in the Vivox C3 voice chat application | 7  |
| Chat  |    |
| This class handles public and private chat messaging between players.                         | 7  |
| ClickTeleport   |    |
| This class allows for teleportation by double-clicking on a collider.                         | 9  |
| MainMenu  |    |
| This class displays the main menu used in the lobby.  | 9  |
| NameTag   |    |
| This class handles displaying the player's name tag   | 10 |
| NetworkManager  |    |
| This singleton class manages the network and wraps useful network methods                     | 11 |
| NetworkPlayer   |    |
| This class handles the networking of important player properties                              | 14 |
| PlayerController  |    |
| This class handles the movement and animations of the local player                            | 15 |
| PlayerHUD   |    |
| This class displays the local player's HUD.   | 17 |
| PlayerList  |    |
| This class wraps useful network player methods.   | 19 |
| ProximityTrigger  |    |
| This class allows a web page to be opened when the player enters a trigger                    | 20 |
| QuickPlayBypass   |    |
| This class allows for the enabling of quickplay in the web player.                            | 20 |
| TeleportObject  |    |
| This class allows for teleportation by clicking on a map icon.                                | 21 |
| TeleportToObject  |    |
| This class allows for teleportation by clicking on a collider.                                | 21 |
| WebLink   |    |
| This class allows for hyperlinking clicks on colliders  | 21 |

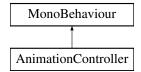
Class Index

### **Chapter 3**

### **Class Documentation**

#### 3.1 AnimationController Class Reference

This class handles the activation and deactivation of animations on the player. Inheritance diagram for AnimationController:



#### **Public Member Functions**

- void ActivateAnimation (string animationToActivate)
  - A method to set activate an animation on our player.
- void ActivateAnimation (int index)

A method to set activate an animation on our player.

#### **Properties**

- string[] Animations [get, set]
  - A property to get/set the animations we have on our player.
- string CurrentAnimation [get, set]

A property to get/set the currently playing animation.

#### 3.1.1 Detailed Description

This class handles the activation and deactivation of animations on the player.

#### 3.1.2 Member Function Documentation

3.1.2.1 void AnimationController.ActivateAnimation ( string animationToActivate )

A method to set activate an animation on our player.

#### **Parameters**

| animationTo- | The name of the animation to activate. |
|--------------|--|
| Activate     |  |

#### 3.1.2.2 void AnimationController.ActivateAnimation (int index)

A method to set activate an animation on our player.

#### **Parameters**

| index | The index of the animation to activate. |
|-------|---|

#### 3.1.3 Property Documentation

**3.1.3.1 string[] AnimationController.Animations** [get], [set]

A property to get/set the animations we have on our player.

**3.1.3.2 string AnimationController.CurrentAnimation** [get], [set]

A property to get/set the currently playing animation.

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

 $\bullet \ \ C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/AnimationController.cs$ 

#### 3.2 MainMenu.Avatar Class Reference

This class constructs an Avatar object.

#### **Public Attributes**

string name

The name of the avatar prefab.

GameObject prefab

The prefab for this avatar.

· Texture icon

The icon for this avatar.

#### 3.2.1 Detailed Description

This class constructs an Avatar object.

#### 3.2.2 Member Data Documentation

#### 3.2.2.1 Texture MainMenu.Avatar.icon

The icon for this avatar.

#### 3.2.2.2 string MainMenu.Avatar.name

The name of the avatar prefab.

#### 3.2.2.3 GameObject MainMenu.Avatar.prefab

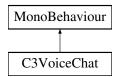
The prefab for this avatar.

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

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/GUI/MainMenu.cs

#### 3.3 C3VoiceChat Class Reference

This class allows for the creation or joining of rooms in the Vivox C3 voice chat application. Inheritance diagram for C3VoiceChat:



#### Static Public Member Functions

• static void JoinVoice (string roomName, string userName)

Joins or creates a C3 voice channel with the player's username.

#### 3.3.1 Detailed Description

This class allows for the creation or joining of rooms in the Vivox C3 voice chat application.

#### 3.3.2 Member Function Documentation

**3.3.2.1** static void C3VoiceChat.JoinVoice ( string roomName, string userName ) [static]

Joins or creates a C3 voice channel with the player's username.

#### **Parameters**

| roomName | The room name.        |
|----------|-----------------------|
| userName | The player's username |

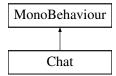
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/GUI/C3VoiceChat.cs

#### 3.4 Chat Class Reference

This class handles public and private chat messaging between players.

Inheritance diagram for Chat:



#### **Public Member Functions**

• void SendChat (PhotonTargets targets, string message)

A method to send a public chat message.

• void SendChat (PhotonPlayer target, string message)

A method to send a private chat message.

#### **Public Attributes**

List< string > Messages = new List<string>()
 A list of the messages that have been sent.

#### 3.4.1 Detailed Description

This class handles public and private chat messaging between players.

#### 3.4.2 Member Function Documentation

3.4.2.1 void Chat.SendChat ( PhotonTargets targets, string message )

A method to send a public chat message.

#### Parameters

| targets | The players to whom this message should be sent. |
|---------|--|
| message | The message to send.                             |

#### 3.4.2.2 void Chat.SendChat ( PhotonPlayer target, string message )

A method to send a private chat message.

#### **Parameters**

| target  | The player to whom this message should be sent. |
|---------|---|
| message | The message to send.                            |

#### 3.4.3 Member Data Documentation

3.4.3.1 List<string> Chat.Messages = new List<string>()

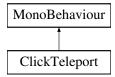
A list of the messages that have been sent.

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

C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/Chat.cs

#### 3.5 ClickTeleport Class Reference

This class allows for teleportation by double-clicking on a collider. Inheritance diagram for ClickTeleport:



#### **Public Attributes**

• float radius = 100f

The radius of the teleportation range.

#### 3.5.1 Detailed Description

This class allows for teleportation by double-clicking on a collider.

#### 3.5.2 Member Data Documentation

#### 3.5.2.1 float ClickTeleport.radius = 100f

The radius of the teleportation range.

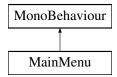
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Functionality/ClickTeleport.cs

#### 3.6 MainMenu Class Reference

This class displays the main menu used in the lobby.

Inheritance diagram for MainMenu:



#### **Classes**

class Avatar

This class constructs an Avatar object.

#### **Public Attributes**

Avatar[] avatars

An array of Avatar.

• string selectedAvatar = ""

The selected avatar.

• float spawnRadius =3f

The spawn radius.

• GUISkin CustomSkin

The custom skin.

· Texture background

The background for the main menu.

#### 3.6.1 Detailed Description

This class displays the main menu used in the lobby.

#### 3.6.2 Member Data Documentation

#### 3.6.2.1 Avatar [] MainMenu.avatars

An array of Avatar.

3.6.2.2 Texture MainMenu.background

The background for the main menu.

3.6.2.3 GUISkin MainMenu.CustomSkin

The custom skin.

3.6.2.4 string MainMenu.selectedAvatar = ""

The selected avatar.

3.6.2.5 float MainMenu.spawnRadius =3f

The spawn radius.

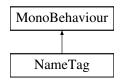
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/GUI/MainMenu.cs

#### 3.7 NameTag Class Reference

This class handles displaying the player's name tag.

Inheritance diagram for NameTag:



#### **Public Attributes**

Color nameTagColor

The color the text of name tag should be.

float fadeDistance

The distance at which the name tag should start to fade.

#### 3.7.1 Detailed Description

This class handles displaying the player's name tag.

#### 3.7.2 Member Data Documentation

#### 3.7.2.1 float NameTag.fadeDistance

The distance at which the name tag should start to fade.

#### 3.7.2.2 Color NameTag.nameTagColor

The color the text of name tag should be.

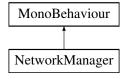
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/NameTag.cs

#### 3.8 NetworkManager Class Reference

This singleton class manages the network and wraps useful network methods.

Inheritance diagram for NetworkManager:



#### **Public Member Functions**

void Connect (string version)

A method to connect to the Photon server. Uses the settings you set in the PUN Setup Wizard.

• void CreateRoom (string roomName, bool isVisible, bool isOpen, int maxPlayers)

A method to create a new room on the Photon server.

void JoinRoom (string roomName)

A method to join an existing room on the Photon server.

• void JoinRandomRoom ()

A method to join a random room on the Photon server.

void LeaveRoom ()

A method to leave the current room.

GameObject Instantiate (string prefabName, Vector3 position, Quaternion rotation, int group)

A method to instantiate a prefab on the network.

void LoadLevel (int levelID)

A method to load a level.

void LoadLevel (string levelName)

A method to load a level.

#### **Public Attributes**

• string version

The version of this build. Photon separates versions on the network.

#### **Properties**

• static NetworkManager Instance [get, set]

A static instance of this script to make this gameobject a singleton.

• string PlayerName [get, set]

Gets or sets the name of the local player.

• Room Room [get]

Gets the current room.

• bool Connected [get]

Gets a value indicating whether PhotonNetwork is connected.

• RoomInfo[] RoomList [get]

Gets the room list.

• bool OfflineMode [get, set]

Gets or sets a value indicating whether PhotonNetwork is in offline mode.

• bool IsMessageQueueRunning [get, set]

Gets or sets a value indicating whether PhotonNetwork is or should be running the message queue.

#### 3.8.1 Detailed Description

This singleton class manages the network and wraps useful network methods.

#### 3.8.2 Member Function Documentation

3.8.2.1 void NetworkManager.Connect ( string version )

A method to connect to the Photon server. Uses the settings you set in the PUN Setup Wizard.

#### **Parameters**

version The version of this build. Photon uses this to separate different versions on the server.

3.8.2.2 void NetworkManager.CreateRoom ( string roomName, bool isVisible, bool isOpen, int maxPlayers )

A method to create a new room on the Photon server.

#### **Parameters**

roomName The name of the room we're creating.

| isVisible  | Should this room be visible to others?                              |
|------------|---|
| isOpen     | Should this room be open to others?                                 |
| maxPlayers | The maximum number of players that can be in this room at one time. |

#### 3.8.2.3 GameObject NetworkManager.Instantiate ( string prefabName, Vector3 position, Quaternion rotation, int group )

A method to instantiate a prefab on the network.

#### **Parameters**

| prefabName | The name of the prefab we're instantiating. NOTE: The prefab must be located in the Re- |
|------------|---|
|            | sources folder.   |
| position   | The position where the prefab should be instantiated.                                   |
| rotation   | How the prefab should be orientated.  |
| group      | The group the prefab. Can be used for team-based play.                                  |

#### 3.8.2.4 void NetworkManager.JoinRandomRoom ( )

A method to join a random room on the Photon server.

#### 3.8.2.5 void NetworkManager.JoinRoom ( string roomName )

A method to join an existing room on the Photon server.

#### **Parameters**

| roomName | The name of the room we're trying to join. |
|----------|--|
|----------|--|

#### 3.8.2.6 void NetworkManager.LeaveRoom ( )

A method to leave the current room.

#### 3.8.2.7 void NetworkManager.LoadLevel (int levelID)

A method to load a level.

#### **Parameters**

| leveIID | The integer id of the level to load. |
|---------|--------------------------------------|

#### 3.8.2.8 void NetworkManager.LoadLevel ( string levelName )

A method to load a level.

#### **Parameters**

| levelName | The name of the level to load. |
|-----------|--------------------------------|

#### 3.8.3 Member Data Documentation

#### 3.8.3.1 string NetworkManager.version

The version of this build. Photon separates versions on the network.

#### 3.8.4 Property Documentation

**3.8.4.1** bool NetworkManager.Connected [get]

Gets a value indicating whether PhotonNetwork is connected.

true if connected; otherwise, false.

**3.8.4.2 NetworkManager NetworkManager.Instance** [static], [get], [set]

A static instance of this script to make this gameobject a singleton.

**3.8.4.3** bool NetworkManager.lsMessageQueueRunning [get], [set]

Gets or sets a value indicating whether PhotonNetwork is or should be running the message queue.

true if this instance is message queue running; otherwise, false.

**3.8.4.4 bool NetworkManager.OfflineMode** [get], [set]

Gets or sets a value indicating whether PhotonNetwork is in offline mode.

true if in offline mode; otherwise, false.

**3.8.4.5 string NetworkManager.PlayerName** [get], [set]

Gets or sets the name of the local player.

The name of the local player.

**3.8.4.6 Room NetworkManager.Room** [get]

Gets the current room.

The current room.

**3.8.4.7 RoomInfo[] NetworkManager.RoomList** [get]

Gets the room list.

The room list.

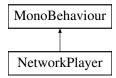
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/NetworkManager.cs

#### 3.9 NetworkPlayer Class Reference

This class handles the networking of important player properties.

Inheritance diagram for NetworkPlayer:



#### 3.9.1 Detailed Description

This class handles the networking of important player properties.

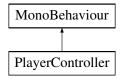
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/NetworkPlayer.cs

#### 3.10 PlayerController Class Reference

This class handles the movement and animations of the local player.

Inheritance diagram for PlayerController:



#### **Public Types**

enum CharacterState {
 CharacterState.IDLE =0, CharacterState.WALK =1, CharacterState.RUN =2, CharacterState.JUMP =3,
 CharacterState.SIT =4, CharacterState.FLY =5 }

This enumeration lists the different character states.

#### **Public Member Functions**

void Fly (bool val)

A method to enable flying and set properties to allow flight.

#### **Public Attributes**

· AnimationController animationController

An instance of the Rigidbody component on this player.

float walkSpeed =1.0f

The walk speed.

• float runSpeed =1.5f

The run speed.

• float flySpeed =2.0f

The fly speed.

• float heightOffset = 0.0f

The height offset for where the grounded raycast should originate.

• float groundingDistance = 0.1f

The grounding distance.

LayerMask groundLayers

The ground layers.

• float gravity = 50.0f

The artificial gravity.

· bool grounded

A boolean to check if the player is grounded.

· bool flying

A boolean to check if the player is flying.

#### **Properties**

• CharacterState CharState [get, set]

A property to get/set and trigger the character state of the player.

#### 3.10.1 Detailed Description

This class handles the movement and animations of the local player.

#### 3.10.2 Member Enumeration Documentation

#### 3.10.2.1 enum PlayerController.CharacterState

This enumeration lists the different character states.

#### Enumerator

IDLE The IDLE character state.

WALK The WALK character state.

RUN The RUN character state.

**JUMP** The JUMP character state.

SIT The SIT character state.

FLY The FLY character state.

#### 3.10.3 Member Function Documentation

3.10.3.1 void PlayerController.Fly ( bool val )

A method to enable flying and set properties to allow flight.

#### 3.10.4 Member Data Documentation

#### 3.10.4.1 AnimationController PlayerController.animationController

An instance of the Rigidbody component on this player.

An instance of the AniimationController component on this player.

#### 3.10.4.2 bool PlayerController.flying

A boolean to check if the player is flying.

3.10.4.3 float PlayerController.flySpeed =2.0f

The fly speed.

3.10.4.4 float PlayerController.gravity = 50.0f

The artificial gravity.

3.10.4.5 bool PlayerController.grounded

A boolean to check if the player is grounded.

3.10.4.6 float PlayerController.groundingDistance = 0.1f

The grounding distance.

3.10.4.7 LayerMask PlayerController.groundLayers

The ground layers.

3.10.4.8 float PlayerController.heightOffset = 0.0f

The height offset for where the grounded raycast should originate.

3.10.4.9 float PlayerController.runSpeed =1.5f

The run speed.

3.10.4.10 float PlayerController.walkSpeed =1.0f

The walk speed.

3.10.5 Property Documentation

**3.10.5.1 CharacterState PlayerController.CharState** [get], [set]

A property to get/set and trigger the character state of the player.

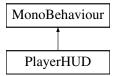
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/PlayerController.cs

#### 3.11 PlayerHUD Class Reference

This class displays the local player's HUD.

Inheritance diagram for PlayerHUD:



#### **Public Attributes**

• GUISkin CustomSkin

The custom skin used to style the player HUD.

Texture2D C3\_Tex

The C3 button texture.

Texture2D MapTex

The map button texture.

Texture2D VolumeTex

The volume button texture.

Texture2D HelpTex

The help button texture.

Texture2D ExitTex

The exit button texture.

• Texture2D loadingScreen

The loading screen texture.

#### 3.11.1 Detailed Description

This class displays the local player's HUD.

#### 3.11.2 Member Data Documentation

3.11.2.1 Texture2D PlayerHUD.C3\_Tex

The C3 button texture.

3.11.2.2 GUISkin PlayerHUD.CustomSkin

The custom skin used to style the player HUD.

3.11.2.3 Texture2D PlayerHUD.ExitTex

The exit button texture.

3.11.2.4 Texture2D PlayerHUD.HelpTex

The help button texture.

3.11.2.5 Texture2D PlayerHUD.loadingScreen

The loading screen texture.

#### 3.11.2.6 Texture2D PlayerHUD.MapTex

The map button texture.

#### 3.11.2.7 Texture2D PlayerHUD.VolumeTex

The volume button texture.

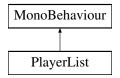
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/PlayerHUD.cs

#### 3.12 PlayerList Class Reference

This class wraps useful network player methods.

Inheritance diagram for PlayerList:



#### **Properties**

- PhotonPlayer[] Players [get]
  - Gets all networked players.
- PhotonPlayer LocalPlayer [get]

Gets the local player.

• PhotonPlayer[] RemotePlayers [get]

Gets the remote players.

#### 3.12.1 Detailed Description

This class wraps useful network player methods.

#### 3.12.2 Property Documentation

**3.12.2.1** PhotonPlayer PlayerList.LocalPlayer [get]

Gets the local player.

The local player.

#### **3.12.2.2 PhotonPlayer[] PlayerList.Players** [get]

Gets all networked players.

All networked players.

**3.12.2.3** PhotonPlayer [] PlayerList.RemotePlayers [get]

Gets the remote players.

The remote players.

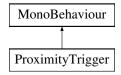
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Player/PlayerList.cs

#### 3.13 ProximityTrigger Class Reference

This class allows a web page to be opened when the player enters a trigger.

Inheritance diagram for ProximityTrigger:



#### **Public Attributes**

· string url

The URL that should be opened.

#### 3.13.1 Detailed Description

This class allows a web page to be opened when the player enters a trigger.

#### 3.13.2 Member Data Documentation

3.13.2.1 string ProximityTrigger.url

The URL that should be opened.

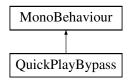
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Functionality/ProximityTrigger.cs

#### 3.14 QuickPlayBypass Class Reference

This class allows for the enabling of quickplay in the web player.

Inheritance diagram for QuickPlayBypass:



#### 3.14.1 Detailed Description

This class allows for the enabling of quickplay in the web player.

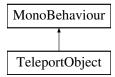
The documentation for this class was generated from the following file:

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/QuickPlayBypass.cs

#### 3.15 TeleportObject Class Reference

This class allows for teleportation by clicking on a map icon.

Inheritance diagram for TeleportObject:



#### 3.15.1 Detailed Description

This class allows for teleportation by clicking on a map icon.

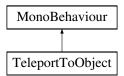
The documentation for this class was generated from the following file:

C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Functionality/TeleportObject.cs

#### 3.16 TeleportToObject Class Reference

This class allows for teleportation by clicking on a collider.

Inheritance diagram for TeleportToObject:



#### 3.16.1 Detailed Description

This class allows for teleportation by clicking on a collider.

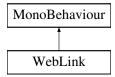
The documentation for this class was generated from the following file:

 $\bullet \ \ C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Functionality/TeleportToObject.cs$ 

#### 3.17 WebLink Class Reference

This class allows for hyperlinking clicks on colliders.

Inheritance diagram for WebLink:



#### **Public Attributes**

• string url

The URL.

#### 3.17.1 Detailed Description

This class allows for hyperlinking clicks on colliders.

#### 3.17.2 Member Data Documentation

#### 3.17.2.1 string WebLink.url

The URL.

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

• C:/Users/VULCAN/Documents/GitHub/HVWC/Assets/Scripts/IDIA/Functionality/WebLink.cs

### Index

| ActivateAnimation         | flySpeed                                 |
|---------------------------|--|
| AnimationController, 5, 6 | PlayerController, 16                     |
| AnimationController, 5    | flying                                   |
| ActivateAnimation, 5, 6   | PlayerController, 16                     |
| Animations, 6             |  |
| CurrentAnimation, 6       | gravity                                  |
| animationController       | PlayerController, 17                     |
| PlayerController, 16      | groundLayers                             |
| Animations                | PlayerController, 17                     |
| AnimationController, 6    | grounded                                 |
| avatars                   | PlayerController, 17 groundingDistance   |
| MainMenu, 10              | PlayerController, 17                     |
| hookground                | r layer controller, 17                   |
| background MainMenu, 10   | heightOffset                             |
| Manimena, 10              | PlayerController, 17                     |
| C3 Tex                    | HelpTex                                  |
| PlayerHUD, 18             | PlayerHUD, 18                            |
| C3VoiceChat, 7            |  |
| JoinVoice, 7              | IDLE                                     |
| CharState                 | PlayerController, 16                     |
| PlayerController, 17      | icon                                     |
| CharacterState            | MainMenu::Avatar, 6                      |
| PlayerController, 16      | Instance                                 |
| Chat, 7                   | NetworkManager, 14                       |
| Messages, 8               | Instantiate                              |
| SendChat, 8               | NetworkManager, 13                       |
| ClickTeleport, 9          | IsMessageQueueRunning NetworkManager, 14 |
| radius, 9                 | Networkiviariager, 14                    |
| Connect                   | JUMP                                     |
| NetworkManager, 12        | PlayerController, 16                     |
| Connected                 | JoinRandomRoom                           |
| NetworkManager, 14        | NetworkManager, 13                       |
| CreateRoom                | JoinRoom                                 |
| NetworkManager, 12        | NetworkManager, 13                       |
| CurrentAnimation          | JoinVoice                                |
| AnimationController, 6    | C3VoiceChat, 7                           |
| CustomSkin                |  |
| MainMenu, 10              | LeaveRoom                                |
| PlayerHUD, 18             | NetworkManager, 13                       |
| ExitTex                   | LoadLevel                                |
| PlayerHUD, 18             | NetworkManager, 13                       |
| riayerriob, ro            | loadingScreen PlayerHUD, 18              |
| FLY                       | LocalPlayer                              |
| PlayerController, 16      | PlayerList, 19                           |
| fadeDistance              | i iayorust, 13                           |
| NameTag, 11               | MainMenu, 9                              |
| Fly                       | avatars, 10                              |
| PlayerController, 16      | background, 10                           |

24 INDEX

| CustomSkin, 10                          | heightOffset, 17     |
|---|----------------------|
| selectedAvatar, 10                      | runSpeed, 17         |
| spawnRadius, 10                         | walkSpeed, 17        |
| MainMenu.Avatar, 6                      | PlayerHUD, 17        |
| MainMenu::Avatar                        | C3_Tex, 18           |
| icon, 6                                 | CustomSkin, 18       |
|   |                      |
| name, 6                                 | ExitTex, 18          |
| prefab, 7                               | HelpTex, 18          |
| MapTex                                  | loadingScreen, 18    |
| PlayerHUD, 18                           | MapTex, 18           |
| Messages                                | VolumeTex, 19        |
| Chat, 8                                 | PlayerList, 19       |
| - · · · · · · · · · · · · · · · · · · · | LocalPlayer, 19      |
| name                                    |                      |
|   | Players, 19          |
| MainMenu::Avatar, 6                     | RemotePlayers, 19    |
| NameTag, 10                             | PlayerName           |
| fadeDistance, 11                        | NetworkManager, 14   |
| nameTagColor, 11                        | Players              |
| nameTagColor                            | PlayerList, 19       |
| NameTag, 11                             | prefab               |
| NetworkManager, 11                      | ·                    |
| Connect, 12                             | MainMenu::Avatar, 7  |
| •                                       | ProximityTrigger, 20 |
| Connected, 14                           | url, 20              |
| CreateRoom, 12                          |                      |
| Instance, 14                            | QuickPlayBypass, 20  |
| Instantiate, 13                         |                      |
| IsMessageQueueRunning, 14               | RUN                  |
| JoinRandomRoom, 13                      | PlayerController, 16 |
| JoinRoom, 13                            | radius               |
| LeaveRoom, 13                           | ClickTeleport, 9     |
|   | <u>-</u>             |
| LoadLevel, 13                           | RemotePlayers        |
| OfflineMode, 14                         | PlayerList, 19       |
| PlayerName, 14                          | Room                 |
| Room, 14                                | NetworkManager, 14   |
| RoomList, 14                            | RoomList             |
| version, 13                             | NetworkManager, 14   |
| NetworkPlayer, 14                       | runSpeed             |
| Trottona layon, Tr                      |                      |
| OfflineMode                             | PlayerController, 17 |
|   | OUT                  |
| NetworkManager, 14                      | SIT                  |
| Diaman O anatona illa in                | PlayerController, 16 |
| PlayerController                        | selectedAvatar       |
| FLY, 16                                 | MainMenu, 10         |
| IDLE, 16                                | SendChat             |
| JUMP, 16                                | Chat, 8              |
| RUN, 16                                 | spawnRadius          |
| SIT, 16                                 | -                    |
| WALK, 16                                | MainMenu, 10         |
|   |                      |
| PlayerController, 15                    | TeleportObject, 21   |
| animationController, 16                 | TeleportToObject, 21 |
| CharState, 17                           |                      |
| CharacterState, 16                      | url                  |
| Fly, 16                                 | ProximityTrigger, 20 |
| flySpeed, 16                            | WebLink, 22          |
| flying, 16                              | TTOOLIII, LL         |
| gravity, 17                             | version              |
|   |                      |
| groundLayers, 17                        | NetworkManager, 13   |
| grounded, 17                            | VolumeTex            |
| groundingDistance, 17                   | PlayerHUD, 19        |
|   |                      |

INDEX 25

```
WALK
PlayerController, 16
walkSpeed
PlayerController, 17
WebLink, 21
url, 22
```