Irritating Crusader

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Chapter 1

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Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

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  com.progmethgame.server.ServerStartupError 157
com.progmethgame.common.GameConfig 81
com.progmethgame.common.context.GameContext 82
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com.progmethgame.network.event.base.GameEvent< ClientBusListener > 88
  com.progmethgame.network.event.base.ServerEvent 142
    com.progmethgame.network.event.server.ServerAddEntityEvent 132
    com.progmethgame.network.event.server.ServerPlaySoundEvent 144
    com.progmethgame.network.event.server.ServerReadyEvent 146
    com.progmethgame.network.event.server.ServerRemoveEntityEvent 147
    com.progmethgame.network.event.server.ServerResetEvent 149
    com.progmethgame.network.event.server.ServerUpdateEntityEvent 159
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  com.progmethgame.network.event.base.ClientEvent 49
    com.progmethgame.network.event.client.ClientDebugEvent 42
    com.progmethgame.network.event.client.ClientDisconnectEvent 44
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com.progmethgame.client.ClientRuntime 50
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com.progmethgame.server.ServerRuntime 150
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com.progmethgame.client.GameInputController 88
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Chapter 3

Class Index

3.1 Class List

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

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com.progmethgame.client.graphic.component.BannerWinOverlay . . . 18
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com.progmethgame.server.entities.bullets.BulletConfig . . . 27
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Chapter 4

Namespace Documentation

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- package progmethgame

4.2 Package com.progmethgame

Packages

- package client
- package common
- package launcher
- package network
- package server

4.3 Package com.progmethgame.client

Packages

- package graphic

Classes

- class ClientEntity
- class ClientRuntime
- class GameDebugger
- class GameInputController
- class GameScreen

4.4 Package com.progmethgame.client.graphic

Packages

- package component

4.5 Package com.progmethgame.client.graphic.component

Classes

- class BannerWinOverlay
- class Healthbar
- class HudOverlay
- class Overlay
- class StatusOverlay

4.6 Package com.progmethgame.common

Packages

- package context

Classes

- enum DisplayType
- class EntityData
- class GameConfig
- enum SoundType

4.7 Package com.progmethgame.common.context

Classes

- interface ClientContext
- class GameContext
- interface ServerContext

4.8 Package com.progmethgame.launcher

Packages

- package screen

Classes

- class GameLauncher

4.9 Package com.progmethgame.launcher.screen

Classes

- class AboutStage
- class BaseStage
- class ConnectStage
- class HelpStage
- class QuitableTextStage
- class StageScreen
- class TextStage

4.10 Package com.progmethgame.network

Packages

- package event

Classes

- class ClientBus
- interface ClientBusListener
- class KyroListener
- class NetworkPacket
- class SerializationUtil
- class ServerBus
- interface ServerBusListener
- class ServerEventBroadcast
- class Ticker
- class UUIDSerializer

4.11 Package com.progmethgame.network.event

Packages

- package base
- package client
- package server

4.12 Package com.progmethgame.network.event.base

Classes

- class ClientEvent
- class GameEvent
- class ServerEvent

4.13 Package com.progmethgame.network.event.client

Classes

- class ClientDebugEvent
- class ClientDisconnectEvent
- class ClientJoinEvent
- class PlayerFireEvent
- class PlayerMovementEvent
- class PlayerSwapGunEvent

4.14 Package com.progmethgame.network.event.server

Classes

- class ServerAddEntityEvent
- class ServerPlaySoundEvent
- class ServerReadyEvent
- class ServerRemoveEntityEvent
- class ServerResetEvent
- class ServerUpdateEntityEvent

4.15 Package com.progmethgame.server

Packages

- package blocks
- package entities

Classes

- class GameMap
- class MapParserException
- class ServerRuntime
- class ServerStartupError

4.16 Package com.progmethgame.server.blocks

Classes

- class Block
- class BlockManager
- class BurnBlock
- class BurnFloor
- class BurningBlock
- class CooldownBlock
- class CureFloor
- interface Interactable
- class SolidBlock
- class SpikeBlock
- class SpikeFloor
- class WalkableBlock

4.17 Package com.progmethgame.server.entities

Packages

- package bullets
- package effects
- package guns

Classes

- class Entity
- class Player
- class SmallTestEntity
- class SpinningEntity
- class TestEntity
- interface Tickable
- class WinningBannerEntity

4.18 Package com.progmethgame.server.entities.bullets

Classes

- class Bullet
- class BulletConfig
- class BulletTest
- class BurnBullet
- class ConfuseBullet
- class HookBullet
- class SlowBullet
- class StatusBullet
- class StuntBullet
- class TeleportBullet
- class TestBullet

4.19 Package com.progmethgame.server.entities.effects

Classes

- class Burn
- class Confuse
- class EffectConfig
- class Slow
- class StatusEffect
- class Stunt

4.20 Package com.progmethgame.server.entities.guns

Classes

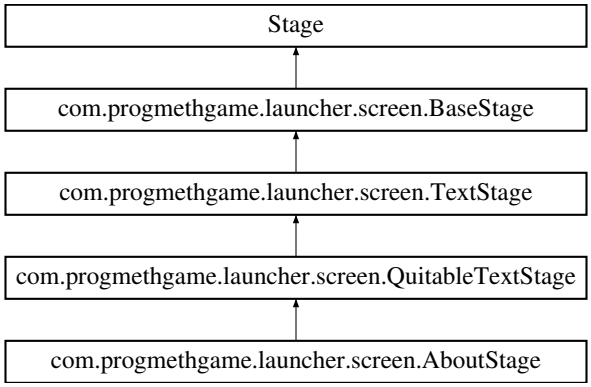
- class BurnGun
- class ConfuseGun
- class Gun
- class GunConfig
- class HookGun
- class SlowGun
- class StuntGun
- class TeleportGun

Chapter 5

Class Documentation

5.1 com.progmethgame.launcher.screen.AboutStage Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.AboutStage:



Public Member Functions

- AboutStage ()

Static Public Attributes

- static final String ABOUTTEXT

Additional Inherited Members

5.1.1 Detailed Description

Display about menu

Author

pigt

5.1.2 Constructor & Destructor Documentation

5.1.2.1 AboutStage()

```
com.progmethgame.launcher.screen.AboutStage.AboutStage ( )
```

5.1.3 Member Data Documentation

5.1.3.1 ABOUTTEXT

```
final String com.progmethgame.launcher.screen.AboutStage.ABOUTTEXT  [static]
```

Initial value:

```
= "Irritating Crusader (\"The game\") is a two-player, top-down, shooter game where the player \"disrupt\"
       the opponent by shooting the \"effect bullets\", eventually causing the other player to \"confuse\"
       and get killed by the \"traps\"."
            + "\n\n The game is developed by Pipat Saengow and Siri Thammarerkrit"
            + "\n\n Copyrighted Material:" +
            "\n    LibGDX is an Apache2-licensed game engine by Bad Logic Games.\n" +
            "    KryoNet is a networking library by Nathan Sweet licensed under BSD-3-Clause.\n" +
            "    PressStart2P is a font by CodeMan38 licensed under Open Font License.\n" +
            "    plain-james is a scene2d ui skin by Raymond \"Raeleus\" Buckley licensed under CC BY 4.0\n"
       +
            "    TMX Format is a tiled map data format by mapeditor.org licensed under CC BY-SA 3.0.\n" +
            "    8-bit Game Over sound effect by Euphrosyyn via freesound.org CC BY 3.0\n"
```

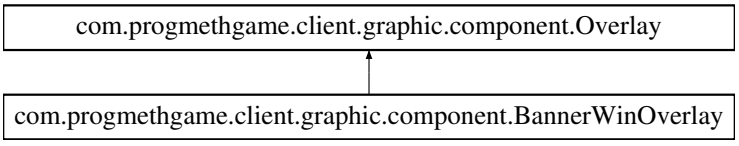
Information Text

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/About↩ Stage.java

5.2 com.progmethgame.client.graphic.component.BannerWinOverlay Class Reference

Inheritance diagram for com.progmethgame.client.graphic.component.BannerWinOverlay:



Public Member Functions

- BannerWinOverlay ()
- BannerWinOverlay (UUID winPlayer)
- void render (Viewport view, Batch batch, Rectangle rect, ClientEntity target)

Private Attributes

- UUID winningPlayer

5.2.1 Detailed Description

Overlay for Victory or Lose message display

5.2.2 Constructor & Destructor Documentation

5.2.2.1 BannerWinOverlay() [1/2]

```
com.progmethgame.client.graphic.component.BannerWinOverlay.BannerWinOverlay ( )
```

5.2.2.2 BannerWinOverlay() [2/2]

```
com.progmethgame.client.graphic.component.BannerWinOverlay.BannerWinOverlay (
            UUID winPlayer )
```

Create banner which show winPlayer as the winner

Parameters

winPlayer	

5.2.3 Member Function Documentation

5.2.3.1 render()

```
void com.progmethgame.client.graphic.component.BannerWinOverlay.render (
            Viewport view,
```

```
            Batch batch,
            Rectangle rect,
            ClientEntity target )
```

Render this overlay

Parameters

view	Screen's viewport
batch	Screen's batch
rect	The entity's bounding box in screen space.
target	The owner of this overlay

Reimplemented from com.progmethgame.client.graphic.component.Overlay.

5.2.4 Member Data Documentation

5.2.4.1 winningPlayer

```
UUID com.progmethgame.client.graphic.component.BannerWinOverlay.winningPlayer  [private]
```

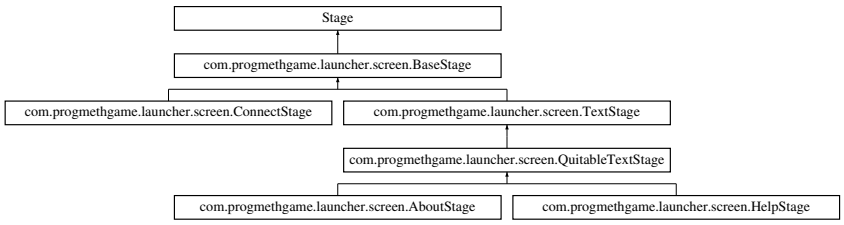
Player to show winning message to

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/graphic/component/BannerWinOverlay.java

5.3 com.progmethgame.launcher.screen.BaseStage Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.BaseStage:



Public Member Functions

- BaseStage ()

Protected Attributes

- Skin skin

5.3.1 Detailed Description

Stage with skin loaded

5.3.2 Constructor & Destructor Documentation

5.3.2.1 BaseStage()

```
com.progmethgame.launcher.screen.BaseStage.BaseStage ( )
```

5.3.3 Member Data Documentation

5.3.3.1 skin

```
Skin com.progmethgame.launcher.screen.BaseStage.skin  [protected]
```

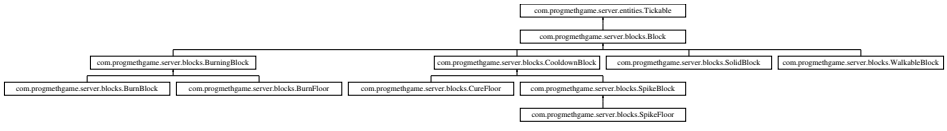
Scene2d skin

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/Base↩ Stage.java

5.4 com.progmethgame.server.blocks.Block Class Reference

Inheritance diagram for com.progmethgame.server.blocks.Block:



Public Member Functions

- abstract boolean isSolid ()
- void tick (float delta)

5.4.1 Detailed Description

Represent a tile on a map

Author

pigt

5.4.2 Member Function Documentation

5.4.2.1 isSolid()

```
abstract boolean com.progmethgame.server.blocks.Block.isSolid ( )  [abstract]
```

Can entity pass through this block?

Returns

solidness

Reimplemented in com.progmethgame.server.blocks.SpikeBlock, com.progmethgame.server.blocks.CureFloor, com.progmethgame.server.blocks.SpikeFloor, com.progmethgame.server.blocks.BurnBlock, com.progmethgame.server.blocks.BurnF com.progmethgame.server.blocks.SolidBlock, and com.progmethgame.server.blocks.WalkableBlock.

5.4.2.2 tick()

```
void com.progmethgame.server.blocks.Block.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Implements com.progmethgame.server.entities.Tickable.

Reimplemented in com.progmethgame.server.blocks.CooldownBlock.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Block.↩ java

5.5 com.progmethgame.server.blocks.BlockManager Class Reference

Static Public Member Functions

- static Block fromId (int id)

5.5.1 Detailed Description

A Factory to generate a block from an ID

Author

pigt

5.5.2 Member Function Documentation

5.5.2.1 fromId()

```
static Block com.progmethgame.server.blocks.BlockManager.fromId (
            int id )  [static]
```

Create a block object with that id type

Parameters

id	id of the block

Returns

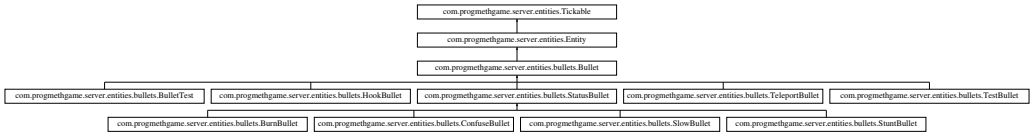
Block with specified id

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Block↩ Manager.java

5.6 com.progmethgame.server.entities.bullets.Bullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.Bullet:



Public Member Functions

- Bullet (DisplayType type, float speed, Player owner)
- abstract void onCollide (Player hitPlayer)
- void onCollideSolid (Block block)
- void onCollide (Entity other)
- float getPhysicalSize ()
- abstract Bullet cpy ()
- void tick (float delta)

Protected Attributes

- float speed
- Player owner

5.6.1 Detailed Description

A bullet entity

5.6.2 Constructor & Destructor Documentation

5.6.2.1 Bullet()

```
com.progmethgame.server.entities.bullets.Bullet.Bullet (
            DisplayType type,
            float speed,
            Player owner )
```

5.6.3 Member Function Documentation

5.6.3.1 cpy()

```
abstract Bullet com.progmethgame.server.entities.bullets.Bullet.cpy ( )  [abstract]
```

Duplicate this bullet

Reimplemented in com.progmethgame.server.entities.bullets.HookBullet, com.progmethgame.server.entities.bullets.BulletTest, com.progmethgame.server.entities.bullets.TeleportBullet, com.progmethgame.server.entities.bullets.TestBullet, com.progmethgame.server.entities.bullets.BurnBullet, com.progmethgame.server.entities.bullets.ConfuseBullet, com.progmethgame.server.entities.bullets.SlowBullet, and com.progmethgame.server.entities.bullets.StuntBullet.

5.6.3.2 getPhysicalSize()

```
float com.progmethgame.server.entities.bullets.Bullet.getPhysicalSize ( )
```

Return physical size for physic engine's onCollide(Entity) calculation.

Size in this case is the side length of the bounding square. The bounding box has the same center as the default bound.

Reimplemented from com.progmethgame.server.entities.Entity.

5.6.3.3 onCollide() [1/2]

```
void com.progmethgame.server.entities.bullets.Bullet.onCollide (
            Entity other )
```

Called when entity touched other.

Parameters

other	the touched entity

Reimplemented from com.progmethgame.server.entities.Entity.

5.6.3.4 onCollide() [2/2]

```
abstract void com.progmethgame.server.entities.bullets.Bullet.onCollide (
            Player hitPlayer )  [abstract]
```

Called when the bullet collide a player

Reimplemented in com.progmethgame.server.entities.bullets.StatusBullet, com.progmethgame.server.entities.bullets.BulletTest, com.progmethgame.server.entities.bullets.HookBullet, com.progmethgame.server.entities.bullets.TestBullet, and com.progmethgame.server.entities.bullets.TeleportBullet.

5.6.3.5 onCollideSolid()

```
void com.progmethgame.server.entities.bullets.Bullet.onCollideSolid (
            Block block )
```

Call when entity hit solid block

Parameters

block	the block that this entity collided with

Reimplemented from com.progmethgame.server.entities.Entity.

5.6.3.6 tick()

```
void com.progmethgame.server.entities.bullets.Bullet.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Reimplemented from com.progmethgame.server.entities.Entity.

5.6.4 Member Data Documentation

5.6.4.1 owner

```
Player com.progmethgame.server.entities.bullets.Bullet.owner  [protected]
```

Player who shot the bullet

5.6.4.2 speed

```
float com.progmethgame.server.entities.bullets.Bullet.speed  [protected]
```

Bullet speed

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Bullet.↩ java

5.7 com.progmethgame.server.entities.bullets.BulletConfig Class Reference

Static Public Attributes

- static final float HOOK_BLLET_SPEED = 6.0f
- static final float HOOK_SPEED = 10f
- static final float TELEPORT_BULLET_SPEED = 10f
- static final float BURN_BULLET_SPEED = 7f
- static final float CONFUSE_BULLET_SPEED = 8f
- static final float SLOW_BULLET_SPEED = 8f
- static final float STUNT_BULLET_SPEED = 6.5f

5.7.1 Detailed Description

Store bullet's constant

5.7.2 Member Data Documentation

5.7.2.1 BURN_BULLET_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.BURN_BULLET_SPEED = 7f  [static]
```

Burn bullet speed

5.7.2.2 CONFUSE_BULLET_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.CONFUSE_BULLET_SPEED = 8f
[static]
```

Confuse Bullet speed

5.7.2.3 HOOK_BLLET_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.HOOK_BLLET_SPEED = 6.0f
[static]
```

Hook Bullet speed

5.7.2.4 HOOK_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.HOOK_SPEED = 10f  [static]
```

Hook Bullet hook speed

5.7.2.5 SLOW_BULLET_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.SLOW_BULLET_SPEED = 8f  [static]
```

Slow Bullet speed

5.7.2.6 STUNT_BULLET_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.STUNT_BULLET_SPEED = 6.5f
[static]
```

Stunt Bullet speed

5.7.2.7 TELEPORT_BULLET_SPEED

```
final float com.progmethgame.server.entities.bullets.BulletConfig.TELEPORT_BULLET_SPEED = 10f
[static]
```

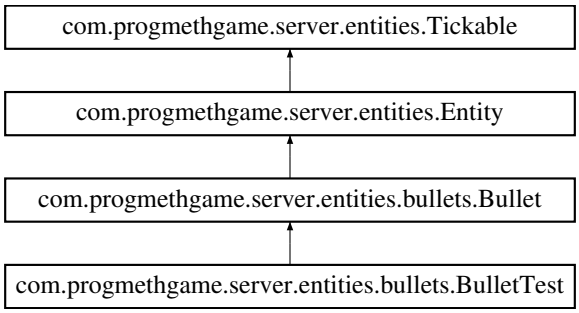
Teleport Bullet speed

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Bullet↩ Config.java

5.8 com.progmethgame.server.entities.bullets.BulletTest Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.BulletTest:



Public Member Functions

- BulletTest (Player owner)
- void onCollide (Player hitPlayer)
- Bullet cpy ()

Additional Inherited Members

5.8.1 Detailed Description

A demo bullet for testing purpose.

Author

pigt

5.8.2 Constructor & Destructor Documentation

5.8.2.1 BulletTest()

```
com.progmethgame.server.entities.bullets.BulletTest.BulletTest (
            Player owner )
```

5.8.3 Member Function Documentation

5.8.3.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.BulletTest.cpy ( )
```

Duplicate this bullet

Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

5.8.3.2 onCollide()

```
void com.progmethgame.server.entities.bullets.BulletTest.onCollide (
            Player hitPlayer )
```

Called when the bullet collide a player

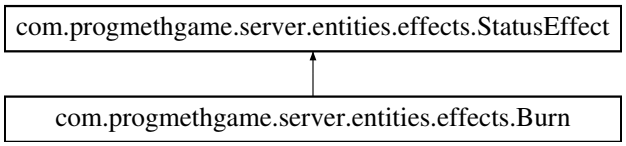
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/BulletTest.java

5.9 com.progmethgame.server.entities.effects.Burn Class Reference

Inheritance diagram for com.progmethgame.server.entities.effects.Burn:



Public Member Functions

- Burn ()
- void getEffect (Player p)
- void removeEffect (Player p)
- Burn cpy ()

Static Package Attributes

- static final int dps = EffectConfig.BURN_DPS

Additional Inherited Members

5.9.1 Detailed Description

An status effect that constantly decrease the player's health

5.9.2 Constructor & Destructor Documentation

5.9.2.1 Burn()

```
com.progmethgame.server.entities.effects.Burn.Burn ( )
```

5.9.3 Member Function Documentation

5.9.3.1 cpy()

```
Burn com.progmethgame.server.entities.effects.Burn.cpy ( )
```

Clone this effect

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.9.3.2 getEffect()

```
void com.progmethgame.server.entities.effects.Burn.getEffect (
            Player p )
```

Apply effect to the player

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.9.3.3 removeEffect()

```
void com.progmethgame.server.entities.effects.Burn.removeEffect (
            Player p )
```

Remove effect from the player

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.9.4 Member Data Documentation

5.9.4.1 dps

```
final int com.progmethgame.server.entities.effects.Burn.dps = EffectConfig.BURN_DPS  [static],
[package]
```

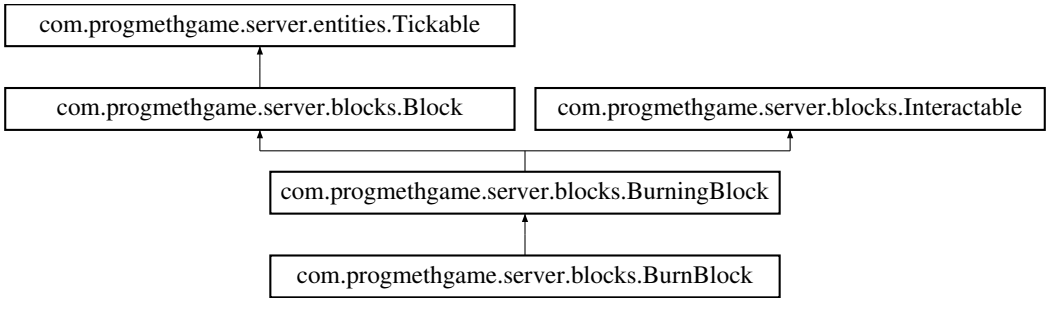
Damage per second after this effect is applied

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/effects/Burn.↩ java

5.10 com.progmethgame.server.blocks.BurnBlock Class Reference

Inheritance diagram for com.progmethgame.server.blocks.BurnBlock:



Public Member Functions

- boolean isSolid ()

5.10.1 Detailed Description

A solid block that burn the player when touched

Author

pigt

5.10.2 Member Function Documentation

5.10.2.1 isSolid()

```
boolean com.progmethgame.server.blocks.BurnBlock.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

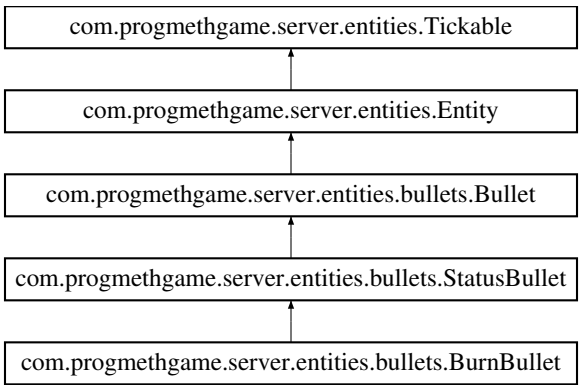
Reimplemented from com.progmethgame.server.blocks.Block.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Burn↩ Block.java

5.11 com.progmethgame.server.entities.bullets.BurnBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.BurnBullet:



Public Member Functions

- BurnBullet (Player owner)
- Bullet cpy ()

Additional Inherited Members

5.11.1 Constructor & Destructor Documentation

5.11.1.1 BurnBullet()

```
com.progmethgame.server.entities.bullets.BurnBullet.BurnBullet (
            Player owner )
```

5.11.2 Member Function Documentation

5.11.2.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.BurnBullet.cpy ( )
```

Duplicate this bullet

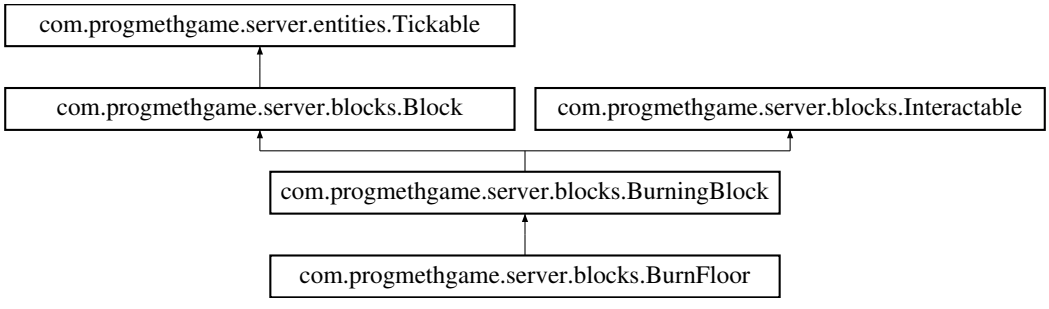
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Burn↩ Bullet.java

5.12 com.progmethgame.server.blocks.BurnFloor Class Reference

Inheritance diagram for com.progmethgame.server.blocks.BurnFloor:



Public Member Functions

- boolean isSolid ()

5.12.1 Detailed Description

A floor that burn the player when touched

Author

pigt

5.12.2 Member Function Documentation

5.12.2.1 isSolid()

```
boolean com.progmethgame.server.blocks.BurnFloor.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

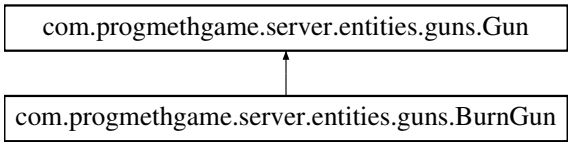
Reimplemented from com.progmethgame.server.blocks.Block.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Burn↩ Floor.java

5.13 com.progmethgame.server.entities.guns.BurnGun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.BurnGun:



Public Member Functions

- BurnGun (Player owner)

Additional Inherited Members

5.13.1 Detailed Description

Gun that spawn burn bullet

5.13.2 Constructor & Destructor Documentation

5.13.2.1 BurnGun()

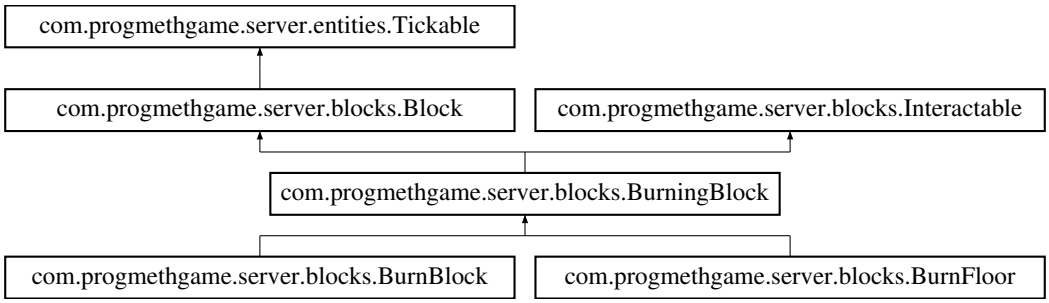
```
com.progmethgame.server.entities.guns.BurnGun.BurnGun (
            Player owner )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/Burn↩ Gun.java

5.14 com.progmethgame.server.blocks.BurningBlock Class Reference

Inheritance diagram for com.progmethgame.server.blocks.BurningBlock:



Public Member Functions

- void interact (Player p)

5.14.1 Detailed Description

A block that will set the player on fire if touched

Author

pigt

5.14.2 Member Function Documentation

5.14.2.1 interact()

```
void com.progmethgame.server.blocks.BurningBlock.interact (
            Player p )
```

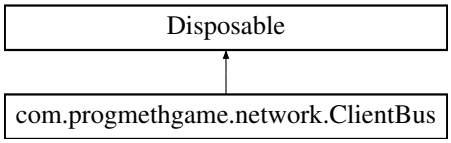
Implements com.progmethgame.server.blocks.Interactable.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Burning↩ Block.java

5.15 com.progmethgame.network.ClientBus Class Reference

Inheritance diagram for com.progmethgame.network.ClientBus:



Public Member Functions

- ClientBus (String ipaddr, ClientBusListener listener) throws IOException
- void sendEvent (ClientEvent event)
- void dispose ()

Private Attributes

- final Client client

5.15.1 Detailed Description

Communication bus for the client

5.15.2 Constructor & Destructor Documentation

5.15.2.1 ClientBus()

```
com.progmethgame.network.ClientBus.ClientBus (
            String ipaddr,
            ClientBusListener listener ) throws IOException
```

Connect to the server.

Constructor might block for few second.

Parameters

ipaddr	server's IP address
listener	bus's event listener

Exceptions

IOException	

5.15.3 Member Function Documentation

5.15.3.1 dispose()

```
void com.progmethgame.network.ClientBus.dispose ( )
```

5.15.3.2 sendEvent()

```
void com.progmethgame.network.ClientBus.sendEvent (
            ClientEvent event )
```

Send an event to the server

Parameters

event	

5.15.4 Member Data Documentation

5.15.4.1 client

```
final Client com.progmethgame.network.ClientBus.client  [private]
```

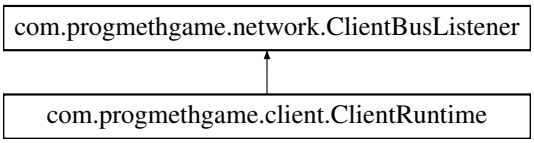
KyroNet client

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/ClientBus.java

5.16 com.progmethgame.network.ClientBusListener Interface Reference

Inheritance diagram for com.progmethgame.network.ClientBusListener:



Public Member Functions

- void onEntityAdd (EntityData data)
- void onEntityRemove (UUID id)
- void onEntityUpdate (EntityData data)
- void onPlaySound (SoundType sound)
- void onServerReady (UUID assignedId)
- void onServerReset ()
- void onDisconnect ()

5.16.1 Detailed Description

Client bus's event listener

5.16.2 Member Function Documentation

5.16.2.1 onDisconnect()

```
void com.progmethgame.network.ClientBusListener.onDisconnect ( )
```

Called when server disconnect eg. Connection lost, Server closed

Implemented in com.progmethgame.client.ClientRuntime.

5.16.2.2 onEntityAdd()

```
void com.progmethgame.network.ClientBusListener.onEntityAdd (
            EntityData data )
```

Server added an entity

Parameters

data	entity's data

Implemented in com.progmethgame.client.ClientRuntime.

5.16.2.3 onEntityRemove()

```
void com.progmethgame.network.ClientBusListener.onEntityRemove (
            UUID id )
```

Server remove an entity

Parameters

id	entity's id

Implemented in com.progmethgame.client.ClientRuntime.

5.16.2.4 onEntityUpdate()

```
void com.progmethgame.network.ClientBusListener.onEntityUpdate (
            EntityData data )
```

Server update entity's data

Parameters

data	update data

Implemented in com.progmethgame.client.ClientRuntime.

5.16.2.5 onPlaySound()

```
void com.progmethgame.network.ClientBusListener.onPlaySound (
            SoundType sound )
```

Server wants to play a sound

Parameters

sound	

Implemented in com.progmethgame.client.ClientRuntime.

5.16.2.6 onServerReady()

```
void com.progmethgame.network.ClientBusListener.onServerReady (
            UUID assignedId )
```

Server have initialized the client and is now ready.

Always call after server finished sending entities and ready to display data.

Parameters

assignedId	ID assigned by the server

Implemented in com.progmethgame.client.ClientRuntime.

5.16.2.7 onServerReset()

```
void com.progmethgame.network.ClientBusListener.onServerReset ( )
```

Server instruct client to clear all game state.

Always called first when client connect or level reset

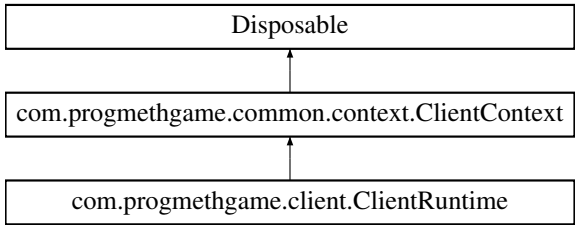
Implemented in com.progmethgame.client.ClientRuntime.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/ClientBusListener.java

5.17 com.progmethgame.common.context.ClientContext Interface Reference

Inheritance diagram for com.progmethgame.common.context.ClientContext:



Public Member Functions

- AssetManager getAssetManager ()
- ClientBus getNetworkBus ()
- void quit ()
- void tick (float delta)
- Map< UUID, ClientEntity > getEntities ()
- UUID getClientUUID ()

5.17.1 Detailed Description

Client's context. Provides client's data interface and action

5.17.2 Member Function Documentation

5.17.2.1 getAssetManager()

```
AssetManager com.progmethgame.common.context.ClientContext.getAssetManager ( )
```

Get AssetManager

Returns

Implemented in com.progmethgame.client.ClientRuntime.

5.17.2.2 getClientUUID()

```
UUID com.progmethgame.common.context.ClientContext.getClientUUID ( )
```

Return the UUID assigned by the server.

Note that Entity with the same UUID represent controllable character.

Implemented in com.progmethgame.client.ClientRuntime.

5.17.2.3 getEntities()

```
Map<UUID, ClientEntity> com.progmethgame.common.context.ClientContext.getEntities ( )
```

Return unmodifiable list of all entities.

Implemented in com.progmethgame.client.ClientRuntime.

5.17.2.4 getNetworkBus()

```
ClientBus com.progmethgame.common.context.ClientContext.getNetworkBus ( )
```

Get client-server's communication bus.

Returns

Implemented in com.progmethgame.client.ClientRuntime.

5.17.2.5 quit()

```
void com.progmethgame.common.context.ClientContext.quit ( )
```

Quit the game and return to main screen.

Implemented in com.progmethgame.client.ClientRuntime.

5.17.2.6 tick()

```
void com.progmethgame.common.context.ClientContext.tick (
            float delta )
```

Apply time step by delta seconds.

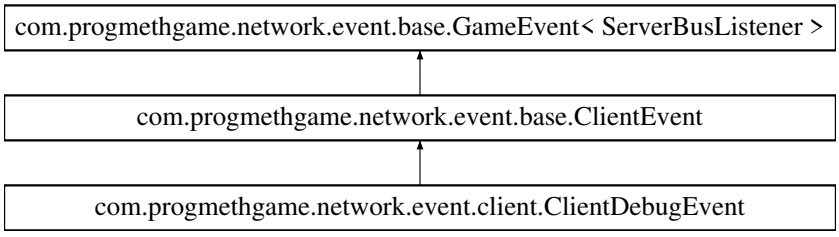
Implemented in com.progmethgame.client.ClientRuntime.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/context/Client↩ Context.java

5.18 com.progmethgame.network.event.client.ClientDebugEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.client.ClientDebugEvent:



Public Member Functions

- ClientDebugEvent (String msg)
- void notifyListener (ServerBusListener target)

Private Member Functions

- ClientDebugEvent ()

Private Attributes

- String debugMsg

Additional Inherited Members

5.18.1 Detailed Description

Client issued debug command event

5.18.2 Constructor & Destructor Documentation

5.18.2.1 ClientDebugEvent() [1/2]

```
com.progmethgame.network.event.client.ClientDebugEvent.ClientDebugEvent ( )  [private]
```

5.18.2.2 ClientDebugEvent() [2/2]

```
com.progmethgame.network.event.client.ClientDebugEvent.ClientDebugEvent (
            String msg )
```

Create new debug event with specified command

Parameters

msg	command

5.18.3 Member Function Documentation

5.18.3.1 notifyListener()

```
void com.progmethgame.network.event.client.ClientDebugEvent.notifyListener (
            ServerBusListener target )
```

5.18.4 Member Data Documentation

5.18.4.1 debugMsg

```
String com.progmethgame.network.event.client.ClientDebugEvent.debugMsg  [private]
```

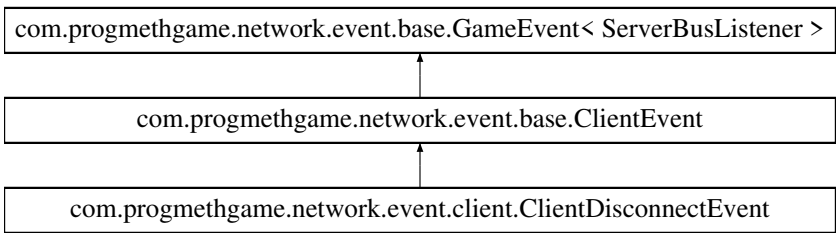
Debug command

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/client/ClientDebugEvent.java

5.19 com.progmethgame.network.event.client.ClientDisconnectEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.client.ClientDisconnectEvent:



Public Member Functions

- void notifyListener (ServerBusListener target)

Additional Inherited Members

5.19.1 Detailed Description

Virtual event for when the client disconnect or lose connection to the server

5.19.2 Member Function Documentation

5.19.2.1 notifyListener()

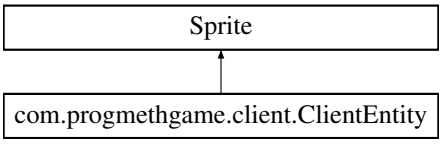
```
void com.progmethgame.network.event.client.ClientDisconnectEvent.notifyListener (
            ServerBusListener target )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/client/ClientDisconnectEvent.java

5.20 com.progmethgame.client.ClientEntity Class Reference

Inheritance diagram for com.progmethgame.client.ClientEntity:



Public Member Functions

- ClientEntity (EntityData data)
- UUID getGid ()
- DisplayType getType ()
- void update (EntityData data)
- void tick (float delta)
- void drawOverlay (Viewport view, Batch batch, Rectangle rect)

Private Member Functions

- void applyDisplayType ()

Private Attributes

- UUID gid
- DisplayType type
- Vector2[ ] lastPosBuffer
- long[ ] lastUpdateTimeBuffer
- List< Overlay > overlays
- Vector2[ ] lastDirBuffer

5.20.1 Detailed Description

Represent client-side's entity data.

This is the only entity available to the client. It contains just enough data to render whatever it represent.

5.20.2 Constructor & Destructor Documentation

5.20.2.1 ClientEntity()

```
com.progmethgame.client.ClientEntity.ClientEntity (
            EntityData data )
```

Create new entity from data

Parameters

data	entity's data

5.20.3 Member Function Documentation

5.20.3.1 applyDisplayType()

```
void com.progmethgame.client.ClientEntity.applyDisplayType ( )  [private]
```

Update this sprite's texture to match the display type

5.20.3.2 drawOverlay()

```
void com.progmethgame.client.ClientEntity.drawOverlay (
            Viewport view,
            Batch batch,
            Rectangle rect )
```

Draw this entity's overlays

Parameters

view	ScreenViewport
batch	Drawing Batch
rect	Rectangle representing this entity in the viewport

5.20.3.3 getGid()

```
UUID com.progmethgame.client.ClientEntity.getGid ( )
```

Returns

This entity's ID

5.20.3.4 getType()

```
DisplayType com.progmethgame.client.ClientEntity.getType ( )
```

Returns

This entity's texture

5.20.3.5 tick()

```
void com.progmethgame.client.ClientEntity.tick (
            float delta )
```

Animate this entity by specific time-step

Parameters

delta	time duration

5.20.3.6 update()

```
void com.progmethgame.client.ClientEntity.update (
            EntityData data )
```

Update this entity's state using EntityData

Parameters

data	updated data

5.20.4 Member Data Documentation

5.20.4.1 gid

```
UUID com.progmethgame.client.ClientEntity.gid  [private]
```

ID of this entity. This is unique to all entity and is used to communicate with the server

5.20.4.2 lastDirBuffer

```
Vector2 [] com.progmethgame.client.ClientEntity.lastDirBuffer  [private]
```

Facing direction according to the server (storing the last 2) (doesn't interpolate)

5.20.4.3 lastPosBuffer

```
Vector2 [] com.progmethgame.client.ClientEntity.lastPosBuffer  [private]
```

Most recent position of this entity according to the server (for interpolation)

5.20.4.4 lastUpdateTimeBuffer

```
long [] com.progmethgame.client.ClientEntity.lastUpdateTimeBuffer  [private]
```

Most recent time this entity was updated (for interpolation)

5.20.4.5 overlays

```
List<Overlay> com.progmethgame.client.ClientEntity.overlays  [private]
```

Overlays attached to this entity

5.20.4.6 type

```
DisplayType com.progmethgame.client.ClientEntity.type  [private]
```

Texture to display

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/Client↩ Entity.java

5.21 com.progmethgame.network.event.base.ClientEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.base.ClientEvent:

Public Attributes

- UUID clientId

Additional Inherited Members

5.21.1 Detailed Description

Event emitted from the game clients

5.21.2 Member Data Documentation

5.21.2.1 clientId

```
UUID com.progmethgame.network.event.base.ClientEvent.clientId
```

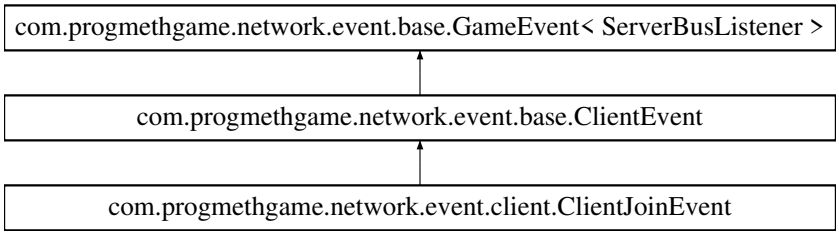
ID of the client connection who emitted this event

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/base/Client↩ Event.java

5.22 com.progmethgame.network.event.client.ClientJoinEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.client.ClientJoinEvent:



Public Member Functions

- void notifyListener (ServerBusListener target)

Additional Inherited Members

5.22.1 Detailed Description

Client connect to the server

5.22.2 Member Function Documentation

5.22.2.1 notifyListener()

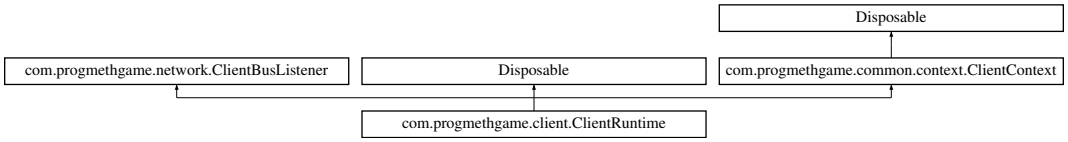
```
void com.progmethgame.network.event.client.ClientJoinEvent.notifyListener (
            ServerBusListener target )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/client/ClientJoinEvent.java

5.23 com.progmethgame.client.ClientRuntime Class Reference

Inheritance diagram for com.progmethgame.client.ClientRuntime:



Public Member Functions

- ClientRuntime (String ipaddr)
- Map< UUID, ClientEntity > getEntities ()
- AssetManager getAssetManager ()
- ClientBus getNetworkBus ()
- UUID getClientUUID ()
- void onEntityAdd (EntityData data)
- void onEntityRemove (UUID id)
- void onEntityUpdate (EntityData data)
- void onServerReady (UUID assignedId)
- void onServerReset ()
- void tick (float delta)
- void dispose ()
- void onDisconnect ()
- void quit ()
- void onPlaySound (SoundType sound)

Private Member Functions

- void initAssets ()

Private Attributes

- GameScreen screen
- UUID clientId
- ClientBus bus
- HashMap< UUID, ClientEntity > entities
- AssetManager assetsMan

5.23.1 Detailed Description

Store and manage the game's state

5.23.2 Constructor & Destructor Documentation

5.23.2.1 ClientRuntime()

```
com.progmethgame.client.ClientRuntime.ClientRuntime (
            String ipaddr )
```

Create new runtime, connect to the server and display the game.

Parameters

ipaddr	server's IP address

5.23.3 Member Function Documentation

5.23.3.1 dispose()

```
void com.progmethgame.client.ClientRuntime.dispose ( )
```

5.23.3.2 getAssetManager()

```
AssetManager com.progmethgame.client.ClientRuntime.getAssetManager ( )
```

Get AssetManager

Returns

Implements com.progmethgame.common.context.ClientContext.

5.23.3.3 getClientUUID()

```
UUID com.progmethgame.client.ClientRuntime.getClientUUID ( )
```

Return the UUID assigned by the server.

Note that Entity with the same UUID represent controllable character.

Implements com.progmethgame.common.context.ClientContext.

5.23.3.4 getEntities()

```
Map<UUID, ClientEntity> com.progmethgame.client.ClientRuntime.getEntities ( )
```

Return unmodifiable list of all entities.

Implements com.progmethgame.common.context.ClientContext.

5.23.3.5 getNetworkBus()

```
ClientBus com.progmethgame.client.ClientRuntime.getNetworkBus ( )
```

Get client-server's communication bus.

Returns

Implements com.progmethgame.common.context.ClientContext.

5.23.3.6 initAssets()

```
void com.progmethgame.client.ClientRuntime.initAssets ( )  [private]
```

Initialize all assets required

5.23.3.7 onDisconnect()

```
void com.progmethgame.client.ClientRuntime.onDisconnect ( )
```

Called when server disconnect eg. Connection lost, Server closed

Implements com.progmethgame.network.ClientBusListener.

5.23.3.8 onEntityAdd()

```
void com.progmethgame.client.ClientRuntime.onEntityAdd (
            EntityData data )
```

Server added an entity

Parameters

data	entity's data

Implements com.progmethgame.network.ClientBusListener.

5.23.3.9 onEntityRemove()

```
void com.progmethgame.client.ClientRuntime.onEntityRemove (
            UUID id )
```

Server remove an entity

Parameters

id	entity's id

Implements com.progmethgame.network.ClientBusListener.

5.23.3.10 onEntityUpdate()

```
void com.progmethgame.client.ClientRuntime.onEntityUpdate (
```

```
            EntityData data )
```

Server update entity's data

Parameters

data	update data

Implements com.progmethgame.network.ClientBusListener.

5.23.3.11 onPlaySound()

```
void com.progmethgame.client.ClientRuntime.onPlaySound (
            SoundType sound )
```

Server wants to play a sound

Parameters

sound	

Implements com.progmethgame.network.ClientBusListener.

5.23.3.12 onServerReady()

```
void com.progmethgame.client.ClientRuntime.onServerReady (
            UUID assignedId )
```

Server have initialized the client and is now ready.

Always call after server finished sending entities and ready to display data.

Parameters

assigned↩ Id	ID assigned by the server

Implements com.progmethgame.network.ClientBusListener.

5.23.3.13 onServerReset()

```
void com.progmethgame.client.ClientRuntime.onServerReset ( )
```

Server instruct client to clear all game state.

Always called first when client connect or level reset

Implements com.progmethgame.network.ClientBusListener.

5.23.3.14 quit()

```
void com.progmethgame.client.ClientRuntime.quit ( )
```

Quit the game and return to main screen.

Implements com.progmethgame.common.context.ClientContext.

5.23.3.15 tick()

```
void com.progmethgame.client.ClientRuntime.tick (
            float delta )
```

Apply time step by delta seconds.

Implements com.progmethgame.common.context.ClientContext.

5.23.4 Member Data Documentation

5.23.4.1 assetsMan

```
AssetManager com.progmethgame.client.ClientRuntime.assetsMan  [private]
```

Assets loader

5.23.4.2 bus

```
ClientBus com.progmethgame.client.ClientRuntime.bus  [private]
```

Communication bus

5.23.4.3 clientId

```
UUID com.progmethgame.client.ClientRuntime.clientId  [private]
```

Client id assigned by the server. This is also the controllable player's entity UUID

5.23.4.4 entities

```
HashMap<UUID, ClientEntity> com.progmethgame.client.ClientRuntime.entities  [private]
```

Store entities

5.23.4.5 screen

```
GameScreen com.progmethgame.client.ClientRuntime.screen  [private]
```

Screen

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/Client↩ Runtime.java

5.24 com.progmethgame.server.entities.Player.Color Enum Reference

Public Member Functions

- DisplayType getTop ()
- DisplayType getFront ()

Public Attributes

- BLUE =(DisplayType.PLAYER_BLUE_ICON, DisplayType.PLAYER_BLUE)
- RED =(DisplayType.PLAYER_RED_ICON, DisplayType.PLAYER_RED)
- GREEN =(DisplayType.PLAYER_GREEN_ICON, DisplayType.PLAYER_GREEN)
- ORANGE =(DisplayType.PLAYER_ORANGE_ICON, DisplayType.PLAYER_ORANGE)
- PURPLE =(DisplayType.PLAYER_PURPLE_ICON, DisplayType.PLAYER_PURPLE)
- YELLOW =(DisplayType.PLAYER_YELLOW_ICON, DisplayType.PLAYER_YELLOW)

Private Member Functions

- Color (DisplayType front, DisplayType top)

Private Attributes

- DisplayType top
- DisplayType front

5.24.1 Constructor & Destructor Documentation

5.24.1.1 Color()

```
com.progmethgame.server.entities.Player.Color.Color (
            DisplayType front,
            DisplayType top )  [private]
```

5.24.2 Member Function Documentation

5.24.2.1 getFront()

```
DisplayType com.progmethgame.server.entities.Player.Color.getFront ( )
```

5.24.2.2 getTop()

```
DisplayType com.progmethgame.server.entities.Player.Color.getTop ( )
```

5.24.3 Member Data Documentation

5.24.3.1 BLUE

```
com.progmethgame.server.entities.Player.Color.BLUE =(DisplayType.PLAYER_BLUE_ICON, DisplayType.PLAYER_BLUE)
```

5.24.3.2 front

```
DisplayType com.progmethgame.server.entities.Player.Color.front  [private]
```

5.24.3.3 GREEN

```
com.progmethgame.server.entities.Player.Color.GREEN =(DisplayType.PLAYER_GREEN_ICON, DisplayType.PLAYER_GREEN)
```

5.24.3.4 ORANGE

```
com.progmethgame.server.entities.Player.Color.ORANGE =(DisplayType.PLAYER_ORANGE_ICON, DisplayType.PLAYER_ORAN
```

5.24.3.5 PURPLE

```
com.progmethgame.server.entities.Player.Color.PURPLE =(DisplayType.PLAYER_PURPLE_ICON, DisplayType.PLAYER_PURP
```

5.24.3.6 RED

```
com.progmethgame.server.entities.Player.Color.RED =(DisplayType.PLAYER_RED_ICON, DisplayType.PLAYER_RED)
```

5.24.3.7 top

```
DisplayType com.progmethgame.server.entities.Player.Color.top  [private]
```

5.24.3.8 YELLOW

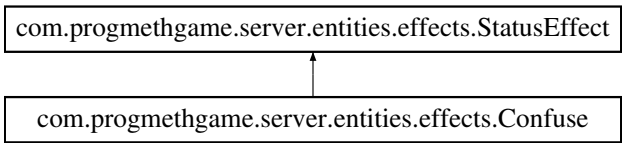
```
com.progmethgame.server.entities.Player.Color.YELLOW =(DisplayType.PLAYER_YELLOW_ICON, DisplayType.PLAYER_YELL
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Player.↩ java

5.25 com.progmethgame.server.entities.effects.Confuse Class Reference

Inheritance diagram for com.progmethgame.server.entities.effects.Confuse:



Public Member Functions

- Confuse ()
- void getEffect (Player p)
- void removeEffect (Player p)
- Confuse cpy ()

Additional Inherited Members

5.25.1 Detailed Description

An effect that reverse the player's control

5.25.2 Constructor & Destructor Documentation

5.25.2.1 Confuse()

```
com.progmethgame.server.entities.effects.Confuse.Confuse ( )
```

5.25.3 Member Function Documentation

5.25.3.1 cpy()

```
Confuse com.progmethgame.server.entities.effects.Confuse.cpy ( )
```

Clone this effect

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.25.3.2 getEffect()

```
void com.progmethgame.server.entities.effects.Confuse.getEffect (
            Player p )
```

Apply effect to the player

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.25.3.3 removeEffect()

```
void com.progmethgame.server.entities.effects.Confuse.removeEffect (
            Player p )
```

Remove effect from the player

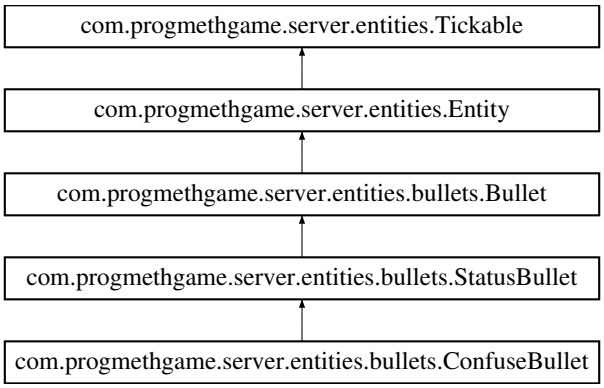
Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/effects/Confuse.↩ java

5.26 com.progmethgame.server.entities.bullets.ConfuseBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.ConfuseBullet:



Public Member Functions

- ConfuseBullet (Player owner)
- Bullet cpy ()

Additional Inherited Members

5.26.1 Constructor & Destructor Documentation

5.26.1.1 ConfuseBullet()

```
com.progmethgame.server.entities.bullets.ConfuseBullet.ConfuseBullet (
            Player owner )
```

5.26.2 Member Function Documentation

5.26.2.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.ConfuseBullet.cpy ( )
```

Duplicate this bullet

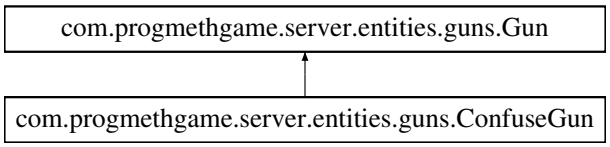
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Confuse↩ Bullet.java

5.27 com.progmethgame.server.entities.guns.ConfuseGun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.ConfuseGun:



Public Member Functions

- ConfuseGun (Player owner)

Additional Inherited Members

5.27.1 Detailed Description

Gun that spawn confuse bullet

5.27.2 Constructor & Destructor Documentation

5.27.2.1 ConfuseGun()

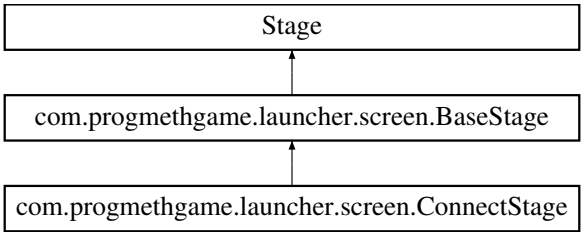
```
com.progmethgame.server.entities.guns.ConfuseGun.ConfuseGun (
            Player owner )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/ConfuseGun.java

5.28 com.progmethgame.launcher.screen.ConnectStage Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.ConnectStage:



Public Member Functions

- ConnectStage ()
- void draw ()
- void dispose ()

Private Attributes

- Texture background
- Viewport bgView

Additional Inherited Members

5.28.1 Detailed Description

Display connection and main menu dialog

5.28.2 Constructor & Destructor Documentation

5.28.2.1 ConnectStage()

```
com.progmethgame.launcher.screen.ConnectStage.ConnectStage ( )
```

Create a new connect stage

5.28.3 Member Function Documentation

5.28.3.1 dispose()

```
void com.progmethgame.launcher.screen.ConnectStage.dispose ( )
```

5.28.3.2 draw()

```
void com.progmethgame.launcher.screen.ConnectStage.draw ( )
```

5.28.4 Member Data Documentation

5.28.4.1 background

```
Texture com.progmethgame.launcher.screen.ConnectStage.background  [private]
```

Background texture

5.28.4.2 bgView

```
Viewport com.progmethgame.launcher.screen.ConnectStage.bgView  [private]
```

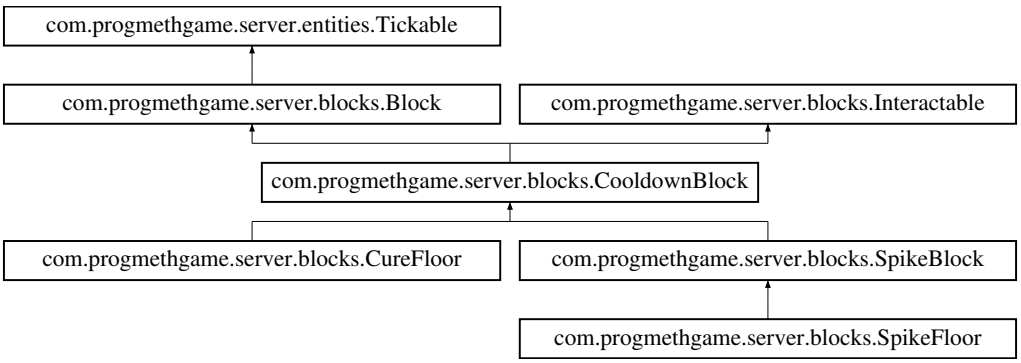
Background's viewport

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/Connect↩ Stage.java

5.29 com.progmethgame.server.blocks.CooldownBlock Class Reference

Inheritance diagram for com.progmethgame.server.blocks.CooldownBlock:



Public Member Functions

- CooldownBlock ()
- void interact (Player p)
- void tick (float delta)

Protected Member Functions

- abstract void applyEffect (Player p)

Static Protected Attributes

- static final int maxCooldown = 5

Private Attributes

- int cooldown
- int tickCount

5.29.1 Detailed Description

A block that have "cooldown" on its effect

Author

pigt

5.29.2 Constructor & Destructor Documentation

5.29.2.1 CooldownBlock()

```
com.progmethgame.server.blocks.CooldownBlock.CooldownBlock ( )
```

5.29.3 Member Function Documentation

5.29.3.1 applyEffect()

```
abstract void com.progmethgame.server.blocks.CooldownBlock.applyEffect (
            Player p )  [abstract], [protected]
```

Reimplemented in com.progmethgame.server.blocks.SpikeBlock, and com.progmethgame.server.blocks.CureFloor.

5.29.3.2 interact()

```
void com.progmethgame.server.blocks.CooldownBlock.interact (
            Player p )
```

Implements com.progmethgame.server.blocks.Interactable.

5.29.3.3 tick()

```
void com.progmethgame.server.blocks.CooldownBlock.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Reimplemented from com.progmethgame.server.blocks.Block.

5.29.4 Member Data Documentation

5.29.4.1 cooldown

```
int com.progmethgame.server.blocks.CooldownBlock.cooldown  [private]
```

Number of second before block is active again

5.29.4.2 maxCooldown

```
final int com.progmethgame.server.blocks.CooldownBlock.maxCooldown = 5  [static], [protected]
```

Cooldown interval (second)

5.29.4.3 tickCount

```
int com.progmethgame.server.blocks.CooldownBlock.tickCount  [private]
```

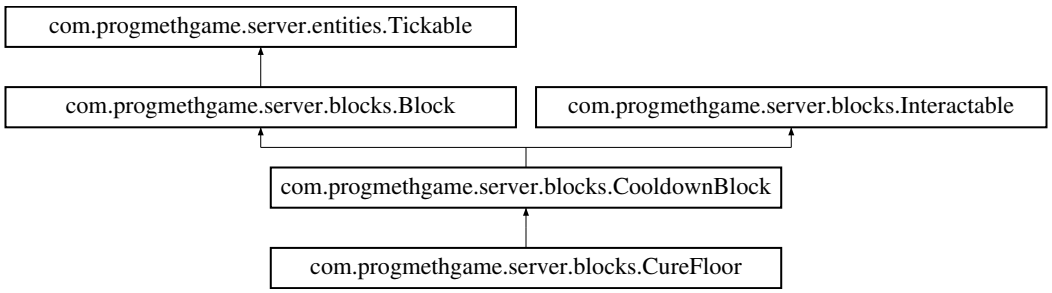
Number of tick after last cooldown decrement

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Cooldown↩ Block.java

5.30 com.progmethgame.server.blocks.CureFloor Class Reference

Inheritance diagram for com.progmethgame.server.blocks.CureFloor:



Public Member Functions

- CureFloor ()
- boolean isSolid ()

Protected Member Functions

- void applyEffect (Player p)

Additional Inherited Members

5.30.1 Detailed Description

A floor block that remove status effect from the player

Author

pigt

5.30.2 Constructor & Destructor Documentation

5.30.2.1 CureFloor()

```
com.progmethgame.server.blocks.CureFloor.CureFloor ( )
```

5.30.3 Member Function Documentation

5.30.3.1 applyEffect()

```
void com.progmethgame.server.blocks.CureFloor.applyEffect (
            Player p )  [protected]
```

Reimplemented from com.progmethgame.server.blocks.CooldownBlock.

5.30.3.2 isSolid()

```
boolean com.progmethgame.server.blocks.CureFloor.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

Reimplemented from com.progmethgame.server.blocks.Block.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Cure↩ Floor.java

5.31 com.progmethgame.common.DisplayType Enum Reference

Public Member Functions

- String filename ()

Public Attributes

- PLAYER =("player.png")
- BULLET_BURN =("bullets/burnbullet.png")
- BULLET_SLOW =("bullets/slowbullet.png")
- BULLET_CONFUSE =("bullets/confusebullet.png")
- BULLET_STUNT =("bullets/stuntbullet.png")
- BULLET_HOOK =("bullets/hookbullet.png")
- BULLET_TELEPORT =("bullets/teleportbullet.png")
- RICK =("rick.png")
- TEST =("test.png")
- POTION =("potion.png")
- SMALLCUBE =("smallcube.png")
- SMALLCUBEEX =("smallcubeexcited.png")
- EFFECT_BURN =("effects/burn.png")
- EFFECT_CONFUSE =("effects/confuse.png")
- EFFECT_SLOW =("effects/slow.png")
- EFFECT_STUNT =("effects/stunt.png")
- PLAYER_RED =("players/TopRed.png")
- PLAYER_RED_ICON =("players/Red.png")
- PLAYER_BLUE =("players/TopBlue.png")
- PLAYER_BLUE_ICON =("players/Blue.png")
- PLAYER_GREEN =("players/TopGreen.png")
- PLAYER_GREEN_ICON =("players/Green.png")
- PLAYER_ORANGE =("players/TopOrange.png")
- PLAYER_ORANGE_ICON =("players/Orange.png")
- PLAYER_PURPLE =("players/TopPurple.png")
- PLAYER_PURPLE_ICON =("players/Purple.png")
- PLAYER_YELLOW =("players/TopYellow.png")
- PLAYER_YELLOW_ICON =("players/Yellow.png")

Private Member Functions

- DisplayType (String filename)

Private Attributes

- final String filename

5.31.1 Detailed Description

Represent textures available on the client.

5.31.2 Constructor & Destructor Documentation

5.31.2.1 DisplayType()

```
com.progmethgame.common.DisplayType.DisplayType (
            String filename )  [private]
```

Create new DisplayType

Parameters

filename	path to texture's file

5.31.3 Member Function Documentation

5.31.3.1 filename()

```
String com.progmethgame.common.DisplayType.filename ( )
```

Get texture's file path.

Returns

5.31.4 Member Data Documentation

5.31.4.1 BULLET_BURN

```
com.progmethgame.common.DisplayType.BULLET_BURN =("bullets/burnbullet.png")
```

5.31.4.2 BULLET_CONFUSE

```
com.progmethgame.common.DisplayType.BULLET_CONFUSE =("bullets/confusebullet.png")
```

5.31.4.3 BULLET_HOOK

```
com.progmethgame.common.DisplayType.BULLET_HOOK =("bullets/hookbullet.png")
```

5.31.4.4 BULLET_SLOW

```
com.progmethgame.common.DisplayType.BULLET_SLOW =("bullets/slowbullet.png")
```

5.31.4.5 BULLET_STUNT

```
com.progmethgame.common.DisplayType.BULLET_STUNT =("bullets/stuntbullet.png")
```

5.31.4.6 BULLET_TELEPORT

```
com.progmethgame.common.DisplayType.BULLET_TELEPORT =("bullets/teleportbullet.png")
```

5.31.4.7 EFFECT_BURN

```
com.progmethgame.common.DisplayType.EFFECT_BURN =("effects/burn.png")
```

5.31.4.8 EFFECT_CONFUSE

```
com.progmethgame.common.DisplayType.EFFECT_CONFUSE =("effects/confuse.png")
```

5.31.4.9 EFFECT_SLOW

```
com.progmethgame.common.DisplayType.EFFECT_SLOW =("effects/slow.png")
```

5.31.4.10 EFFECT_STUNT

```
com.progmethgame.common.DisplayType.EFFECT_STUNT =("effects/stunt.png")
```

5.31.4.11 filename

```
final String com.progmethgame.common.DisplayType.filename  [private]
```

Location of the file associated with this DisplayType

5.31.4.12 PLAYER

```
com.progmethgame.common.DisplayType.PLAYER =("player.png")
```

5.31.4.13 PLAYER_BLUE

```
com.progmethgame.common.DisplayType.PLAYER_BLUE =("players/TopBlue.png")
```

5.31.4.14 PLAYER_BLUE_ICON

```
com.progmethgame.common.DisplayType.PLAYER_BLUE_ICON =("players/Blue.png")
```

5.31.4.15 PLAYER_GREEN

```
com.progmethgame.common.DisplayType.PLAYER_GREEN =("players/TopGreen.png")
```

5.31.4.16 PLAYER_GREEN_ICON

```
com.progmethgame.common.DisplayType.PLAYER_GREEN_ICON =("players/Green.png")
```

5.31.4.17 PLAYER_ORANGE

```
com.progmethgame.common.DisplayType.PLAYER_ORANGE =("players/TopOrange.png")
```

5.31.4.18 PLAYER_ORANGE_ICON

```
com.progmethgame.common.DisplayType.PLAYER_ORANGE_ICON =("players/Orange.png")
```

5.31.4.19 PLAYER_PURPLE

```
com.progmethgame.common.DisplayType.PLAYER_PURPLE =("players/TopPurple.png")
```

5.31.4.20 PLAYER_PURPLE_ICON

```
com.progmethgame.common.DisplayType.PLAYER_PURPLE_ICON =("players/Purple.png")
```

5.31.4.21 PLAYER_RED

```
com.progmethgame.common.DisplayType.PLAYER_RED =("players/TopRed.png")
```

5.31.4.22 PLAYER_RED_ICON

```
com.progmethgame.common.DisplayType.PLAYER_RED_ICON =("players/Red.png")
```

5.31.4.23 PLAYER_YELLOW

```
com.progmethgame.common.DisplayType.PLAYER_YELLOW =("players/TopYellow.png")
```

5.31.4.24 PLAYER_YELLOW_ICON

```
com.progmethgame.common.DisplayType.PLAYER_YELLOW_ICON =("players/Yellow.png")
```

5.31.4.25 POTION

```
com.progmethgame.common.DisplayType.POTION =("potion.png")
```

5.31.4.26 RICK

```
com.progmethgame.common.DisplayType.RICK =("rick.png")
```

5.31.4.27 SMALLCUBE

```
com.progmethgame.common.DisplayType.SMALLCUBE =("smallcube.png")
```

5.31.4.28 SMALLCUBEEX

```
com.progmethgame.common.DisplayType.SMALLCUBEEX =("smallcubeexcited.png")
```

5.31.4.29 TEST

```
com.progmethgame.common.DisplayType.TEST =("test.png")
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/Display↩ Type.java

5.32 com.progmethgame.server.entities.effects.EffectConfig Class Reference

Static Public Attributes

- static final int BURN_MAX_DURATION = 4
- static final int BURN_DPS = 2
- static final int CONFUSE_MAX_DURATION = 3
- static final int SLOW_MAX_DURATION = 5
- static final float SLOW_RATE = 0.5f
- static final int STUNT_MAX_DURATION = 1

5.32.1 Detailed Description

A class storing effect's config

5.32.2 Member Data Documentation

5.32.2.1 BURN_DPS

```
final int com.progmethgame.server.entities.effects.EffectConfig.BURN_DPS = 2  [static]
```

Burn damage per second

5.32.2.2 BURN_MAX_DURATION

```
final int com.progmethgame.server.entities.effects.EffectConfig.BURN_MAX_DURATION = 4  [static]
```

Burn duration

5.32.2.3 CONFUSE_MAX_DURATION

```
final int com.progmethgame.server.entities.effects.EffectConfig.CONFUSE_MAX_DURATION = 3  [static]
```

Confuse duration

5.32.2.4 SLOW_MAX_DURATION

```
final int com.progmethgame.server.entities.effects.EffectConfig.SLOW_MAX_DURATION = 5  [static]
```

Slow duration

5.32.2.5 SLOW_RATE

```
final float com.progmethgame.server.entities.effects.EffectConfig.SLOW_RATE = 0.5f  [static]
```

Slow walk fraction

5.32.2.6 STUNT_MAX_DURATION

```
final int com.progmethgame.server.entities.effects.EffectConfig.STUNT_MAX_DURATION = 1  [static]
```

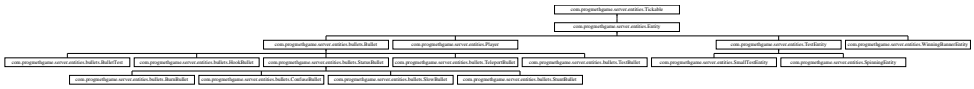
Stunt duration

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/effects/Effect↩ Config.java

5.33 com.progmethgame.server.entities.Entity Class Reference

Inheritance diagram for com.progmethgame.server.entities.Entity:



Public Member Functions

- Entity (UUID gid, DisplayType type)
- Entity (DisplayType type)
- boolean equals (Object obj)
- int hashCode ()
- void setDisplay (DisplayType t)
- void tick (float delta)
- Vector2 getVelocity ()
- Vector2 getPosition ()
- DisplayType getType ()
- UUID getGid ()
- EntityData getData ()
- void onCollide (Entity other)
- void onWalkOn (Block block)
- void onCollideSolid (Block block)
- float getPhysicalSize ()

Protected Attributes

- Vector2 position
- Vector2 velocity
- DisplayType type
- final UUID gid
- ArrayList< Overlay > overlays
- Vector2 facingDirection

5.33.1 Detailed Description

Represent a logical entity on the server

5.33.2 Constructor & Destructor Documentation

5.33.2.1 Entity() [1/2]

```
com.progmethgame.server.entities.Entity.Entity (
            UUID gid,
            DisplayType type )
```

Create a new entity with specified ID and type

Parameters

gid	
type	

5.33.2.2 Entity() [2/2]

```
com.progmethgame.server.entities.Entity.Entity (
            DisplayType type )
```

Create a new entity with specified type and a random id

Parameters

type	

5.33.3 Member Function Documentation

5.33.3.1 equals()

```
boolean com.progmethgame.server.entities.Entity.equals (
            Object obj )
```

5.33.3.2 getData()

```
EntityData com.progmethgame.server.entities.Entity.getData ( )
```

Parse the graphical rendering data for sending accross the network

Returns

EntityData

5.33.3.3 getGid()

```
UUID com.progmethgame.server.entities.Entity.getGid ( )
```

Get the entity's id

5.33.3.4 getPhysicalSize()

```
float com.progmethgame.server.entities.Entity.getPhysicalSize ( )
```

Return physical size for physic engine's onCollide(Entity) calculation.

Size in this case is the side length of the bounding square. The bounding box has the same center as the default bound.

Reimplemented in com.progmethgame.server.entities.bullets.Bullet, and com.progmethgame.server.entities.SmallTestEntity.

5.33.3.5 getPosition()

```
Vector2 com.progmethgame.server.entities.Entity.getPosition ( )
```

Get the position

5.33.3.6 getType()

```
DisplayType com.progmethgame.server.entities.Entity.getType ( )
```

Get the display type

5.33.3.7 getVelocity()

```
Vector2 com.progmethgame.server.entities.Entity.getVelocity ( )
```

Get the velocity

Returns

5.33.3.8 hashCode()

```
int com.progmethgame.server.entities.Entity.hashCode ( )
```

5.33.3.9 onCollide()

```
void com.progmethgame.server.entities.Entity.onCollide (
            Entity other )
```

Called when entity touched other.

Parameters

other	the touched entity

Reimplemented in com.progmethgame.server.entities.bullets.Bullet, and com.progmethgame.server.entities.TestEntity.

5.33.3.10 onCollideSolid()

```
void com.progmethgame.server.entities.Entity.onCollideSolid (
            Block block )
```

Call when entity hit solid block

Parameters

block	the block that this entity collided with

Reimplemented in com.progmethgame.server.entities.Player, and com.progmethgame.server.entities.bullets.Bullet.

5.33.3.11 onWalkOn()

```
void com.progmethgame.server.entities.Entity.onWalkOn (
            Block block )
```

Called when walked on the block

Parameters

block	the block that got walked on

Reimplemented in com.progmethgame.server.entities.Player.

5.33.3.12 setDisplay()

```
void com.progmethgame.server.entities.Entity.setDisplay (
            DisplayType t )
```

Change the display type

Parameters

t	

5.33.3.13 tick()

```
void com.progmethgame.server.entities.Entity.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Implements com.progmethgame.server.entities.Tickable.

Reimplemented in com.progmethgame.server.entities.Player, com.progmethgame.server.entities.bullets.Bullet, com.progmethgame.server.entities.TestEntity, and com.progmethgame.server.entities.SpinningEntity.

5.33.4 Member Data Documentation

5.33.4.1 facingDirection

```
Vector2 com.progmethgame.server.entities.Entity.facingDirection  [protected]
```

Facing direction

5.33.4.2 gid

```
final UUID com.progmethgame.server.entities.Entity.gid  [protected]
```

ID

5.33.4.3 overlays

```
ArrayList<Overlay> com.progmethgame.server.entities.Entity.overlays  [protected]
```

Overlays attached

5.33.4.4 position

```
Vector2 com.progmethgame.server.entities.Entity.position  [protected]
```

Position

5.33.4.5 type

```
DisplayType com.progmethgame.server.entities.Entity.type  [protected]
```

Displayed type

5.33.4.6 velocity

```
Vector2 com.progmethgame.server.entities.Entity.velocity  [protected]
```

Velocity

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Entity.↩ java

5.34 com.progmethgame.common.EntityData Class Reference

Public Attributes

- UUID id
- DisplayType dispType
- Vector2 position
- Vector2 facingDirection
- ArrayList< Overlay > overlays

5.34.1 Detailed Description

Data structure representing networked entity.

5.34.2 Member Data Documentation

5.34.2.1 dispType

```
DisplayType com.progmethgame.common.EntityData.dispType
```

5.34.2.2 facingDirection

```
Vector2 com.progmethgame.common.EntityData.facingDirection
```

5.34.2.3 id

```
UUID com.progmethgame.common.EntityData.id
```

5.34.2.4 overlays

```
ArrayList<Overlay> com.progmethgame.common.EntityData.overlays
```

5.34.2.5 position

```
Vector2 com.progmethgame.common.EntityData.position
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/Entity↩ Data.java

5.35 com.progmethgame.common.GameConfig Class Reference

Static Public Attributes

- static float SERVER_TICK_RATE = 1/30f
- static int CLIENT_ENTITY_INTERPOLATION_TIME_MILLIS = (int) (SERVER_TICK_RATE ∗1000)
- static int SERVER_MAX_PACKET = 20
- static float AUDIO_VOLUME = 0.50f
- static int CLIENT_MAP_VIEWPORT_SIZE = 20
- static String MAP_FILEPATH = "map/map.tmx"
- static int SERVER_GAMEOVER_TIMER = (int) (5/SERVER_TICK_RATE)

5.35.1 Detailed Description

Game's configuration and constants.

5.35.2 Member Data Documentation

5.35.2.1 AUDIO_VOLUME

```
float com.progmethgame.common.GameConfig.AUDIO_VOLUME = 0.50f  [static]
```

Music and Sound's volume

5.35.2.2 CLIENT_ENTITY_INTERPOLATION_TIME_MILLIS

```
int com.progmethgame.common.GameConfig.CLIENT_ENTITY_INTERPOLATION_TIME_MILLIS = (int) (SERVER_TICK_RATE
∗1000)  [static]
```

Delay duration for entity interpolation

5.35.2.3 CLIENT_MAP_VIEWPORT_SIZE

```
int com.progmethgame.common.GameConfig.CLIENT_MAP_VIEWPORT_SIZE = 20  [static]
```

Width and Height of client's map viewport

5.35.2.4 MAP_FILEPATH

```
String com.progmethgame.common.GameConfig.MAP_FILEPATH = "map/map.tmx"  [static]
```

Map file's location

5.35.2.5 SERVER_GAMEOVER_TIMER

```
int com.progmethgame.common.GameConfig.SERVER_GAMEOVER_TIMER = (int) (5/SERVER_TICK_RATE)
[static]
```

5.35.2.6 SERVER_MAX_PACKET

```
int com.progmethgame.common.GameConfig.SERVER_MAX_PACKET = 20  [static]
```

Max event to send in a single packet

5.35.2.7 SERVER_TICK_RATE

```
float com.progmethgame.common.GameConfig.SERVER_TICK_RATE = 1/30f  [static]
```

Server update rate (Hz)

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/Game↩ Config.java

5.36 com.progmethgame.common.context.GameContext Class Reference

Static Public Member Functions

- static void setServerContext (ServerContext ctx)
- static void setClientContext (ClientContext ctx)
- static ServerContext getServerContext ()
- static ClientContext getClientContext ()

Private Member Functions

- GameContext ()

Static Private Attributes

- static ServerContext serverCtx
- static ClientContext clientCtx

5.36.1 Detailed Description

Store global game context ie. ServerContext and ClientContext

5.36.2 Constructor & Destructor Documentation

5.36.2.1 GameContext()

```
com.progmethgame.common.context.GameContext.GameContext ( )  [private]
```

5.36.3 Member Function Documentation

5.36.3.1 getClientContext()

```
static ClientContext com.progmethgame.common.context.GameContext.getClientContext ( )  [static]
```

Get current client context

Returns

5.36.3.2 getServerContext()

```
static ServerContext com.progmethgame.common.context.GameContext.getServerContext ( )  [static]
```

Get current server context

Returns

5.36.3.3 setClientContext()

```
static void com.progmethgame.common.context.GameContext.setClientContext (
            ClientContext ctx )  [static]
```

Set the global client context.

Parameters

ctx	

5.36.3.4 setServerContext()

```
static void com.progmethgame.common.context.GameContext.setServerContext (
            ServerContext ctx )  [static]
```

Set the global server context.

Parameters

ctx	

5.36.4 Member Data Documentation

5.36.4.1 clientCtx

```
ClientContext com.progmethgame.common.context.GameContext.clientCtx  [static], [private]
```

Client context

5.36.4.2 serverCtx

```
ServerContext com.progmethgame.common.context.GameContext.serverCtx  [static], [private]
```

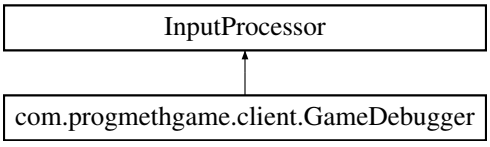
Server context

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/context/GameContext.java

5.37 com.progmethgame.client.GameDebugger Class Reference

Inheritance diagram for com.progmethgame.client.GameDebugger:



Public Member Functions

- void render (Batch batch, Viewport hudViewport)
- boolean keyDown (int keycode)
- boolean keyUp (int keycode)
- boolean keyTyped (char character)
- boolean touchDown (int screenX, int screenY, int pointer, int button)
- boolean touchUp (int screenX, int screenY, int pointer, int button)
- boolean touchDragged (int screenX, int screenY, int pointer)
- boolean mouseMoved (int screenX, int screenY)
- boolean scrolled (int amount)

Private Member Functions

- void sendDebug ()

Private Attributes

- boolean activated = false
- String command = ""
- ArrayList< String > history = new ArrayList<String>()
- int histPtr

5.37.1 Detailed Description

Debugging Interface. Provides debugging command line's rendering, input, and networking component.

5.37.2 Member Function Documentation

5.37.2.1 keyDown()

```
boolean com.progmethgame.client.GameDebugger.keyDown (
            int keycode )
```

5.37.2.2 keyTyped()

```
boolean com.progmethgame.client.GameDebugger.keyTyped (
            char character )
```

5.37.2.3 keyUp()

```
boolean com.progmethgame.client.GameDebugger.keyUp (
            int keycode )
```

5.37.2.4 mouseMoved()

```
boolean com.progmethgame.client.GameDebugger.mouseMoved (
            int screenX,
            int screenY )
```

5.37.2.5 render()

```
void com.progmethgame.client.GameDebugger.render (
            Batch batch,
            Viewport hudViewport )
```

Render the debugger's UI

Parameters

batch	screen's batch
hudViewport	screen's viewport

5.37.2.6 scrolled()

```
boolean com.progmethgame.client.GameDebugger.scrolled (
            int amount )
```

5.37.2.7 sendDebug()

```
void com.progmethgame.client.GameDebugger.sendDebug ( )  [private]
```

Send current command to the server

5.37.2.8 touchDown()

```
boolean com.progmethgame.client.GameDebugger.touchDown (
            int screenX,
            int screenY,
            int pointer,
            int button )
```

5.37.2.9 touchDragged()

```
boolean com.progmethgame.client.GameDebugger.touchDragged (
            int screenX,
            int screenY,
            int pointer )
```

5.37.2.10 touchUp()

```
boolean com.progmethgame.client.GameDebugger.touchUp (
            int screenX,
            int screenY,
            int pointer,
            int button )
```

5.37.3 Member Data Documentation

5.37.3.1 activated

```
boolean com.progmethgame.client.GameDebugger.activated = false  [private]
```

Debugger is activated by user?

5.37.3.2 command

```
String com.progmethgame.client.GameDebugger.command = ""  [private]
```

Current command text field

5.37.3.3 history

```
ArrayList<String> com.progmethgame.client.GameDebugger.history = new ArrayList<String>()
[private]
```

Command history

5.37.3.4 histPtr

```
int com.progmethgame.client.GameDebugger.histPtr  [private]
```

Index of command selected by the user relative to the rear

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/Game↩ Debugger.java

5.38 com.progmethgame.network.event.base.GameEvent< T > Class Template Reference

Public Member Functions

- abstract void notifyListener (T target)

5.38.1 Detailed Description

Game's network event

5.38.2 Member Function Documentation

5.38.2.1 notifyListener()

```
abstract void com.progmethgame.network.event.base.GameEvent< T >.notifyListener (
            T target )  [abstract]
```

Notify the listener of this event

Parameters

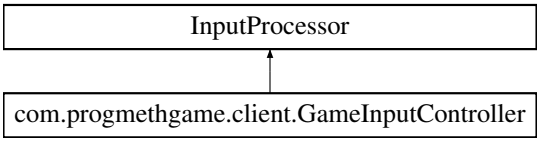
target	The listener who listen to this event.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/base/GameEvent.java

5.39 com.progmethgame.client.GameInputController Class Reference

Inheritance diagram for com.progmethgame.client.GameInputController:



Public Member Functions

- GameInputController ()
- boolean keyDown (int keycode)
- boolean keyUp (int keycode)
- boolean keyTyped (char character)
- boolean touchDown (int screenX, int screenY, int pointer, int button)
- boolean touchUp (int screenX, int screenY, int pointer, int button)
- boolean touchDragged (int screenX, int screenY, int pointer)
- boolean mouseMoved (int screenX, int screenY)
- boolean scrolled (int amount)

Private Member Functions

- void notifyMovement ()

Private Attributes

- final Vector2 movementVec

5.39.1 Detailed Description

Game's input device processor

5.39.2 Constructor & Destructor Documentation

5.39.2.1 GameInputController()

```
com.progmethgame.client.GameInputController.GameInputController ( )
```

Initialize controller

5.39.3 Member Function Documentation

5.39.3.1 keyDown()

```
boolean com.progmethgame.client.GameInputController.keyDown (
            int keycode )
```

5.39.3.2 keyTyped()

```
boolean com.progmethgame.client.GameInputController.keyTyped (
            char character )
```

5.39.3.3 keyUp()

```
boolean com.progmethgame.client.GameInputController.keyUp (
            int keycode )
```

5.39.3.4 mouseMoved()

```
boolean com.progmethgame.client.GameInputController.mouseMoved (
            int screenX,
            int screenY )
```

5.39.3.5 notifyMovement()

```
void com.progmethgame.client.GameInputController.notifyMovement ( )  [private]
```

Notify direction vector changes to the server

5.39.3.6 scrolled()

```
boolean com.progmethgame.client.GameInputController.scrolled (
            int amount )
```

5.39.3.7 touchDown()

```
boolean com.progmethgame.client.GameInputController.touchDown (
            int screenX,
            int screenY,
            int pointer,
            int button )
```

5.39.3.8 touchDragged()

```
boolean com.progmethgame.client.GameInputController.touchDragged (
            int screenX,
            int screenY,
            int pointer )
```

5.39.3.9 touchUp()

```
boolean com.progmethgame.client.GameInputController.touchUp (
            int screenX,
            int screenY,
            int pointer,
            int button )
```

5.39.4 Member Data Documentation

5.39.4.1 movementVec

```
final Vector2 com.progmethgame.client.GameInputController.movementVec  [private]
```

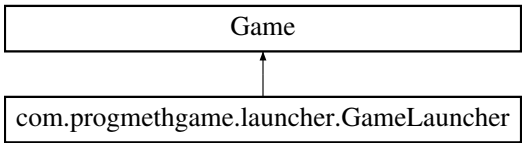
Player's movement direction vector

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/GameInputController.java

5.40 com.progmethgame.launcher.GameLauncher Class Reference

Inheritance diagram for com.progmethgame.launcher.GameLauncher:



Public Member Functions

- void create ()
- void connect (String ipaddr)
- void displayStage (Stage stage)
- void displayMessage (String message)
- void displayMessageQuitable (String message)
- void displayError (Throwable error)
- void displayWelcomeScreen ()
- void dispose ()

Static Public Member Functions

- static GameLauncher getLauncher ()

Private Member Functions

- void cleanUpContext ()

Private Attributes

- StageScreen stageScreen

Static Private Attributes

- static GameLauncher launcher

5.40.1 Detailed Description

Provides user interface for creation and termination of the game.

Note: There's only *one* launcher.

5.40.2 Member Function Documentation

5.40.2.1 cleanUpContext()

```
void com.progmethgame.launcher.GameLauncher.cleanUpContext ( )  [private]
```

Cleanup all the context created.

5.40.2.2 connect()

```
void com.progmethgame.launcher.GameLauncher.connect (
            String ipaddr )
```

Connect to the server and start the game

Parameters

ipaddr	IP address of the server. if null then local server will be started

5.40.2.3 create()

```
void com.progmethgame.launcher.GameLauncher.create ( )
```

5.40.2.4 displayError()

```
void com.progmethgame.launcher.GameLauncher.displayError (
            Throwable error )
```

Display error message

Parameters

error	

5.40.2.5 displayMessage()

```
void com.progmethgame.launcher.GameLauncher.displayMessage (
            String message )
```

Display message

Parameters

message	

5.40.2.6 displayMessageQuitable()

```
void com.progmethgame.launcher.GameLauncher.displayMessageQuitable (
            String message )
```

Display message with with a button to go back to the launcher screen

Parameters

message	

5.40.2.7 displayStage()

```
void com.progmethgame.launcher.GameLauncher.displayStage (
            Stage stage )
```

Display scene2d stage

5.40.2.8 displayWelcomeScreen()

```
void com.progmethgame.launcher.GameLauncher.displayWelcomeScreen ( )
```

Display connect screen

5.40.2.9 dispose()

```
void com.progmethgame.launcher.GameLauncher.dispose ( )
```

5.40.2.10 getLauncher()

```
static GameLauncher com.progmethgame.launcher.GameLauncher.getLauncher ( )  [static]
```

Get the global game launcher

5.40.3 Member Data Documentation

5.40.3.1 launcher

```
GameLauncher com.progmethgame.launcher.GameLauncher.launcher  [static], [private]
```

Global game launcher

5.40.3.2 stageScreen

```
StageScreen com.progmethgame.launcher.GameLauncher.stageScreen [private]
```

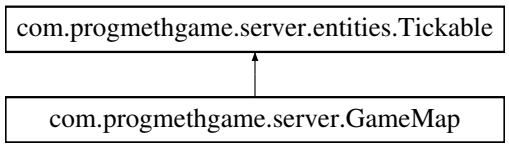
Current UI stage (if applied)

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/GameLauncher.java

5.41 com.progmethgame.server.GameMap Class Reference

Inheritance diagram for com.progmethgame.server.GameMap:



Public Member Functions

- GameMap () throws ServerStartupError
- Block getBlock (int x, int y)
- void onPlayerEnter (Player player)
- int getWidth ()
- int getHeight ()
- void reset ()
- void tick (float delta)
- void checkWinCondition ()

Private Member Functions

- void parseMap () throws MapParserException

Private Attributes

- int map [ ][ ]
- Block blocks [ ][ ]
- int mapWidth
- int mapHeight
- final Vector2[ ] spawnPoints = {new Vector2(2, 2), new Vector2(18, 18)}
- int spawnPointsIdx = 0
- int resetTimer = -1

5.41.1 Detailed Description

Store map's state and managed entity's interaction with the map

5.41.2 Constructor & Destructor Documentation

5.41.2.1 GameMap()

```
com.progmethgame.server.GameMap.GameMap ( ) throws ServerStartupError
```

Read and initialize the map

Exceptions

ServerStartupError	

5.41.3 Member Function Documentation

5.41.3.1 checkWinCondition()

```
void com.progmethgame.server.GameMap.checkWinCondition ( )
```

Check and handle win condition

5.41.3.2 getBlock()

```
Block com.progmethgame.server.GameMap.getBlock (
            int x,
            int y )
```

Retriev the block at specified position

Parameters

x	
y	

Returns

Block at that location or null if there's no block there

5.41.3.3 getHeight()

```
int com.progmethgame.server.GameMap.getHeight ( )
```

Returns

Map's height

5.41.3.4 getWidth()

```
int com.progmethgame.server.GameMap.getWidth ( )
```

Returns

Map's width

5.41.3.5 onPlayerEnter()

```
void com.progmethgame.server.GameMap.onPlayerEnter (
            Player player )
```

Initialize the player's state

Parameters

player	

5.41.3.6 parseMap()

```
void com.progmethgame.server.GameMap.parseMap ( ) throws MapParserException  [private]
```

Parse the map file into 2d block id array.

Exceptions

MapParserException	

5.41.3.7 reset()

```
void com.progmethgame.server.GameMap.reset ( )
```

Reset the map

5.41.3.8 tick()

```
void com.progmethgame.server.GameMap.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Implements com.progmethgame.server.entities.Tickable.

5.41.4 Member Data Documentation

5.41.4.1 blocks

```
Block com.progmethgame.server.GameMap.blocks[][]  [private]
```

2d array of map's block object

5.41.4.2 map

```
int com.progmethgame.server.GameMap.map[][]  [private]
```

2d array of map's block id

5.41.4.3 mapHeight

```
int com.progmethgame.server.GameMap.mapHeight  [private]
```

height of the map

5.41.4.4 mapWidth

```
int com.progmethgame.server.GameMap.mapWidth  [private]
```

width of the map

5.41.4.5 resetTimer

```
int com.progmethgame.server.GameMap.resetTimer = -1  [private]
```

Number of tick until the server reset itself

5.41.4.6 spawnPoints

```
final Vector2 [] com.progmethgame.server.GameMap.spawnPoints = {new Vector2(2, 2), new Vector2(18,
18)}  [private]
```

List of available spawn location

5.41.4.7 spawnPointsIdx

```
int com.progmethgame.server.GameMap.spawnPointsIdx = 0  [private]
```

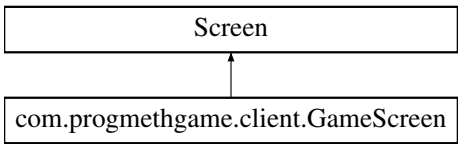
Index of the next spawn location

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/Game↩ Map.java

5.42 com.progmethgame.client.GameScreen Class Reference

Inheritance diagram for com.progmethgame.client.GameScreen:



Public Member Functions

- GameScreen ()
- void show ()
- void render (float delta)
- void resize (int width, int height)
- void pause ()
- void resume ()
- void hide ()
- void dispose ()

Private Member Functions

- void setupInput ()

Private Attributes

- TiledMap map
- TiledMapRenderer mapRenderer
- OrthographicCamera camera
- Viewport viewport
- Batch batch
- Viewport hudViewport
- GameDebugger debugger

5.42.1 Detailed Description

Handle rendering of the game

5.42.2 Constructor & Destructor Documentation

5.42.2.1 GameScreen()

```
com.progmethgame.client.GameScreen.GameScreen ( )
```

5.42.3 Member Function Documentation

5.42.3.1 dispose()

```
void com.progmethgame.client.GameScreen.dispose ( )
```

5.42.3.2 hide()

```
void com.progmethgame.client.GameScreen.hide ( )
```

5.42.3.3 pause()

```
void com.progmethgame.client.GameScreen.pause ( )
```

5.42.3.4 render()

```
void com.progmethgame.client.GameScreen.render (
            float delta )
```

5.42.3.5 resize()

```
void com.progmethgame.client.GameScreen.resize (
            int width,
            int height )
```

5.42.3.6 resume()

```
void com.progmethgame.client.GameScreen.resume ( )
```

5.42.3.7 setupInput()

```
void com.progmethgame.client.GameScreen.setupInput ( )  [private]
```

Setup input controller

5.42.3.8 show()

```
void com.progmethgame.client.GameScreen.show ( )
```

5.42.4 Member Data Documentation

5.42.4.1 batch

```
Batch com.progmethgame.client.GameScreen.batch  [private]
```

Rendering Batch

5.42.4.2 camera

```
OrthographicCamera com.progmethgame.client.GameScreen.camera  [private]
```

Game's camera

5.42.4.3 debugger

```
GameDebugger com.progmethgame.client.GameScreen.debugger  [private]
```

Debugger UI

5.42.4.4 hudViewport

```
Viewport com.progmethgame.client.GameScreen.hudViewport  [private]
```

Screen's viewport

5.42.4.5 map

```
TiledMap com.progmethgame.client.GameScreen.map  [private]
```

Game's map

5.42.4.6 mapRenderer

```
TiledMapRenderer com.progmethgame.client.GameScreen.mapRenderer  [private]
```

Map's renderer

5.42.4.7 viewport

```
Viewport com.progmethgame.client.GameScreen.viewport  [private]
```

Game's viewport

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/Game↩ Screen.java

5.43 com.progmethgame.server.entities.guns.Gun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.Gun:

Public Member Functions

- Gun (String name, float maxCooldown, Player owner)
- void shoot ()
- void recharge (float tickRate)
- String getName ()
- Bullet getBullet ()
- String getStatus ()

Public Attributes

- String name

Protected Attributes

- Bullet bullet
- float cooldown
- float maxCooldown
- Player owner

5.43.1 Constructor & Destructor Documentation

5.43.1.1 Gun()

```
com.progmethgame.server.entities.guns.Gun.Gun (
            String name,
            float maxCooldown,
            Player owner )
```

5.43.2 Member Function Documentation

5.43.2.1 getBullet()

```
Bullet com.progmethgame.server.entities.guns.Gun.getBullet ( )
```

Bullet spawned

5.43.2.2 getName()

```
String com.progmethgame.server.entities.guns.Gun.getName ( )
```

Name of the gun

5.43.2.3 getStatus()

```
String com.progmethgame.server.entities.guns.Gun.getStatus ( )
```

Text displaying status of the gun

5.43.2.4 recharge()

```
void com.progmethgame.server.entities.guns.Gun.recharge (
            float tickRate )
```

Reduce cooldown count

5.43.2.5 shoot()

```
void com.progmethgame.server.entities.guns.Gun.shoot ( )
```

Spawn bullet from this gun

5.43.3 Member Data Documentation

5.43.3.1 bullet

```
Bullet com.progmethgame.server.entities.guns.Gun.bullet  [protected]
```

Bullet expelled by this gun

5.43.3.2 cooldown

```
float com.progmethgame.server.entities.guns.Gun.cooldown  [protected]
```

Gun's current cooldown interval

5.43.3.3 maxCooldown

```
float com.progmethgame.server.entities.guns.Gun.maxCooldown  [protected]
```

Gun's cooldown interval

5.43.3.4 name

```
String com.progmethgame.server.entities.guns.Gun.name
```

Gun's name

5.43.3.5 owner

```
Player com.progmethgame.server.entities.guns.Gun.owner  [protected]
```

Player who owned the gun

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/Gun.↩ java

5.44 com.progmethgame.server.entities.guns.GunConfig Class Reference

Static Public Attributes

- static float BURN_GUN_MAX_COOLDOWN = 0.3f
- static float CONFUSE_GUN_MAX_COOLDOWN = 0.5f
- static float SLOW_GUN_MAX_COOLDOWN = 1f
- static float STUNT_GUN_MAX_COOLDOWN = 2f
- static float HOOK_GUN_MAX_COOLDOWN = 3f
- static float TELEPORT_GUN_MAX_COOLDOWN = 0.2f

5.44.1 Detailed Description

Gun's configuration constants

5.44.2 Member Data Documentation

5.44.2.1 BURN_GUN_MAX_COOLDOWN

```
float com.progmethgame.server.entities.guns.GunConfig.BURN_GUN_MAX_COOLDOWN = 0.3f  [static]
```

cooldown for burn gun

5.44.2.2 CONFUSE_GUN_MAX_COOLDOWN

```
float com.progmethgame.server.entities.guns.GunConfig.CONFUSE_GUN_MAX_COOLDOWN = 0.5f  [static]
```

cooldown for confuse gun

5.44.2.3 HOOK_GUN_MAX_COOLDOWN

```
float com.progmethgame.server.entities.guns.GunConfig.HOOK_GUN_MAX_COOLDOWN = 3f  [static]
```

cooldown for hook gun

5.44.2.4 SLOW_GUN_MAX_COOLDOWN

```
float com.progmethgame.server.entities.guns.GunConfig.SLOW_GUN_MAX_COOLDOWN = 1f  [static]
```

cooldown for slow gun

5.44.2.5 STUNT_GUN_MAX_COOLDOWN

```
float com.progmethgame.server.entities.guns.GunConfig.STUNT_GUN_MAX_COOLDOWN = 2f  [static]
```

cooldown for stunt gun

5.44.2.6 TELEPORT_GUN_MAX_COOLDOWN

```
float com.progmethgame.server.entities.guns.GunConfig.TELEPORT_GUN_MAX_COOLDOWN = 0.2f  [static]
```

cooldown for teleport gun

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/Gun↩ Config.java

5.45 com.progmethgame.client.graphic.component.Healthbar Class Reference

Static Public Member Functions

- static void render (Batch batch, int x, int y, int width, int height, float health, String healthtex, String healthfilltex)

5.45.1 Detailed Description

Utility for drawing health bar

5.45.2 Member Function Documentation

5.45.2.1 render()

```
static void com.progmethgame.client.graphic.component.Healthbar.render (
            Batch batch,
            int x,
            int y,
            int width,
            int height,
            float health,
            String healthtex,
            String healthfilltex )  [static]
```

Render the health bar

Parameters

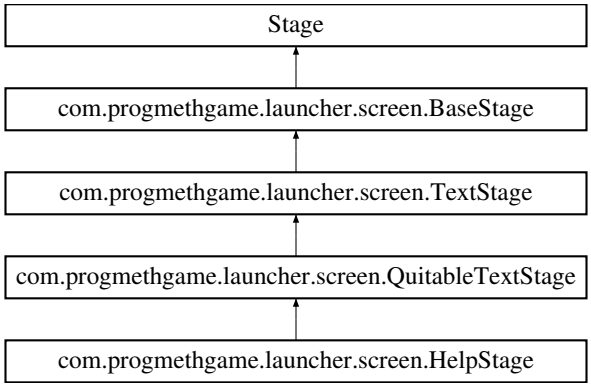
batch	Screen batch
x	
y	
width	
height	
health	Value between 0 and 1 indicating health
healthtex	Path to empty healthbar's texture
healthfilltex	Path to full healthbar's texture

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/graphic/component/Healthba
  java

5.46 com.progmethgame.launcher.screen.HelpStage Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.HelpStage:



Public Member Functions

- HelpStage ()

Static Public Attributes

- static final String HELPTEXT

Additional Inherited Members

5.46.1 Detailed Description

Display Help information

Author

pigt

5.46.2 Constructor & Destructor Documentation

5.46.2.1 HelpStage()

```
com.progmethgame.launcher.screen.HelpStage.HelpStage ( )
```

5.46.3 Member Data Documentation

5.46.3.1 HELPTEXT

```
final String com.progmethgame.launcher.screen.HelpStage.HELPTEXT  [static]
```

Initial value:

```
= "WASD to move"
            + "\nE to change weapon"
            + "\nSPACE to shoot"
            + "\n See game manual for more information."
```

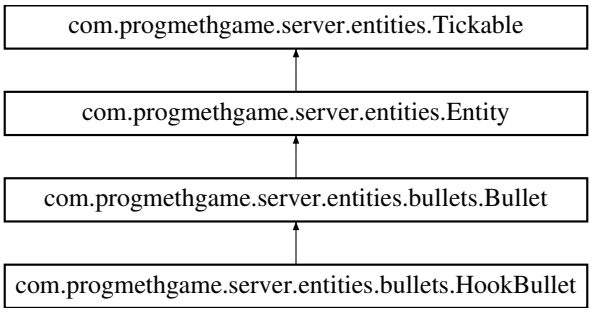
Help Information

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/Help↩ Stage.java

5.47 com.progmethgame.server.entities.bullets.HookBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.HookBullet:



Public Member Functions

- HookBullet (Player owner)
- void onCollide (Player hitPlayer)
- Bullet cpy ()

Static Public Attributes

- static final float hookSpeed = BulletConfig.HOOK_SPEED

Additional Inherited Members

5.47.1 Constructor & Destructor Documentation

5.47.1.1 HookBullet()

```
com.progmethgame.server.entities.bullets.HookBullet.HookBullet (
            Player owner )
```

5.47.2 Member Function Documentation

5.47.2.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.HookBullet.cpy ( )
```

Duplicate this bullet

Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

5.47.2.2 onCollide()

```
void com.progmethgame.server.entities.bullets.HookBullet.onCollide (
            Player hitPlayer )
```

Called when the bullet collide a player

Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

5.47.3 Member Data Documentation

5.47.3.1 hookSpeed

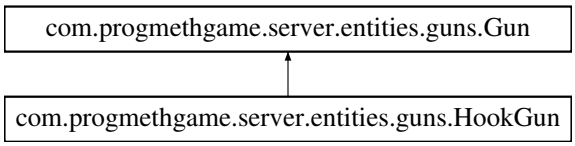
```
final float com.progmethgame.server.entities.bullets.HookBullet.hookSpeed = BulletConfig.HOOK_SPEED
[static]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Hook↩ Bullet.java

5.48 com.progmethgame.server.entities.guns.HookGun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.HookGun:



Public Member Functions

- HookGun (Player owner)

Additional Inherited Members

5.48.1 Detailed Description

Gun that spawn hook bullet

5.48.2 Constructor & Destructor Documentation

5.48.2.1 HookGun()

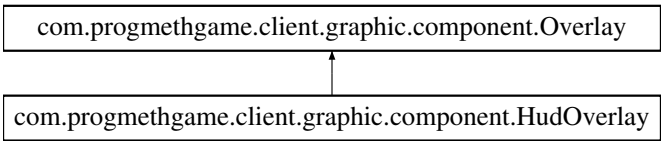
```
com.progmethgame.server.entities.guns.HookGun.HookGun (
            Player owner )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/Hook↩ Gun.java

5.49 com.progmethgame.client.graphic.component.HudOverlay Class Reference

Inheritance diagram for com.progmethgame.client.graphic.component.HudOverlay:



Public Member Functions

- HudOverlay ()
- void render (Viewport view, Batch batch, Rectangle rect, ClientEntity target)
- void setHealth (float health)
- void setWeaponName (String weaponName)
- void setGunIcon (DisplayType gunIcon)
- void setPlayerIcon (DisplayType playerIcon)

Private Attributes

- float health
- String weaponName
- DisplayType gunIcon
- DisplayType playerIcon

5.49.1 Detailed Description

HUD for displaying player's status

5.49.2 Constructor & Destructor Documentation

5.49.2.1 HudOverlay()

```
com.progmethgame.client.graphic.component.HudOverlay.HudOverlay ( )
```

5.49.3 Member Function Documentation

5.49.3.1 render()

```
void com.progmethgame.client.graphic.component.HudOverlay.render (
            Viewport view,
            Batch batch,
            Rectangle rect,
            ClientEntity target )
```

Render this overlay

Parameters

view	Screen's viewport
batch	Screen's batch
rect	The entity's bounding box in screen space.
target	The owner of this overlay

Reimplemented from com.progmethgame.client.graphic.component.Overlay.

5.49.3.2 setGunIcon()

```
void com.progmethgame.client.graphic.component.HudOverlay.setGunIcon (
            DisplayType gunIcon )
```

5.49.3.3 setHealth()

```
void com.progmethgame.client.graphic.component.HudOverlay.setHealth (
            float health )
```

5.49.3.4 setPlayerIcon()

```
void com.progmethgame.client.graphic.component.HudOverlay.setPlayerIcon (
            DisplayType playerIcon )
```

5.49.3.5 setWeaponName()

```
void com.progmethgame.client.graphic.component.HudOverlay.setWeaponName (
            String weaponName )
```

5.49.4 Member Data Documentation

5.49.4.1 gunIcon

```
DisplayType com.progmethgame.client.graphic.component.HudOverlay.gunIcon  [private]
```

Current gun's icon

5.49.4.2 health

```
float com.progmethgame.client.graphic.component.HudOverlay.health  [private]
```

Current health portion

5.49.4.3 playerIcon

```
DisplayType com.progmethgame.client.graphic.component.HudOverlay.playerIcon  [private]
```

Current player's icon

5.49.4.4 weaponName

```
String com.progmethgame.client.graphic.component.HudOverlay.weaponName  [private]
```

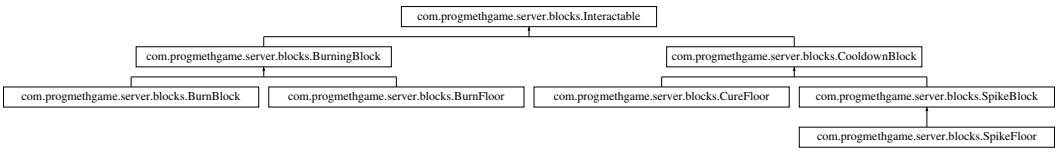
Weapon's name

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/graphic/component/Hud↩ Overlay.java

5.50 com.progmethgame.server.blocks.Interactable Interface Reference

Inheritance diagram for com.progmethgame.server.blocks.Interactable:



Public Member Functions

- void interact (Player p)

5.50.1 Detailed Description

Block that can interact with a player

Author

pigt

5.50.2 Member Function Documentation

5.50.2.1 interact()

```
void com.progmethgame.server.blocks.Interactable.interact (
            Player p )
```

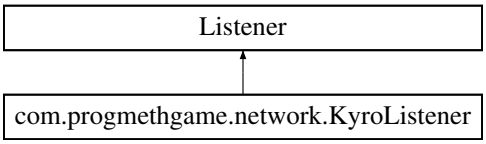
Implemented in com.progmethgame.server.blocks.CooldownBlock, and com.progmethgame.server.blocks.BurningBlock.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Interactable.↩ java

5.51 com.progmethgame.network.KyroListener Class Reference

Inheritance diagram for com.progmethgame.network.KyroListener:



Public Member Functions

- KyroListener (Queue< ClientEvent > queue, Map< Connection, UUID > con)
- void connected (Connection connection)
- void received (Connection connection, Object object)
- void disconnected (Connection connection)

Private Attributes

- final Queue< ClientEvent > queue
- final Map< Connection, UUID > con

5.51.1 Detailed Description

Custom KyroNet listener for the server bus

5.51.2 Constructor & Destructor Documentation

5.51.2.1 KyroListener()

```
com.progmethgame.network.KyroListener.KyroListener (
            Queue< ClientEvent > queue,
            Map< Connection, UUID > con )
```

Create new listener which push message to the queue and register client connection to the con

Queue is assume to be thread-safe con will always be lock when there's an operation

Parameters

queue	client message storage queue
con	client UUID mapping storage

5.51.3 Member Function Documentation

5.51.3.1 connected()

```
void com.progmethgame.network.KyroListener.connected (
            Connection connection )
```

5.51.3.2 disconnected()

```
void com.progmethgame.network.KyroListener.disconnected (
            Connection connection )
```

5.51.3.3 received()

```
void com.progmethgame.network.KyroListener.received (
            Connection connection,
            Object object )
```

5.51.4 Member Data Documentation

5.51.4.1 con

```
final Map<Connection, UUID> com.progmethgame.network.KyroListener.con  [private]
```

Client connection UUID mapping

5.51.4.2 queue

```
final Queue<ClientEvent> com.progmethgame.network.KyroListener.queue  [private]
```

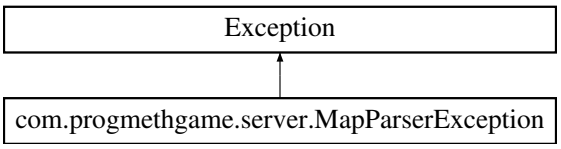
Queue of message received

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/ServerBus.java

5.52 com.progmethgame.server.MapParserException Class Reference

Inheritance diagram for com.progmethgame.server.MapParserException:



Public Member Functions

- MapParserException (String message)
- MapParserException (String message, Throwable e)

Static Private Attributes

- static final long serialVersionUID = -644306957292892482L

5.52.1 Detailed Description

the Map is malformatted or not found

5.52.2 Constructor & Destructor Documentation

5.52.2.1 MapParserException() [1/2]

```
com.progmethgame.server.MapParserException.MapParserException (
            String message )
```

5.52.2.2 MapParserException() [2/2]

```
com.progmethgame.server.MapParserException.MapParserException (
            String message,
            Throwable e )
```

5.52.3 Member Data Documentation

5.52.3.1 serialVersionUID

```
final long com.progmethgame.server.MapParserException.serialVersionUID = -644306957292892482L
[static], [private]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/MapParserException.java

5.53 com.progmethgame.network.NetworkPacket< T > Class Template Reference

Public Member Functions

- NetworkPacket ()

Public Attributes

- ArrayList< T > eventsList

5.53.1 Constructor & Destructor Documentation

5.53.1.1 NetworkPacket()

```
com.progmethgame.network.NetworkPacket< T >.NetworkPacket ( )
```

5.53.2 Member Data Documentation

5.53.2.1 eventsList

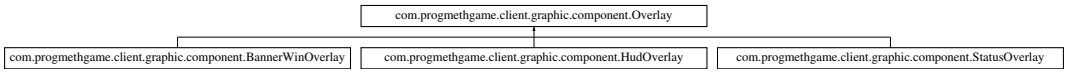
```
ArrayList<T> com.progmethgame.network.NetworkPacket< T >.eventsList
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/NetworkPacket.java

5.54 com.progmethgame.client.graphic.component.Overlay Class Reference

Inheritance diagram for com.progmethgame.client.graphic.component.Overlay:



Public Member Functions

- abstract void render (Viewport view, Batch batch, Rectangle rect, ClientEntity target)

5.54.1 Detailed Description

A data structure representing a graphical widget attached to an entity.

It renders on top of the game in the screen space. This is a synchronized data structure. Don't put any context or state data here.

5.54.2 Member Function Documentation

5.54.2.1 render()

```
abstract void com.progmethgame.client.graphic.component.Overlay.render (
            Viewport view,
            Batch batch,
            Rectangle rect,
            ClientEntity target )  [abstract]
```

Render this overlay

Parameters

view	Screen's viewport
~~*batch*~~	~~Screen's batch~~
rect	The entity's bounding box in screen space.
target	The owner of this overlay

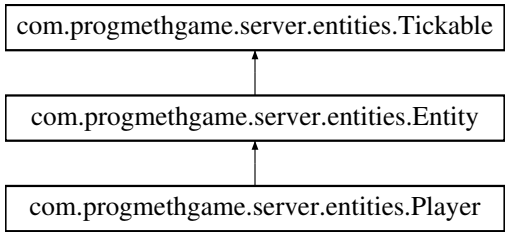
Reimplemented in com.progmethgame.client.graphic.component.HudOverlay, com.progmethgame.client.graphic.component.BannerV and com.progmethgame.client.graphic.component.StatusOverlay.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/graphic/component/Overlay.java

5.55 com.progmethgame.server.entities.Player Class Reference

Inheritance diagram for com.progmethgame.server.entities.Player:



Classes

- enum Color

Public Member Functions

- Player (UUID gid)
- void setColor (Color c)
- void setMovable (boolean movable)
- void setConfuse (boolean confuse)
- float getSpeed ()
- void setSpeed (float speed)
- int getDps ()
- void setDps (int dps)
- StatusEffect getEffect ()
- void setEffect (StatusEffect effect)
- int dealDamge (int damage)
- void tick (float delta)
- void setWalkDirection (Vector2 dir)
- Vector2 getFaceDirection ()
- boolean isAlive ()
- void fire ()
- void swapGun ()
- void onWalkOn (Block block)
- void onCollideSolid (Block block)

Package Attributes

- HudOverlay hud
- StatusOverlay healthOv

Private Attributes

- boolean alive
- int dps
- int hp
- StatusEffect effect
- int tickCount
- Gun[ ] gunSlot
- Gun holdedGun
- int gunIndex
- float speed
- Vector2 walkDirection
- boolean movable
- boolean confuse
- boolean shootable

Additional Inherited Members

5.55.1 Detailed Description

Game player

5.55.2 Constructor & Destructor Documentation

5.55.2.1 Player()

```
com.progmethgame.server.entities.Player.Player (
            UUID gid )
```

5.55.3 Member Function Documentation

5.55.3.1 dealDamge()

```
int com.progmethgame.server.entities.Player.dealDamge (
            int damage )
```

deal damage to player

Parameters

damage	

Returns

amount of damage that deal to player

5.55.3.2 fire()

```
void com.progmethgame.server.entities.Player.fire ( )
```

shoot gun

5.55.3.3 getDps()

```
int com.progmethgame.server.entities.Player.getDps ( )
```

get player damage per second

Returns

5.55.3.4 getEffect()

```
StatusEffect com.progmethgame.server.entities.Player.getEffect ( )
```

Returns

player's status effect

5.55.3.5 getFaceDirection()

```
Vector2 com.progmethgame.server.entities.Player.getFaceDirection ( )
```

Returns

player's face direction

5.55.3.6 getSpeed()

```
float com.progmethgame.server.entities.Player.getSpeed ( )
```

Returns

player's speed

5.55.3.7 isAlive()

```
boolean com.progmethgame.server.entities.Player.isAlive ( )
```

Returns

alive

5.55.3.8 onCollideSolid()

```
void com.progmethgame.server.entities.Player.onCollideSolid (
            Block block )
```

Call when entity hit solid block

Parameters

block	the block that this entity collided with

Reimplemented from com.progmethgame.server.entities.Entity.

5.55.3.9 onWalkOn()

```
void com.progmethgame.server.entities.Player.onWalkOn (
            Block block )
```

Called when walked on the block

Parameters

block	the block that got walked on

Reimplemented from com.progmethgame.server.entities.Entity.

5.55.3.10 setColor()

```
void com.progmethgame.server.entities.Player.setColor (
            Color c )
```

set color of player

Parameters

color	

5.55.3.11 setConfuse()

```
void com.progmethgame.server.entities.Player.setConfuse (
            boolean confuse )
```

set player confuse status

Parameters

confuse	

5.55.3.12 setDps()

```
void com.progmethgame.server.entities.Player.setDps (
            int dps )
```

set damage per second

Parameters

damage	per second

5.55.3.13 setEffect()

```
void com.progmethgame.server.entities.Player.setEffect (
            StatusEffect effect )
```

set player's effect

Parameters

effect	

5.55.3.14 setMovable()

```
void com.progmethgame.server.entities.Player.setMovable (
            boolean movable )
```

set player movable status

Parameters

movable	

5.55.3.15 setSpeed()

```
void com.progmethgame.server.entities.Player.setSpeed (
            float speed )
```

set player speed

Parameters

speed	

5.55.3.16 setWalkDirection()

```
void com.progmethgame.server.entities.Player.setWalkDirection (
            Vector2 dir )
```

set player walk direction

Parameters

dir	

5.55.3.17 swapGun()

```
void com.progmethgame.server.entities.Player.swapGun ( )
```

swap player's holded gun

5.55.3.18 tick()

```
void com.progmethgame.server.entities.Player.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Reimplemented from com.progmethgame.server.entities.Entity.

5.55.4 Member Data Documentation

5.55.4.1 alive

```
boolean com.progmethgame.server.entities.Player.alive  [private]
```

Status if the player is alive

5.55.4.2 confuse

```
boolean com.progmethgame.server.entities.Player.confuse  [private]
```

Status if player confuse

5.55.4.3 dps

```
int com.progmethgame.server.entities.Player.dps  [private]
```

Damage dealing to player per second

5.55.4.4 effect

```
StatusEffect com.progmethgame.server.entities.Player.effect  [private]
```

Effect that affect player

5.55.4.5 gunIndex

```
int com.progmethgame.server.entities.Player.gunIndex  [private]
```

Index of the gun that player is holding

5.55.4.6 gunSlot

```
Gun [] com.progmethgame.server.entities.Player.gunSlot  [private]
```

Gun Slot for player

5.55.4.7 healthOv

```
StatusOverlay com.progmethgame.server.entities.Player.healthOv  [package]
```

health bar on player

5.55.4.8 holdedGun

```
Gun com.progmethgame.server.entities.Player.holdedGun  [private]
```

The gun that player is holding

5.55.4.9 hp

```
int com.progmethgame.server.entities.Player.hp  [private]
```

Health point

5.55.4.10 hud

```
HudOverlay com.progmethgame.server.entities.Player.hud  [package]
```

HUD for Player

5.55.4.11 movable

```
boolean com.progmethgame.server.entities.Player.movable  [private]
```

Status if player can move

5.55.4.12 shootable

```
boolean com.progmethgame.server.entities.Player.shootable  [private]
```

Status if player can shoot

5.55.4.13 speed

```
float com.progmethgame.server.entities.Player.speed  [private]
```

Speed of move

5.55.4.14 tickCount

```
int com.progmethgame.server.entities.Player.tickCount  [private]
```

integer for tick method

5.55.4.15 walkDirection

```
Vector2 com.progmethgame.server.entities.Player.walkDirection  [private]
```

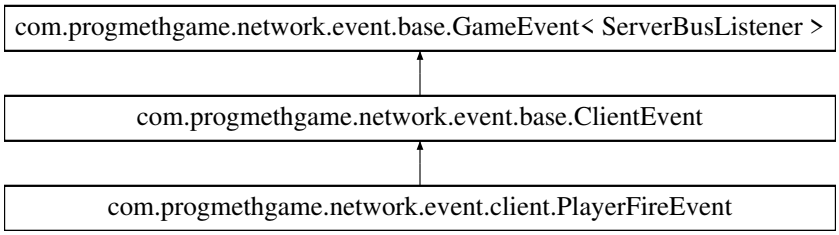
Walk direction

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Player.↩ java

5.56 com.progmethgame.network.event.client.PlayerFireEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.client.PlayerFireEvent:



Public Member Functions

- void notifyListener (ServerBusListener target)

Additional Inherited Members

5.56.1 Detailed Description

Client press fire button

5.56.2 Member Function Documentation

5.56.2.1 notifyListener()

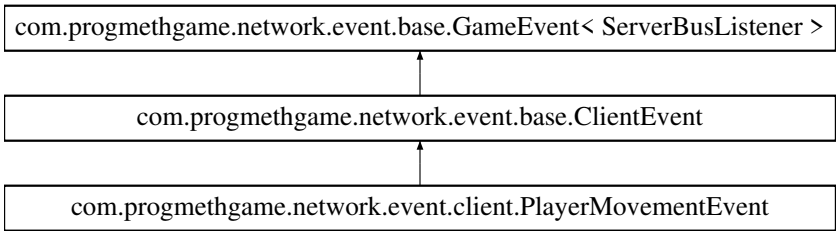
```
void com.progmethgame.network.event.client.PlayerFireEvent.notifyListener (
            ServerBusListener target )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/client/PlayerFireEvent.java

5.57 com.progmethgame.network.event.client.PlayerMovementEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.client.PlayerMovementEvent:



Public Member Functions

- PlayerMovementEvent (Vector2 movementVec)
- void notifyListener (ServerBusListener target)

Private Member Functions

- PlayerMovementEvent ()

Private Attributes

- Vector2 movementVec

Additional Inherited Members

5.57.1 Detailed Description

Movement vector update

5.57.2 Constructor & Destructor Documentation

5.57.2.1 PlayerMovementEvent() [1/2]

```
com.progmethgame.network.event.client.PlayerMovementEvent.PlayerMovementEvent ( )  [private]
```

5.57.2.2 PlayerMovementEvent() [2/2]

```
com.progmethgame.network.event.client.PlayerMovementEvent.PlayerMovementEvent (
            Vector2 movementVec )
```

5.57.3 Member Function Documentation

5.57.3.1 notifyListener()

```
void com.progmethgame.network.event.client.PlayerMovementEvent.notifyListener (
            ServerBusListener target )
```

5.57.4 Member Data Documentation

5.57.4.1 movementVec

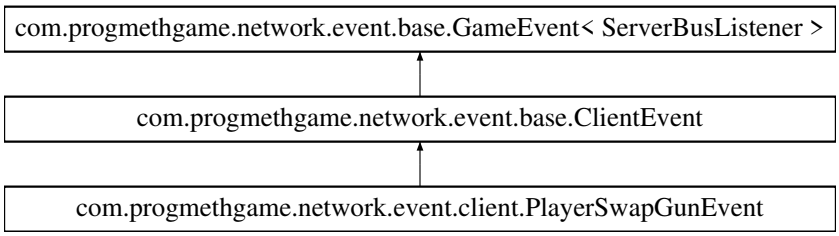
```
Vector2 com.progmethgame.network.event.client.PlayerMovementEvent.movementVec  [private]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/client/Player↩ MovementEvent.java

5.58 com.progmethgame.network.event.client.PlayerSwapGunEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.client.PlayerSwapGunEvent:



Public Member Functions

- void notifyListener (ServerBusListener target)

Additional Inherited Members

5.58.1 Detailed Description

Player request gun swap

5.58.2 Member Function Documentation

5.58.2.1 notifyListener()

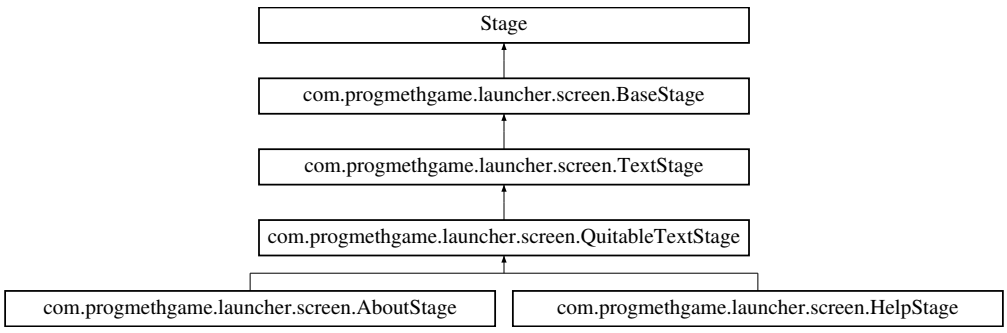
```
void com.progmethgame.network.event.client.PlayerSwapGunEvent.notifyListener (
            ServerBusListener target )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/client/Player↩ SwapGunEvent.java

5.59 com.progmethgame.launcher.screen.QuitableTextStage Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.QuitableTextStage:



Public Member Functions

- QuitableTextStage (String text)

Additional Inherited Members

5.59.1 Detailed Description

Display a message with quit button

Author

pigt

5.59.2 Constructor & Destructor Documentation

5.59.2.1 QuitableTextStage()

```
com.progmethgame.launcher.screen.QuitableTextStage.QuitableTextStage (
            String text )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/Quitable↩ TextStage.java

5.60 com.progmethgame.network.SerializationUtil Class Reference

Static Public Member Functions

- static void registerKryo (Kryo k)

5.60.1 Detailed Description

Utility class for configuring a kyro serializer.

Author

pigt

5.60.2 Member Function Documentation

5.60.2.1 registerKryo()

```
static void com.progmethgame.network.SerializationUtil.registerKryo (
            Kryo k )  [static]
```

Set up kyro serializer

Parameters

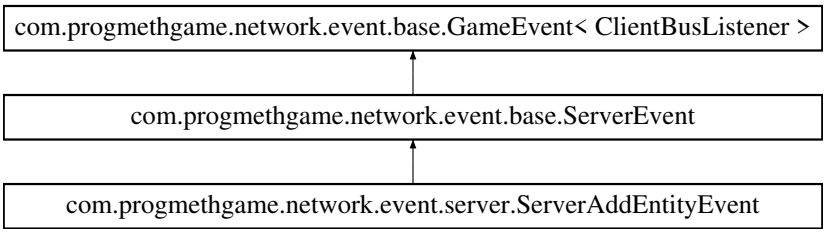
k	kyro

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/Serialization↩ Util.java

5.61 com.progmethgame.network.event.server.ServerAddEntityEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.server.ServerAddEntityEvent:



Public Member Functions

- ServerAddEntityEvent (EntityData data)
- void notifyListener (ClientBusListener target)

Private Member Functions

- ServerAddEntityEvent ()

Private Attributes

- EntityData data

5.61.1 Detailed Description

Server added an entity

5.61.2 Constructor & Destructor Documentation

5.61.2.1 ServerAddEntityEvent() [1/2]

```
com.progmethgame.network.event.server.ServerAddEntityEvent.ServerAddEntityEvent (
            EntityData data )
```

5.61.2.2 ServerAddEntityEvent() [2/2]

```
com.progmethgame.network.event.server.ServerAddEntityEvent.ServerAddEntityEvent ( )  [private]
```

5.61.3 Member Function Documentation

5.61.3.1 notifyListener()

```
void com.progmethgame.network.event.server.ServerAddEntityEvent.notifyListener (
            ClientBusListener target )
```

5.61.4 Member Data Documentation

5.61.4.1 data

```
EntityData com.progmethgame.network.event.server.ServerAddEntityEvent.data  [private]
```

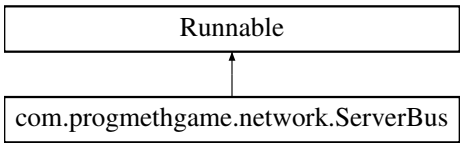
data of the added entity

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/server/Server↩ AddEntityEvent.java

5.62 com.progmethgame.network.ServerBus Class Reference

Inheritance diagram for com.progmethgame.network.ServerBus:



Public Member Functions

- ServerBus (ServerBusListener listener) throws IOException
- void terminate ()
- void run ()
- void sendEvent (UUID clientId, ServerEvent event)
- List< UUID > getConnectionUUIDs ()

Private Member Functions

- void processInputEvent ()
- void processOutputEvent ()
- void log (String m)

Private Attributes

- volatile boolean running
- final Server kryoServer
- final ConcurrentLinkedQueue< ClientEvent > inputEventQueue
- final ArrayList< ServerEventBroadcast > outputEventQueue
- final HashMap< Connection, UUID > clientConnections
- final ServerBusListener listener
- final Ticker ticker

5.62.1 Detailed Description

Server's communication bus.

Provides communication (event source and event bus) to multiple clients. event should be handled by this bus's thread.

5.62.2 Constructor & Destructor Documentation

5.62.2.1 ServerBus()

```
com.progmethgame.network.ServerBus.ServerBus (
            ServerBusListener listener ) throws IOException
```

Initialize and spin-off a separate server bus thread

Parameters

listener	Event Listener

Exceptions

IOException	

5.62.3 Member Function Documentation

5.62.3.1 getConnectionUUIDs()

```
List<UUID> com.progmethgame.network.ServerBus.getConnectionUUIDs ( )
```

Get all client's uuid connected to the server

Returns

5.62.3.2 log()

```
void com.progmethgame.network.ServerBus.log (
            String m )  [private]
```

Log message to stderr

Parameters

m	message

5.62.3.3 processInputEvent()

```
void com.progmethgame.network.ServerBus.processInputEvent ( )  [private]
```

Process event received from the clients

5.62.3.4 processOutputEvent()

```
void com.progmethgame.network.ServerBus.processOutputEvent ( )  [private]
```

Send event from the server

5.62.3.5 run()

```
void com.progmethgame.network.ServerBus.run ( )
```

5.62.3.6 sendEvent()

```
void com.progmethgame.network.ServerBus.sendEvent (
            UUID clientId,
            ServerEvent event )
```

Send a server event to the client(s).

Parameters

clientId	Target client (if clientId == null then all clients will received the event)
event	

5.62.3.7 terminate()

```
void com.progmethgame.network.ServerBus.terminate ( )
```

Stop the bus's thread and cleanup all the resources.

5.62.4 Member Data Documentation

5.62.4.1 clientConnections

```
final HashMap<Connection, UUID> com.progmethgame.network.ServerBus.clientConnections  [private]
```

Map from Kyro connection to UUID

5.62.4.2 inputEventQueue

```
final ConcurrentLinkedQueue<ClientEvent> com.progmethgame.network.ServerBus.inputEventQueue
[private]
```

Client's event waiting to be processed

5.62.4.3 kryoServer

```
final Server com.progmethgame.network.ServerBus.kryoServer  [private]
```

Kryonet server

5.62.4.4 listener

```
final ServerBusListener com.progmethgame.network.ServerBus.listener  [private]
```

ServerBus's event listener

5.62.4.5 outputEventQueue

```
final ArrayList<ServerEventBroadcast> com.progmethgame.network.ServerBus.outputEventQueue
[private]
```

Server's event waiting to be send

5.62.4.6 running

```
volatile boolean com.progmethgame.network.ServerBus.running  [private]
```

Server is running

5.62.4.7 ticker

```
final Ticker com.progmethgame.network.ServerBus.ticker  [private]
```

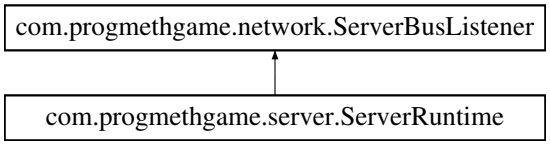
Server Tick rate governor

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/Server↩ Bus.java

5.63 com.progmethgame.network.ServerBusListener Interface Reference

Inheritance diagram for com.progmethgame.network.ServerBusListener:



Public Member Functions

- void onTick (float delta)
- void onClientJoin (UUID id)
- void onClientDisconnect (UUID id)
- void onPlayerMove (UUID id, Vector2 direction)
- void onPlayerFire (UUID id)
- void onDebug (UUID id, String debugMsg)
- void onPlayerSwapGun (UUID id)

5.63.1 Detailed Description

Event listener for the server bus

5.63.2 Member Function Documentation

5.63.2.1 onClientDisconnect()

```
void com.progmethgame.network.ServerBusListener.onClientDisconnect (
            UUID id )
```

Client disconnected from the server

Parameters

id	client's id

Implemented in com.progmethgame.server.ServerRuntime.

5.63.2.2 onClientJoin()

```
void com.progmethgame.network.ServerBusListener.onClientJoin (
            UUID id )
```

Client connected to the server

Parameters

id	client's id

Implemented in com.progmethgame.server.ServerRuntime.

5.63.2.3 onDebug()

```
void com.progmethgame.network.ServerBusListener.onDebug (
            UUID id,
            String debugMsg )
```

Client issue debug command to the server

Parameters

id	client's id
debugMsg	debug command

Implemented in com.progmethgame.server.ServerRuntime.

5.63.2.4 onPlayerFire()

```
void com.progmethgame.network.ServerBusListener.onPlayerFire (
            UUID id )
```

Client request gun fire action.

Parameters

id	client's id

Implemented in com.progmethgame.server.ServerRuntime.

5.63.2.5 onPlayerMove()

```
void com.progmethgame.network.ServerBusListener.onPlayerMove (
            UUID id,
            Vector2 direction )
```

Client's controller request vector changes.

Parameters

id	client's id
direction	new movement vector

Implemented in com.progmethgame.server.ServerRuntime.

5.63.2.6 onPlayerSwapGun()

```
void com.progmethgame.network.ServerBusListener.onPlayerSwapGun (
            UUID id )
```

Client request gun change.

Parameters

id	client's id

Implemented in com.progmethgame.server.ServerRuntime.

5.63.2.7 onTick()

```
void com.progmethgame.network.ServerBusListener.onTick (
            float delta )
```

Bus finished processing the event.

Parameters

delta	time since last onTick

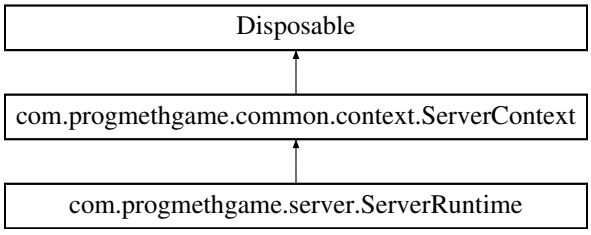
Implemented in com.progmethgame.server.ServerRuntime.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/ServerBusListener.java

5.64 com.progmethgame.common.context.ServerContext Interface Reference

Inheritance diagram for com.progmethgame.common.context.ServerContext:



Public Member Functions

- void addEntity (Entity e)
- void removeEntity (Entity e)
- void playSound (SoundType s)
- void reset ()
- Map< UUID, Player > getPlayers ()

5.64.1 Detailed Description

Provides methods for interacting with server runtime

5.64.2 Member Function Documentation

5.64.2.1 addEntity()

```
void com.progmethgame.common.context.ServerContext.addEntity (
            Entity e )
```

Add new entity

Parameters

e	Entity to be added

Implemented in com.progmethgame.server.ServerRuntime.

5.64.2.2 getPlayers()

```
Map<UUID, Player> com.progmethgame.common.context.ServerContext.getPlayers ( )
```

Get all players

Returns

Map of UUID to Player

Implemented in com.progmethgame.server.ServerRuntime.

5.64.2.3 playSound()

```
void com.progmethgame.common.context.ServerContext.playSound (
            SoundType s )
```

Play sound effect on all clients

Parameters

s	

Implemented in com.progmethgame.server.ServerRuntime.

5.64.2.4 removeEntity()

```
void com.progmethgame.common.context.ServerContext.removeEntity (
            Entity e )
```

Remove the entity

Parameters

e	

Implemented in com.progmethgame.server.ServerRuntime.

5.64.2.5 reset()

```
void com.progmethgame.common.context.ServerContext.reset ( )
```

Reset and start a new game

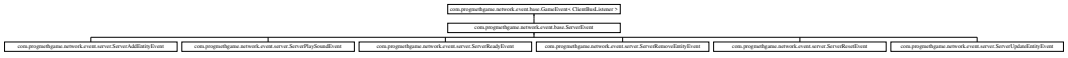
Implemented in com.progmethgame.server.ServerRuntime.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/context/Server↩ Context.java

5.65 com.progmethgame.network.event.base.ServerEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.base.ServerEvent:



Additional Inherited Members

5.65.1 Detailed Description

Event emitted from a game server.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/base/ServerEvent.java

5.66 com.progmethgame.network.ServerEventBroadcast Class Reference

Public Member Functions

- ServerEventBroadcast (UUID target, ServerEvent event)

Package Attributes

- UUID target
- ServerEvent event

5.66.1 Detailed Description

Data structure for storing server event sending request

Author

pigt

5.66.2 Constructor & Destructor Documentation

5.66.2.1 ServerEventBroadcast()

```
com.progmethgame.network.ServerEventBroadcast.ServerEventBroadcast (
            UUID target,
            ServerEvent event )
```

Create new broadcast to target with event

5.66.3 Member Data Documentation

5.66.3.1 event

```
ServerEvent com.progmethgame.network.ServerEventBroadcast.event  [package]
```

The event

5.66.3.2 target

```
UUID com.progmethgame.network.ServerEventBroadcast.target  [package]
```

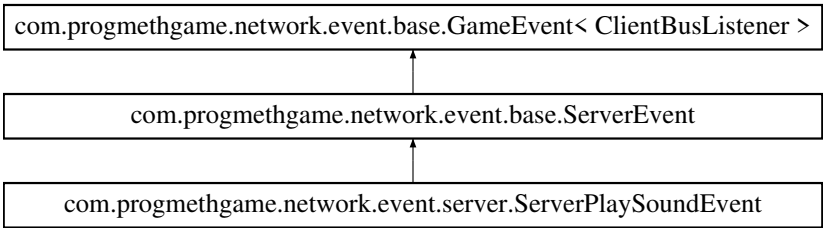
Target client. null if ALL clients

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/Server↩ Bus.java

5.67 com.progmethgame.network.event.server.ServerPlaySoundEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.server.ServerPlaySoundEvent:



Public Member Functions

- ServerPlaySoundEvent (SoundType s)
- void notifyListener (ClientBusListener target)

Private Member Functions

- ServerPlaySoundEvent ()

Private Attributes

- SoundType sound

5.67.1 Detailed Description

Request client to play a sound

5.67.2 Constructor & Destructor Documentation

5.67.2.1 ServerPlaySoundEvent() [1/2]

```
com.progmethgame.network.event.server.ServerPlaySoundEvent.ServerPlaySoundEvent ( )  [private]
```

5.67.2.2 ServerPlaySoundEvent() [2/2]

```
com.progmethgame.network.event.server.ServerPlaySoundEvent.ServerPlaySoundEvent (
            SoundType s )
```

Create new event to play the specified sound

Parameters

s	sound to play

5.67.3 Member Function Documentation

5.67.3.1 notifyListener()

```
void com.progmethgame.network.event.server.ServerPlaySoundEvent.notifyListener (
            ClientBusListener target )
```

5.67.4 Member Data Documentation

5.67.4.1 sound

```
SoundType com.progmethgame.network.event.server.ServerPlaySoundEvent.sound  [private]
```

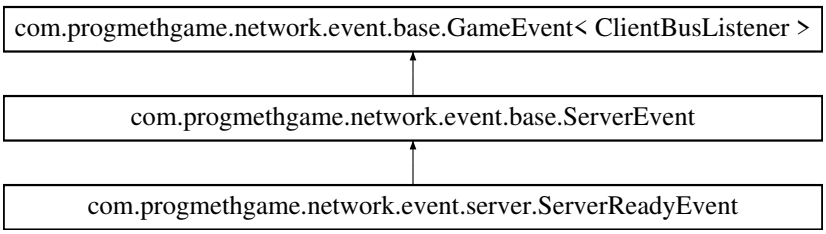
Sound requested

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/server/ServerPlaySoundEvent.java

5.68 com.progmethgame.network.event.server.ServerReadyEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.server.ServerReadyEvent:



Public Member Functions

- ServerReadyEvent (UUID assignedId)
- void notifyListener (ClientBusListener target)

Public Attributes

- UUID assignedId

Private Member Functions

- ServerReadyEvent ()

5.68.1 Detailed Description

Signal that client should display the game now

Author

pigt

5.68.2 Constructor & Destructor Documentation

5.68.2.1 ServerReadyEvent() [1/2]

```
com.progmethgame.network.event.server.ServerReadyEvent.ServerReadyEvent ( )  [private]
```

5.68.2.2 ServerReadyEvent() [2/2]

```
com.progmethgame.network.event.server.ServerReadyEvent.ServerReadyEvent (
            UUID assignedId )
```

5.68.3 Member Function Documentation

5.68.3.1 notifyListener()

```
void com.progmethgame.network.event.server.ServerReadyEvent.notifyListener (
            ClientBusListener target )
```

5.68.4 Member Data Documentation

5.68.4.1 assignedId

```
UUID com.progmethgame.network.event.server.ServerReadyEvent.assignedId
```

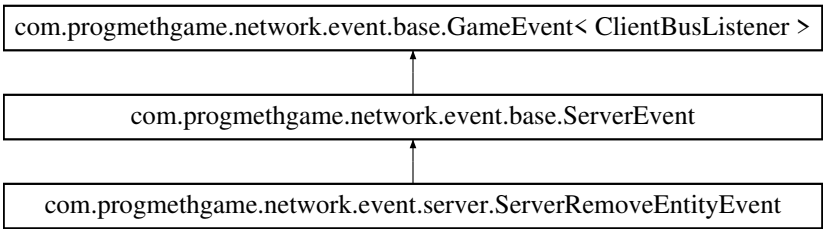
ID that the server assigned to this client

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/server/ServerReadyEvent.java

5.69 com.progmethgame.network.event.server.ServerRemoveEntityEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.server.ServerRemoveEntityEvent:



Public Member Functions

- ServerRemoveEntityEvent (UUID entityId)
- void notifyListener (ClientBusListener target)

Private Member Functions

- ServerRemoveEntityEvent ()

Private Attributes

- UUID entityId

5.69.1 Detailed Description

Server remove an entity

5.69.2 Constructor & Destructor Documentation

5.69.2.1 ServerRemoveEntityEvent() [1/2]

```
com.progmethgame.network.event.server.ServerRemoveEntityEvent.ServerRemoveEntityEvent ( )
[private]
```

5.69.2.2 ServerRemoveEntityEvent() [2/2]

```
com.progmethgame.network.event.server.ServerRemoveEntityEvent.ServerRemoveEntityEvent (
            UUID entityId )
```

5.69.3 Member Function Documentation

5.69.3.1 notifyListener()

```
void com.progmethgame.network.event.server.ServerRemoveEntityEvent.notifyListener (
            ClientBusListener target )
```

5.69.4 Member Data Documentation

5.69.4.1 entityId

```
UUID com.progmethgame.network.event.server.ServerRemoveEntityEvent.entityId  [private]
```

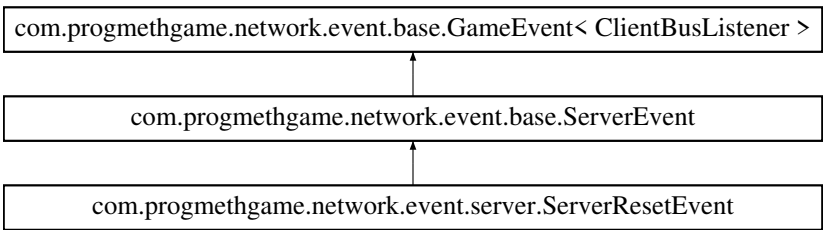
ID of the entity removed

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/server/Server↩ RemoveEntityEvent.java

5.70 com.progmethgame.network.event.server.ServerResetEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.server.ServerResetEvent:



Public Member Functions

- void notifyListener (ClientBusListener target)

5.70.1 Detailed Description

Server request client to reset its world state

5.70.2 Member Function Documentation

5.70.2.1 notifyListener()

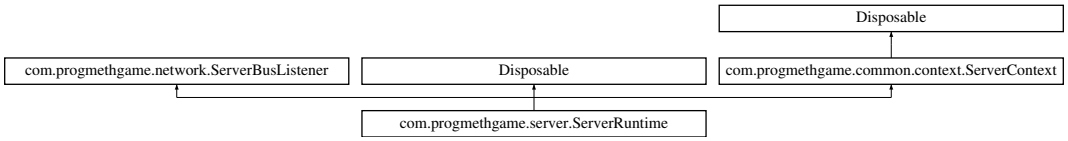
```
void com.progmethgame.network.event.server.ServerResetEvent.notifyListener (
            ClientBusListener target )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/server/ServerResetEvent.java

5.71 com.progmethgame.server.ServerRuntime Class Reference

Inheritance diagram for com.progmethgame.server.ServerRuntime:



Public Member Functions

- ServerRuntime () throws ServerStartupError
- void addEntity (Entity e)
- void removeEntity (Entity e)
- void onTick (float delta)
- void onClientJoin (UUID id)
- void onClientDisconnect (UUID id)
- void onPlayerMove (UUID id, Vector2 direction)
- void dispose ()
- void onPlayerFire (UUID id)
- void onDebug (UUID id, String debugMsg)
- void onPlayerSwapGun (UUID id)
- void playSound (SoundType s)
- void reset ()
- Map< UUID, Player > getPlayers ()

Package Attributes

- ServerBus bus
- Random rand

Private Member Functions

- void simulatePhysic (float delta)

Private Attributes

- GameMap map
- HashMap< UUID, Entity > entities
- HashMap< UUID, Player > players
- final Queue< Entity > entitiesAddQueue
- final Queue< Entity > entitiesRemovalQueue

5.71.1 Detailed Description

Manage the game state.

This class processes the client's event, manage the entities, calculate the physic.

5.71.2 Constructor & Destructor Documentation

5.71.2.1 ServerRuntime()

```
com.progmethgame.server.ServerRuntime.ServerRuntime ( ) throws ServerStartupError
```

Create a server and aquire the port

Exceptions

ServerStartupError	

5.71.3 Member Function Documentation

5.71.3.1 addEntity()

```
void com.progmethgame.server.ServerRuntime.addEntity (
            Entity e )
```

Add new entity

Parameters

e	Entity to be added

Implements com.progmethgame.common.context.ServerContext.

5.71.3.2 dispose()

```
void com.progmethgame.server.ServerRuntime.dispose ( )
```

5.71.3.3 getPlayers()

```
Map<UUID, Player> com.progmethgame.server.ServerRuntime.getPlayers ( )
```

Get all players

Returns

Map of UUID to Player

Implements com.progmethgame.common.context.ServerContext.

5.71.3.4 onClientDisconnect()

```
void com.progmethgame.server.ServerRuntime.onClientDisconnect (
            UUID id )
```

Client disconnected from the server

Parameters

id	client's id

Implements com.progmethgame.network.ServerBusListener.

5.71.3.5 onClientJoin()

```
void com.progmethgame.server.ServerRuntime.onClientJoin (
            UUID id )
```

Client connected to the server

Parameters

id	client's id

Implements com.progmethgame.network.ServerBusListener.

5.71.3.6 onDebug()

```
void com.progmethgame.server.ServerRuntime.onDebug (
            UUID id,
            String debugMsg )
```

Client issue debug command to the server

Parameters

id	client's id
debugMsg	debug command

Implements com.progmethgame.network.ServerBusListener.

5.71.3.7 onPlayerFire()

```
void com.progmethgame.server.ServerRuntime.onPlayerFire (
            UUID id )
```

Client request gun fire action.

Parameters

id	client's id

Implements com.progmethgame.network.ServerBusListener.

5.71.3.8 onPlayerMove()

```
void com.progmethgame.server.ServerRuntime.onPlayerMove (
            UUID id,
            Vector2 direction )
```

Client's controller request vector changes.

Parameters

id	client's id
direction	new movement vector

Implements com.progmethgame.network.ServerBusListener.

5.71.3.9 onPlayerSwapGun()

```
void com.progmethgame.server.ServerRuntime.onPlayerSwapGun (
            UUID id )
```

Client request gun change.

Parameters

id	client's id

Implements com.progmethgame.network.ServerBusListener.

5.71.3.10 onTick()

```
void com.progmethgame.server.ServerRuntime.onTick (
            float delta )
```

Bus finished processing the event.

Parameters

delta	time since last onTick

Implements com.progmethgame.network.ServerBusListener.

5.71.3.11 playSound()

```
void com.progmethgame.server.ServerRuntime.playSound (
            SoundType s )
```

Play sound effect on all clients

Parameters

s	

Implements com.progmethgame.common.context.ServerContext.

5.71.3.12 removeEntity()

```
void com.progmethgame.server.ServerRuntime.removeEntity (
            Entity e )
```

Remove the entity

Parameters

e	

Implements com.progmethgame.common.context.ServerContext.

5.71.3.13 reset()

```
void com.progmethgame.server.ServerRuntime.reset ( )
```

Reset and start a new game

Implements com.progmethgame.common.context.ServerContext.

5.71.3.14 simulatePhysic()

```
void com.progmethgame.server.ServerRuntime.simulatePhysic (
            float delta )  [private]
```

Perform physic simulation on entities

Parameters

delta	time-step

5.71.4 Member Data Documentation

5.71.4.1 bus

```
ServerBus com.progmethgame.server.ServerRuntime.bus  [package]
```

Communication bus

5.71.4.2 entities

```
HashMap<UUID, Entity> com.progmethgame.server.ServerRuntime.entities  [private]
```

List of entities

5.71.4.3 entitiesAddQueue

```
final Queue<Entity> com.progmethgame.server.ServerRuntime.entitiesAddQueue  [private]
```

Queue for entities to be added

5.71.4.4 entitiesRemovalQueue

```
final Queue<Entity> com.progmethgame.server.ServerRuntime.entitiesRemovalQueue  [private]
```

Queue for entities to be removed

5.71.4.5 map

```
GameMap com.progmethgame.server.ServerRuntime.map  [private]
```

Current game's map

5.71.4.6 players

```
HashMap<UUID, Player> com.progmethgame.server.ServerRuntime.players  [private]
```

List of players

5.71.4.7 rand

```
Random com.progmethgame.server.ServerRuntime.rand  [package]
```

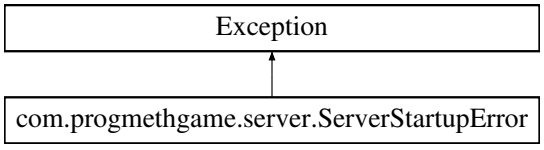
Random number generator

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/Server↩ Runtime.java

5.72 com.progmethgame.server.ServerStartupError Class Reference

Inheritance diagram for com.progmethgame.server.ServerStartupError:



Public Member Functions

- ServerStartupError (String message, Throwable error)

Static Private Attributes

- static final long serialVersionUID = -1353788442300311372L

5.72.1 Detailed Description

Fatal error during the startup of the server

5.72.2 Constructor & Destructor Documentation

5.72.2.1 ServerStartupError()

```
com.progmethgame.server.ServerStartupError.ServerStartupError (
            String message,
            Throwable error )
```

Create an startup error

Parameters

message	Causes
error	Reason

5.72.3 Member Data Documentation

5.72.3.1 serialVersionUID

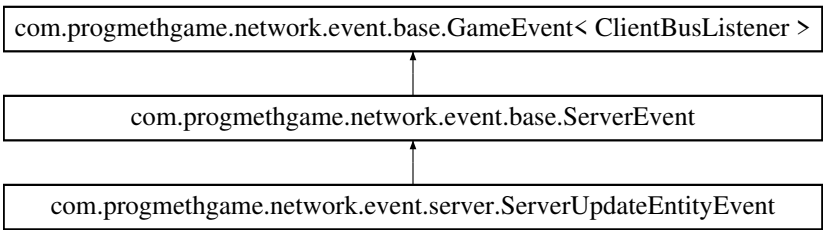
```
final long com.progmethgame.server.ServerStartupError.serialVersionUID = -1353788442300311372L
[static], [private]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/Server↩ StartupError.java

5.73 com.progmethgame.network.event.server.ServerUpdateEntityEvent Class Reference

Inheritance diagram for com.progmethgame.network.event.server.ServerUpdateEntityEvent:



Public Member Functions

- ServerUpdateEntityEvent (EntityData data)
- void notifyListener (ClientBusListener target)

Private Member Functions

- ServerUpdateEntityEvent ()

Private Attributes

- EntityData data

5.73.1 Detailed Description

Entity's data got updated

Author

pigt

5.73.2 Constructor & Destructor Documentation

5.73.2.1 ServerUpdateEntityEvent() [1/2]

```
com.progmethgame.network.event.server.ServerUpdateEntityEvent.ServerUpdateEntityEvent ( )
[private]
```

5.73.2.2 ServerUpdateEntityEvent() [2/2]

```
com.progmethgame.network.event.server.ServerUpdateEntityEvent.ServerUpdateEntityEvent (
            EntityData data )
```

5.73.3 Member Function Documentation

5.73.3.1 notifyListener()

```
void com.progmethgame.network.event.server.ServerUpdateEntityEvent.notifyListener (
            ClientBusListener target )
```

5.73.4 Member Data Documentation

5.73.4.1 data

```
EntityData com.progmethgame.network.event.server.ServerUpdateEntityEvent.data  [private]
```

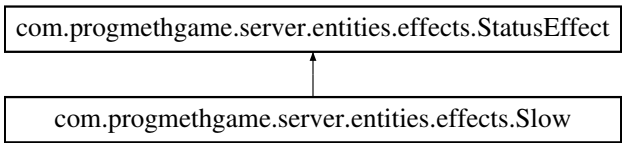
Updated data

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/event/server/Server↩ UpdateEntityEvent.java

5.74 com.progmethgame.server.entities.effects.Slow Class Reference

Inheritance diagram for com.progmethgame.server.entities.effects.Slow:



Public Member Functions

- Slow ()
- void getEffect (Player p)
- void removeEffect (Player p)
- Slow cpy ()

Static Package Attributes

- static final float slowrate = EffectConfig.SLOW_RATE

Additional Inherited Members

5.74.1 Detailed Description

Effect that slow down the play's walk speed

5.74.2 Constructor & Destructor Documentation

5.74.2.1 Slow()

```
com.progmethgame.server.entities.effects.Slow.Slow ( )
```

5.74.3 Member Function Documentation

5.74.3.1 cpy()

```
Slow com.progmethgame.server.entities.effects.Slow.cpy ( )
```

Clone this effect

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.74.3.2 getEffect()

```
void com.progmethgame.server.entities.effects.Slow.getEffect (
            Player p )
```

Apply effect to the player

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.74.3.3 removeEffect()

```
void com.progmethgame.server.entities.effects.Slow.removeEffect (
            Player p )
```

Remove effect from the player

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.74.4 Member Data Documentation

5.74.4.1 slowrate

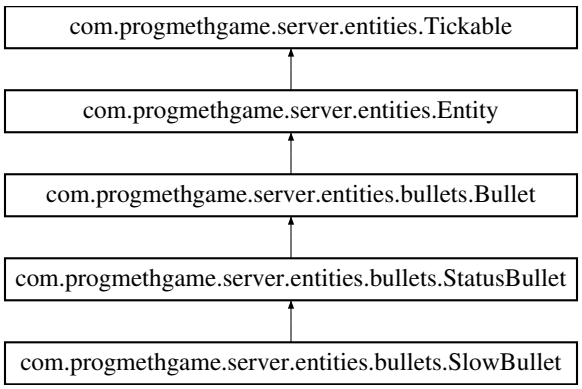
```
final float com.progmethgame.server.entities.effects.Slow.slowrate = EffectConfig.SLOW_RATE
[static], [package]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/effects/Slow.↩ java

5.75 com.progmethgame.server.entities.bullets.SlowBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.SlowBullet:



Public Member Functions

- SlowBullet (Player owner)
- Bullet cpy ()

Additional Inherited Members

5.75.1 Constructor & Destructor Documentation

5.75.1.1 SlowBullet()

```
com.progmethgame.server.entities.bullets.SlowBullet.SlowBullet (
            Player owner )
```

5.75.2 Member Function Documentation

5.75.2.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.SlowBullet.cpy ( )
```

Duplicate this bullet

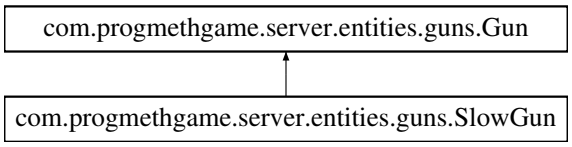
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Slow↩ Bullet.java

5.76 com.progmethgame.server.entities.guns.SlowGun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.SlowGun:



Public Member Functions

- SlowGun (Player owner)

Additional Inherited Members

5.76.1 Detailed Description

Gun that spawn slow bullet

5.76.2 Constructor & Destructor Documentation

5.76.2.1 SlowGun()

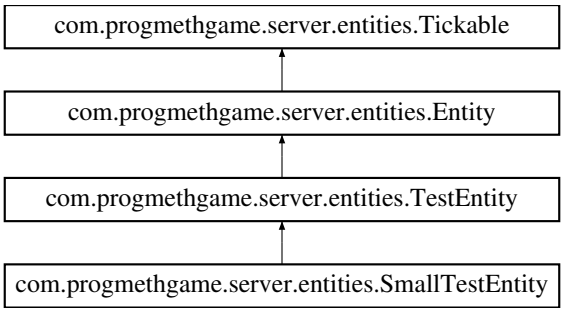
```
com.progmethgame.server.entities.guns.SlowGun.SlowGun (
            Player owner )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/SlowGun.java

5.77 com.progmethgame.server.entities.SmallTestEntity Class Reference

Inheritance diagram for com.progmethgame.server.entities.SmallTestEntity:



Public Member Functions

- SmallTestEntity ()
- float getPhysicalSize ()

Additional Inherited Members

5.77.1 Constructor & Destructor Documentation

5.77.1.1 SmallTestEntity()

```
com.progmethgame.server.entities.SmallTestEntity.SmallTestEntity ( )
```

5.77.2 Member Function Documentation

5.77.2.1 getPhysicalSize()

```
float com.progmethgame.server.entities.SmallTestEntity.getPhysicalSize ( )
```

Return physical size for physic engine's onCollide(Entity) calculation.

Size in this case is the side length of the bounding square. The bounding box has the same center as the default bound.

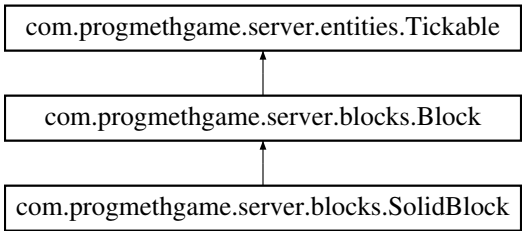
Reimplemented from com.progmethgame.server.entities.Entity.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Small↩ TestEntity.java

5.78 com.progmethgame.server.blocks.SolidBlock Class Reference

Inheritance diagram for com.progmethgame.server.blocks.SolidBlock:



Public Member Functions

- boolean isSolid ()

5.78.1 Detailed Description

A block that is solid

Author

pigt

5.78.2 Member Function Documentation

5.78.2.1 isSolid()

```
boolean com.progmethgame.server.blocks.SolidBlock.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

Reimplemented from com.progmethgame.server.blocks.Block.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Solid↩ Block.java

5.79 com.progmethgame.common.SoundType Enum Reference

Public Member Functions

- String getFilepath ()

Public Attributes

- PEW =("pew.wav")
- END =("end.ogg")

Private Member Functions

- SoundType (String filename)

Private Attributes

- String filename

5.79.1 Detailed Description

Sound effect available on the client

5.79.2 Constructor & Destructor Documentation

5.79.2.1 SoundType()

```
com.progmethgame.common.SoundType.SoundType (
            String filename )  [private]
```

Create new sound with given file

5.79.3 Member Function Documentation

5.79.3.1 getFilepath()

```
String com.progmethgame.common.SoundType.getFilepath ( )
```

Get this sound's file path

5.79.4 Member Data Documentation

5.79.4.1 END

```
com.progmethgame.common.SoundType.END =("end.ogg")
```

5.79.4.2 filename

```
String com.progmethgame.common.SoundType.filename  [private]
```

File path to the sound

5.79.4.3 PEW

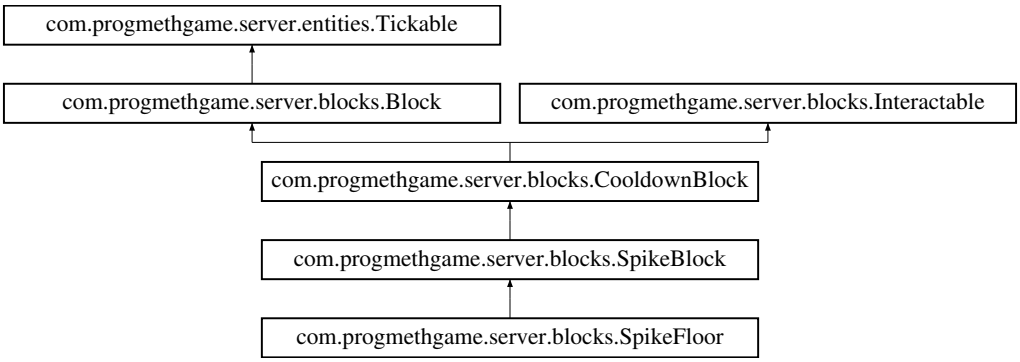
```
com.progmethgame.common.SoundType.PEW =("pew.wav")
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/common/Sound↩ Type.java

5.80 com.progmethgame.server.blocks.SpikeBlock Class Reference

Inheritance diagram for com.progmethgame.server.blocks.SpikeBlock:



Public Member Functions

- SpikeBlock ()
- boolean isSolid ()

Protected Member Functions

- void applyEffect (Player p)

Protected Attributes

- int damage = 7

Additional Inherited Members

5.80.1 Detailed Description

A block that damage the player when touched

Author

pigt

5.80.2 Constructor & Destructor Documentation

5.80.2.1 SpikeBlock()

```
com.progmethgame.server.blocks.SpikeBlock.SpikeBlock ( )
```

5.80.3 Member Function Documentation

5.80.3.1 applyEffect()

```
void com.progmethgame.server.blocks.SpikeBlock.applyEffect (
            Player p )  [protected]
```

Reimplemented from com.progmethgame.server.blocks.CooldownBlock.

5.80.3.2 isSolid()

```
boolean com.progmethgame.server.blocks.SpikeBlock.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

Reimplemented from com.progmethgame.server.blocks.Block.

Reimplemented in com.progmethgame.server.blocks.SpikeFloor.

5.80.4 Member Data Documentation

5.80.4.1 damage

```
int com.progmethgame.server.blocks.SpikeBlock.damage = 7  [protected]
```

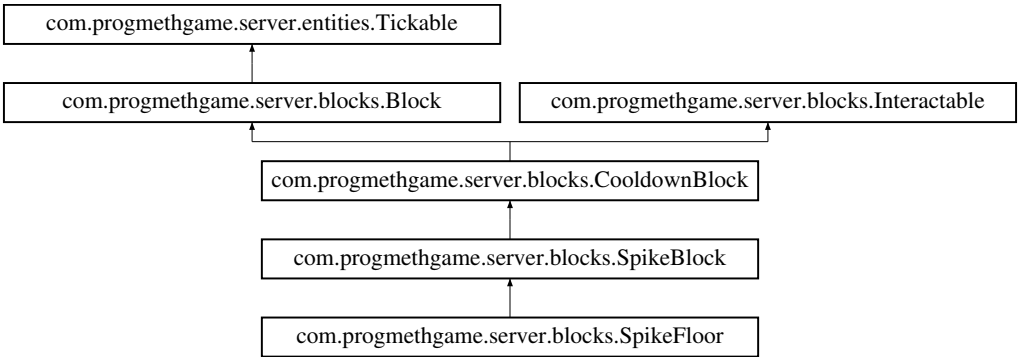
Damage dealt

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Spike↩ Block.java

5.81 com.progmethgame.server.blocks.SpikeFloor Class Reference

Inheritance diagram for com.progmethgame.server.blocks.SpikeFloor:



Public Member Functions

- SpikeFloor ()
- boolean isSolid ()

Additional Inherited Members

5.81.1 Detailed Description

A block that damage the player when walked on

Author

pigt

5.81.2 Constructor & Destructor Documentation

5.81.2.1 SpikeFloor()

```
com.progmethgame.server.blocks.SpikeFloor.SpikeFloor ( )
```

5.81.3 Member Function Documentation

5.81.3.1 isSolid()

```
boolean com.progmethgame.server.blocks.SpikeFloor.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

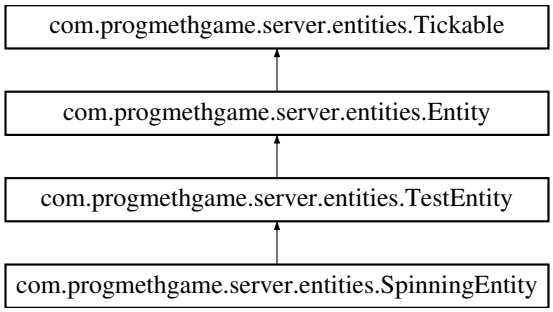
Reimplemented from com.progmethgame.server.blocks.SpikeBlock.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/SpikeFloor.java

5.82 com.progmethgame.server.entities.SpinningEntity Class Reference

Inheritance diagram for com.progmethgame.server.entities.SpinningEntity:



Public Member Functions

- void tick (float delta)

Additional Inherited Members

5.82.1 Member Function Documentation

5.82.1.1 tick()

```
void com.progmethgame.server.entities.SpinningEntity.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

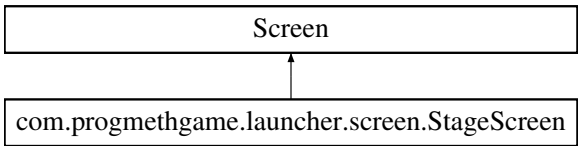
Reimplemented from com.progmethgame.server.entities.TestEntity.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/SpinningEntity.java

5.83 com.progmethgame.launcher.screen.StageScreen Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.StageScreen:



Public Member Functions

- void setStage (Stage stage)
- void show ()
- void render (float delta)
- void resize (int width, int height)
- void pause ()
- void resume ()
- void hide ()
- void dispose ()

Private Attributes

- Stage stage

5.83.1 Detailed Description

A screen that display a stage

5.83.2 Member Function Documentation

5.83.2.1 dispose()

```
void com.progmethgame.launcher.screen.StageScreen.dispose ( )
```

5.83.2.2 hide()

```
void com.progmethgame.launcher.screen.StageScreen.hide ( )
```

5.83.2.3 pause()

```
void com.progmethgame.launcher.screen.StageScreen.pause ( )
```

5.83.2.4 render()

```
void com.progmethgame.launcher.screen.StageScreen.render (
            float delta )
```

5.83.2.5 resize()

```
void com.progmethgame.launcher.screen.StageScreen.resize (
            int width,
            int height )
```

5.83.2.6 resume()

```
void com.progmethgame.launcher.screen.StageScreen.resume ( )
```

5.83.2.7 setStage()

```
void com.progmethgame.launcher.screen.StageScreen.setStage (
            Stage stage )
```

Set a current stage

Parameters

stage	stage to show

5.83.2.8 show()

```
void com.progmethgame.launcher.screen.StageScreen.show ( )
```

5.83.3 Member Data Documentation

5.83.3.1 stage

```
Stage com.progmethgame.launcher.screen.StageScreen.stage  [private]
```

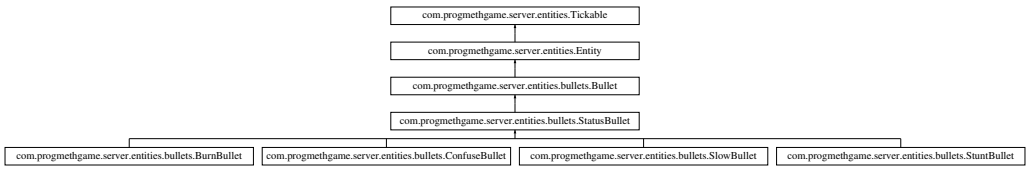
Current stage

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/Stage↩ Screen.java

5.84 com.progmethgame.server.entities.bullets.StatusBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.StatusBullet:



Public Member Functions

- StatusBullet (DisplayType type, float speed, Player owner)
- void onCollide (Player hitPlayer)

Protected Attributes

- StatusEffect effect

5.84.1 Detailed Description

A bullet that will apply effect to the player

Author

pigt

5.84.2 Constructor & Destructor Documentation

5.84.2.1 StatusBullet()

```
com.progmethgame.server.entities.bullets.StatusBullet.StatusBullet (
            DisplayType type,
            float speed,
            Player owner )
```

5.84.3 Member Function Documentation

5.84.3.1 onCollide()

```
void com.progmethgame.server.entities.bullets.StatusBullet.onCollide (
            Player hitPlayer )
```

Called when the bullet collide a player

Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

5.84.4 Member Data Documentation

5.84.4.1 effect

```
StatusEffect com.progmethgame.server.entities.bullets.StatusBullet.effect  [protected]
```

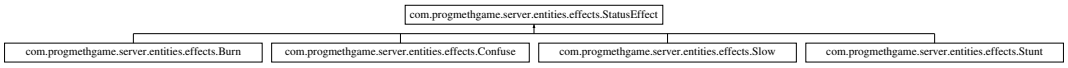
Effect to be applied to the player

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Status↩ Bullet.java

5.85 com.progmethgame.server.entities.effects.StatusEffect Class Reference

Inheritance diagram for com.progmethgame.server.entities.effects.StatusEffect:



Public Member Functions

- StatusEffect (DisplayType dispType)
- DisplayType getDisplayType ()
- int getMaxDuration ()
- abstract void getEffect (Player p)
- abstract void removeEffect (Player p)
- int getDuration ()
- boolean decreaseDuration ()
- void resetDuration ()
- abstract StatusEffect cpy ()

Protected Attributes

- int duration
- int maxDuration
- DisplayType dispType

5.85.1 Detailed Description

Represent an "effect" that can be attached to the player

Author

pigt

5.85.2 Constructor & Destructor Documentation

5.85.2.1 StatusEffect()

```
com.progmethgame.server.entities.effects.StatusEffect.StatusEffect (
            DisplayType dispType )
```

5.85.3 Member Function Documentation

5.85.3.1 cpy()

```
abstract StatusEffect com.progmethgame.server.entities.effects.StatusEffect.cpy ( )  [abstract]
```

Clone this effect

Reimplemented in com.progmethgame.server.entities.effects.Burn, com.progmethgame.server.entities.effects.Slow, com.progmethgame.server.entities.effects.Stunt, and com.progmethgame.server.entities.effects.Confuse.

5.85.3.2 decreaseDuration()

```
boolean com.progmethgame.server.entities.effects.StatusEffect.decreaseDuration ( )
```

Decrease the effect's duration

5.85.3.3 getDisplayType()

```
DisplayType com.progmethgame.server.entities.effects.StatusEffect.getDisplayType ( )
```

Getter for status effect's icon

5.85.3.4 getDuration()

```
int com.progmethgame.server.entities.effects.StatusEffect.getDuration ( )
```

Duration left

5.85.3.5 getEffect()

```
abstract void com.progmethgame.server.entities.effects.StatusEffect.getEffect (
            Player p )  [abstract]
```

Apply effect to the player

Reimplemented in com.progmethgame.server.entities.effects.Burn, com.progmethgame.server.entities.effects.Slow, com.progmethgame.server.entities.effects.Confuse, and com.progmethgame.server.entities.effects.Stunt.

5.85.3.6 getMaxDuration()

```
int com.progmethgame.server.entities.effects.StatusEffect.getMaxDuration ( )
```

Max duration

5.85.3.7 removeEffect()

```
abstract void com.progmethgame.server.entities.effects.StatusEffect.removeEffect (
            Player p )  [abstract]
```

Remove effect from the player

Reimplemented in com.progmethgame.server.entities.effects.Burn, com.progmethgame.server.entities.effects.Slow, com.progmethgame.server.entities.effects.Stunt, and com.progmethgame.server.entities.effects.Confuse.

5.85.3.8 resetDuration()

```
void com.progmethgame.server.entities.effects.StatusEffect.resetDuration ( )
```

Reset the effect's duration

5.85.4 Member Data Documentation

5.85.4.1 dispType

```
DisplayType com.progmethgame.server.entities.effects.StatusEffect.dispType  [protected]
```

5.85.4.2 duration

```
int com.progmethgame.server.entities.effects.StatusEffect.duration  [protected]
```

5.85.4.3 maxDuration

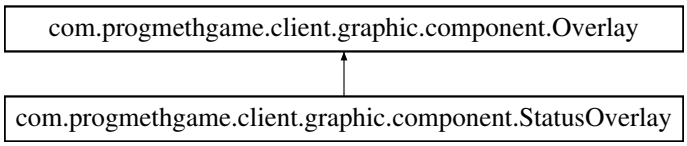
```
int com.progmethgame.server.entities.effects.StatusEffect.maxDuration  [protected]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/effects/Status↩ Effect.java

5.86 com.progmethgame.client.graphic.component.StatusOverlay Class Reference

Inheritance diagram for com.progmethgame.client.graphic.component.StatusOverlay:



Public Member Functions

- StatusOverlay ()
- void render (Viewport view, Batch batch, Rectangle rect, ClientEntity target)
- void setHealth (float health)
- void setEffectIcon (DisplayType effectIcon)

Private Attributes

- float health
- DisplayType effectIcon

5.86.1 Detailed Description

Displays status on top of the player's character

5.86.2 Constructor & Destructor Documentation

5.86.2.1 StatusOverlay()

```
com.progmethgame.client.graphic.component.StatusOverlay.StatusOverlay ( )
```

5.86.3 Member Function Documentation

5.86.3.1 render()

```
void com.progmethgame.client.graphic.component.StatusOverlay.render (
            Viewport view,
            Batch batch,
            Rectangle rect,
            ClientEntity target )
```

Render this overlay

Parameters

view	Screen's viewport
batch	Screen's batch
rect	The entity's bounding box in screen space.
target	The owner of this overlay

Reimplemented from com.progmethgame.client.graphic.component.Overlay.

5.86.3.2 setEffectIcon()

```
void com.progmethgame.client.graphic.component.StatusOverlay.setEffectIcon (
            DisplayType effectIcon )
```

5.86.3.3 setHealth()

```
void com.progmethgame.client.graphic.component.StatusOverlay.setHealth (
            float health )
```

5.86.4 Member Data Documentation

5.86.4.1 effectIcon

```
DisplayType com.progmethgame.client.graphic.component.StatusOverlay.effectIcon  [private]
```

Effect applied to the player

5.86.4.2 health

```
float com.progmethgame.client.graphic.component.StatusOverlay.health  [private]
```

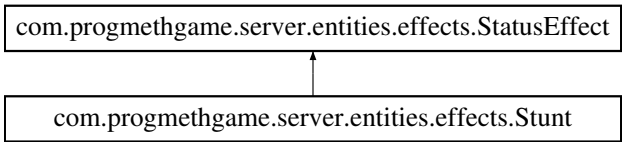
Player's health

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/client/graphic/component/Status↩ Overlay.java

5.87 com.progmethgame.server.entities.effects.Stunt Class Reference

Inheritance diagram for com.progmethgame.server.entities.effects.Stunt:



Public Member Functions

- Stunt ()
- void getEffect (Player p)
- void removeEffect (Player p)
- Stunt cpy ()

Additional Inherited Members

5.87.1 Detailed Description

An effect that caused player to stop moving

5.87.2 Constructor & Destructor Documentation

5.87.2.1 Stunt()

```
com.progmethgame.server.entities.effects.Stunt.Stunt ( )
```

5.87.3 Member Function Documentation

5.87.3.1 cpy()

```
Stunt com.progmethgame.server.entities.effects.Stunt.cpy ( )
```

Clone this effect

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.87.3.2 getEffect()

```
void com.progmethgame.server.entities.effects.Stunt.getEffect (
            Player p )
```

Apply effect to the player

Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

5.87.3.3 removeEffect()

```
void com.progmethgame.server.entities.effects.Stunt.removeEffect (
            Player p )
```

Remove effect from the player

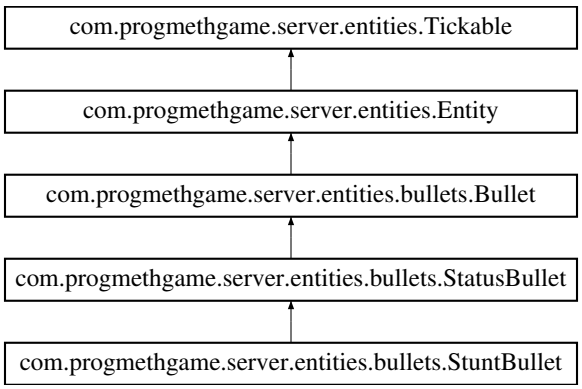
Reimplemented from com.progmethgame.server.entities.effects.StatusEffect.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/effects/Stunt.↩ java

5.88 com.progmethgame.server.entities.bullets.StuntBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.StuntBullet:



Public Member Functions

- StuntBullet (Player owner)
- Bullet cpy ()

Additional Inherited Members

5.88.1 Detailed Description

A bullet that will temporary stop the player

5.88.2 Constructor & Destructor Documentation

5.88.2.1 StuntBullet()

```
com.progmethgame.server.entities.bullets.StuntBullet.StuntBullet (
            Player owner )
```

5.88.3 Member Function Documentation

5.88.3.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.StuntBullet.cpy ( )
```

Duplicate this bullet

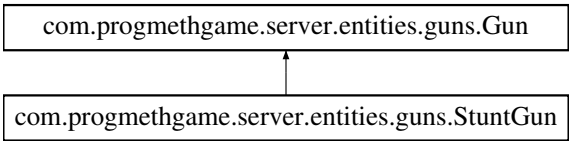
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Stunt↩ Bullet.java

5.89 com.progmethgame.server.entities.guns.StuntGun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.StuntGun:



Public Member Functions

- StuntGun (Player owner)

Additional Inherited Members

5.89.1 Detailed Description

Gun that spawn stunt bullet

5.89.2 Constructor & Destructor Documentation

5.89.2.1 StuntGun()

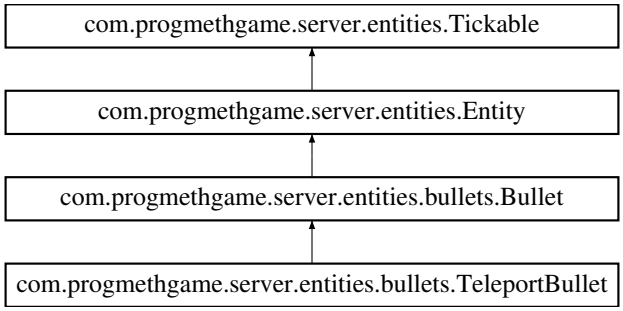
```
com.progmethgame.server.entities.guns.StuntGun.StuntGun (
            Player owner )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/Stunt↩ Gun.java

5.90 com.progmethgame.server.entities.bullets.TeleportBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.TeleportBullet:



Public Member Functions

- TeleportBullet (Player owner)
- void onCollide (Player hitPlayer)
- Bullet cpy ()

Additional Inherited Members

5.90.1 Detailed Description

A bullet that will swap the owner and the victim's position

5.90.2 Constructor & Destructor Documentation

5.90.2.1 TeleportBullet()

```
com.progmethgame.server.entities.bullets.TeleportBullet.TeleportBullet (
            Player owner )
```

5.90.3 Member Function Documentation

5.90.3.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.TeleportBullet.cpy ( )
```

Duplicate this bullet

Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

5.90.3.2 onCollide()

```
void com.progmethgame.server.entities.bullets.TeleportBullet.onCollide (
            Player hitPlayer )
```

Called when the bullet collide a player

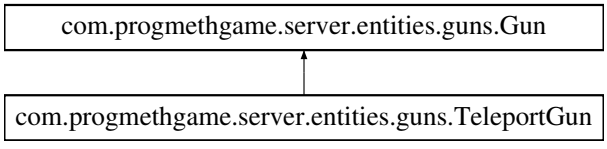
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Teleport↩ Bullet.java

5.91 com.progmethgame.server.entities.guns.TeleportGun Class Reference

Inheritance diagram for com.progmethgame.server.entities.guns.TeleportGun:



Public Member Functions

- TeleportGun (Player owner)

Additional Inherited Members

5.91.1 Detailed Description

Gun that spawn teleport bullet

5.91.2 Constructor & Destructor Documentation

5.91.2.1 TeleportGun()

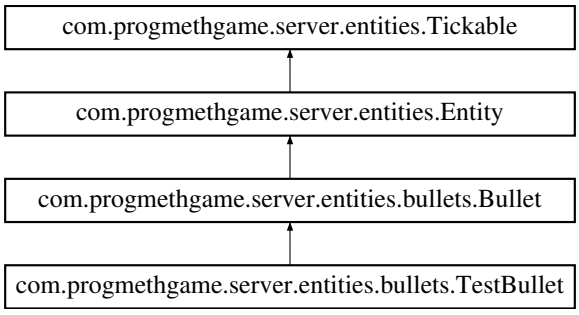
```
com.progmethgame.server.entities.guns.TeleportGun.TeleportGun (
            Player owner )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/guns/Teleport↩ Gun.java

5.92 com.progmethgame.server.entities.bullets.TestBullet Class Reference

Inheritance diagram for com.progmethgame.server.entities.bullets.TestBullet:



Public Member Functions

- TestBullet (Player owner)
- void onCollide (Player hitPlayer)
- Bullet cpy ()

Additional Inherited Members

5.92.1 Detailed Description

Bullet for testing purpose

5.92.2 Constructor & Destructor Documentation

5.92.2.1 TestBullet()

```
com.progmethgame.server.entities.bullets.TestBullet.TestBullet (
            Player owner )
```

5.92.3 Member Function Documentation

5.92.3.1 cpy()

```
Bullet com.progmethgame.server.entities.bullets.TestBullet.cpy ( )
```

Duplicate this bullet

Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

5.92.3.2 onCollide()

```
void com.progmethgame.server.entities.bullets.TestBullet.onCollide (
            Player hitPlayer )
```

Called when the bullet collide a player

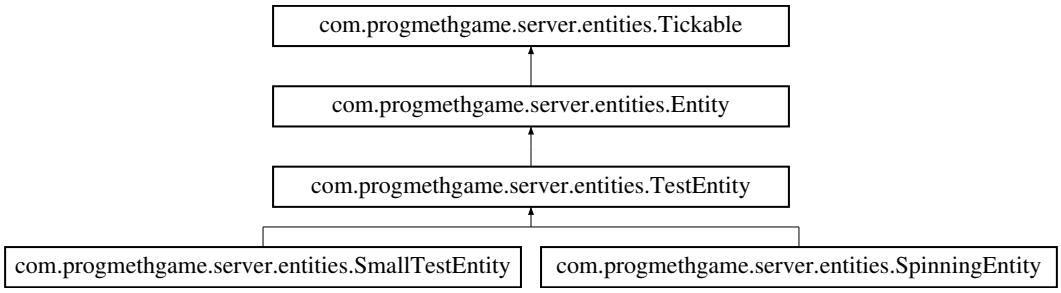
Reimplemented from com.progmethgame.server.entities.bullets.Bullet.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/bullets/Test↩ Bullet.java

5.93 com.progmethgame.server.entities.TestEntity Class Reference

Inheritance diagram for com.progmethgame.server.entities.TestEntity:



Public Member Functions

- TestEntity ()
- void onCollide (Entity other)
- void tick (float delta)

Protected Attributes

- DisplayType cool = DisplayType.TEST
- DisplayType hot = DisplayType.RICK

Private Attributes

- int cooldown = 0

5.93.1 Constructor & Destructor Documentation

5.93.1.1 TestEntity()

```
com.progmethgame.server.entities.TestEntity.TestEntity ( )
```

5.93.2 Member Function Documentation

5.93.2.1 onCollide()

```
void com.progmethgame.server.entities.TestEntity.onCollide (
            Entity other )
```

Called when entity touched other.

Parameters

other	the touched entity

Reimplemented from com.progmethgame.server.entities.Entity.

5.93.2.2 tick()

```
void com.progmethgame.server.entities.TestEntity.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Reimplemented from com.progmethgame.server.entities.Entity.

Reimplemented in com.progmethgame.server.entities.SpinningEntity.

5.93.3 Member Data Documentation

5.93.3.1 cool

```
DisplayType com.progmethgame.server.entities.TestEntity.cool = DisplayType.TEST  [protected]
```

5.93.3.2 cooldown

```
int com.progmethgame.server.entities.TestEntity.cooldown = 0  [private]
```

5.93.3.3 hot

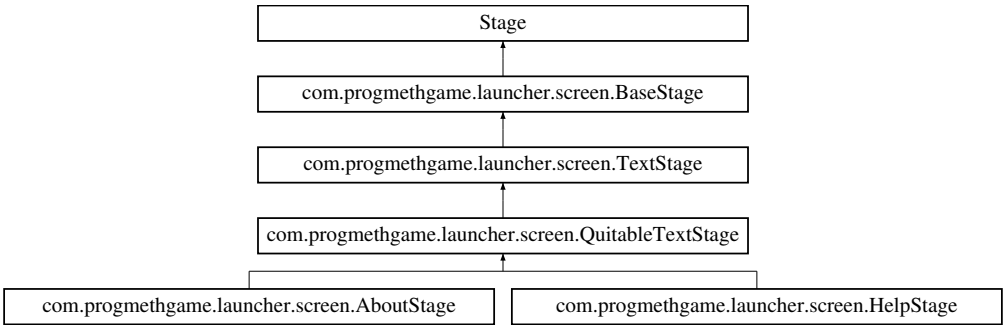
```
DisplayType com.progmethgame.server.entities.TestEntity.hot = DisplayType.RICK  [protected]
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Test↩ Entity.java

5.94 com.progmethgame.launcher.screen.TextStage Class Reference

Inheritance diagram for com.progmethgame.launcher.screen.TextStage:



Public Member Functions

- TextStage (String text)

Protected Attributes

- Label textLabel

5.94.1 Detailed Description

Display a message

5.94.2 Constructor & Destructor Documentation

5.94.2.1 TextStage()

```
com.progmethgame.launcher.screen.TextStage.TextStage (
            String text )
```

Create new text stage with specified message

Parameters

text	a message to display

5.94.3 Member Data Documentation

5.94.3.1 textLabel

```
Label com.progmethgame.launcher.screen.TextStage.textLabel  [protected]
```

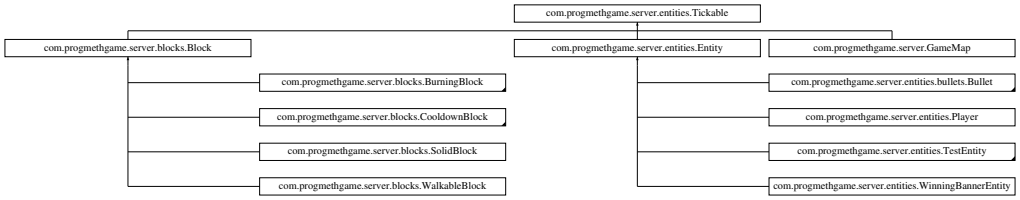
Text label displayed

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/launcher/screen/Text↩ Stage.java

5.95 com.progmethgame.server.entities.Tickable Interface Reference

Inheritance diagram for com.progmethgame.server.entities.Tickable:



Public Member Functions

- void tick (float delta)

5.95.1 Detailed Description

Interface on the a component that update with time.

Author

pigt

5.95.2 Member Function Documentation

5.95.2.1 tick()

```
void com.progmethgame.server.entities.Tickable.tick (
            float delta )
```

Advance this component by delta second

Parameters

delta	no. of second to advance

Implemented in com.progmethgame.server.entities.Player, com.progmethgame.server.GameMap, com.progmethgame.server.entities
com.progmethgame.server.entities.bullets.Bullet, com.progmethgame.server.blocks.CooldownBlock, com.progmethgame.server.entiti
com.progmethgame.server.blocks.Block, and com.progmethgame.server.entities.SpinningEntity.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Tickable.↩
  java

5.96 com.progmethgame.network.Ticker Class Reference

Public Member Functions

- Ticker (float tickRate)
- void tick () throws InterruptedException
- long getLastDeltaMillis ()

Private Attributes

- final float tickRate
- long lastTickMillis
- long lastTickDuration = 0

5.96.1 Detailed Description

Tick governor

5.96.2 Constructor & Destructor Documentation

5.96.2.1 Ticker()

```
com.progmethgame.network.Ticker.Ticker (
            float tickRate )
```

5.96.3 Member Function Documentation

5.96.3.1 getLastDeltaMillis()

```
long com.progmethgame.network.Ticker.getLastDeltaMillis ( )
```

5.96.3.2 tick()

```
void com.progmethgame.network.Ticker.tick ( ) throws InterruptedException
```

5.96.4 Member Data Documentation

5.96.4.1 lastTickDuration

```
long com.progmethgame.network.Ticker.lastTickDuration = 0  [private]
```

Duration between the last tick and this tick

5.96.4.2 lastTickMillis

```
long com.progmethgame.network.Ticker.lastTickMillis  [private]
```

timestamp of the last tick

5.96.4.3 tickRate

```
final float com.progmethgame.network.Ticker.tickRate  [private]
```

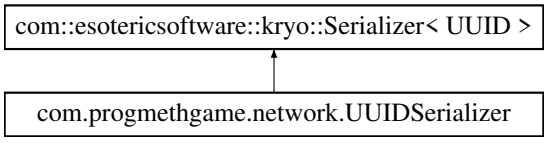
Target tick rate

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/Server↩ Bus.java

5.97 com.progmethgame.network.UUIDSerializer Class Reference

Inheritance diagram for com.progmethgame.network.UUIDSerializer:



Public Member Functions

- void write (Kryo kryo, Output output, UUID object)
- UUID read (Kryo kryo, Input input, Class< UUID > type)

5.97.1 Detailed Description

UUID Serializer

5.97.2 Member Function Documentation

5.97.2.1 read()

```
UUID com.progmethgame.network.UUIDSerializer.read (
            Kryo kryo,
            Input input,
            Class< UUID > type )
```

5.97.2.2 write()

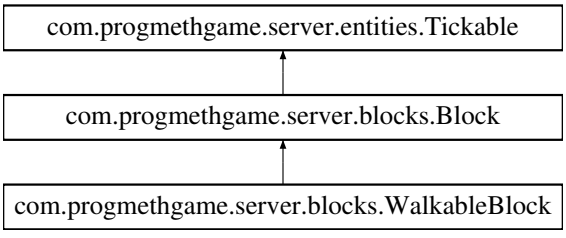
```
void com.progmethgame.network.UUIDSerializer.write (
            Kryo kryo,
            Output output,
            UUID object )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/network/Serialization↩ Util.java

5.98 com.progmethgame.server.blocks.WalkableBlock Class Reference

Inheritance diagram for com.progmethgame.server.blocks.WalkableBlock:



Public Member Functions

- boolean isSolid ()

5.98.1 Member Function Documentation

5.98.1.1 isSolid()

```
boolean com.progmethgame.server.blocks.WalkableBlock.isSolid ( )
```

Can entity pass through this block?

Returns

solidness

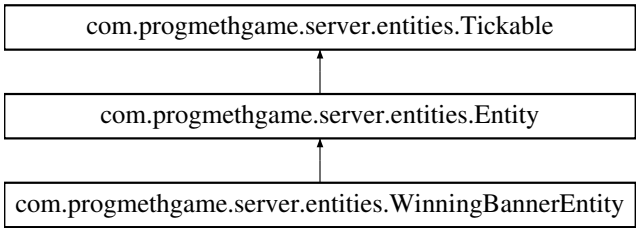
Reimplemented from com.progmethgame.server.blocks.Block.

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/blocks/Walkable↩ Block.java

5.99 com.progmethgame.server.entities.WinningBannerEntity Class Reference

Inheritance diagram for com.progmethgame.server.entities.WinningBannerEntity:



Public Member Functions

- WinningBannerEntity (UUID winPlayer)

Additional Inherited Members

5.99.1 Constructor & Destructor Documentation

5.99.1.1 WinningBannerEntity()

```
com.progmethgame.server.entities.WinningBannerEntity.WinningBannerEntity (
            UUID winPlayer )
```

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

- /home/pigt/Workspace/project-2019-2-progmeth-myfirstgame/core/src/com/progmethgame/server/entities/Winning↩ BannerEntity.java

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