Reference Manual

Generated by Doxygen 1.6.1

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Contents

Chapter 1

Class Index

1.1 Class Hierarchy

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

Chapter 2

Class Index

2.1 Class List

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

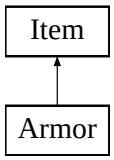
Chapter 3

Class Documentation

3.1 Armor Class Reference

Armor Class to be generated by the ItemFactory.

`#include <Armor.h>`Inheritance diagram for Armor::



Public Member Functions

- bool use ()

3.1.1 Detailed Description

Armor Class to be generated by the ItemFactory.

3.1.2 Member Function Documentation

3.1.2.1 bool Armor::use () `[virtual]`

the armor

Detailed Description

Returns:

bool if the item was successfully used

Implements Item.

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

- Armor.h
- Armor.cc

3.2 Attributes Class Reference

class Attribute

`#include <Attributes.h>`

Public Member Functions

- int const getStrength ()

  Gets the current strength value.

- int const getVitality ()

  Gets the current vitality value.

- int const getAgility ()
- int const getHealthPoints ()

  Gets the current health points value.

- int const getArmor ()

  Gets the current armor value.

- int const getDamage ()

  Gets the current damage value.

- void setStrength (int x)

  Sets the strength value.

- void setVitality (int x)

  Sets the vitality value.

- void setAgility (int x)

  Sets the Agility value.

- void setHealthPoints (int x)

  Sets the Health Points value.

- void setArmor (int x)

  Sets the Armor value.

- void setDamage (int x)

  Sets the Damage value.

3.2.1 Detailed Description

class Attribute

3.2.2 Member Function Documentation

3.2.2.1 int const Attributes::getAgility () [inline]

Gets the current agility value

Returns:

Returns the current agility value

3.2.2.2 int const Attributes::getArmor () [inline]

Gets the current armor value.

Returns:

Returns the current armor value

3.2.2.3 int const Attributes::getDamage () [inline]

Gets the current damage value.

Returns:

Returns the current damage value

3.2.2.4 int const Attributes::getHealthPoints () [inline]

Gets the current health points value.

Returns:

Returns the current health points value

3.2.2.5 int const Attributes::getStrength () [inline]

Gets the current strength value.

Returns:

Returns the current strength value

3.2.2.6 int const Attributes::getVitality () [inline]

Gets the current vitality value.

Returns:

Returns the current vitality value

3.2.2.7 void Attributes::setAgility (int *x*) [inline]

Sets the Agility value.

Parameters:

← ***Agility*** value to be set

3.2.2.8 void Attributes::setArmor (int *x*) [inline]

Sets the Armor value.

Parameters:

← ***Armor*** value to be set

3.2.2.9 void Attributes::setDamage (int *x*) [inline]

Sets the Damage value.

Parameters:

← ***Damage*** value to be set

3.2.2.10 void Attributes::setHealthPoints (int *x*) [inline]

Sets the Health Points value.

Parameters:

← ***Health*** Points value to be set

3.2.2.11 void Attributes::setStrength (int *x*) [inline]

Sets the strength value.

Parameters:

← ***Strength*** value to be set

3.2.2.12 void Attributes::setVitality (int *x*) [inline]

Sets the vitality value.

Parameters:

← ***vitality*** value to be set

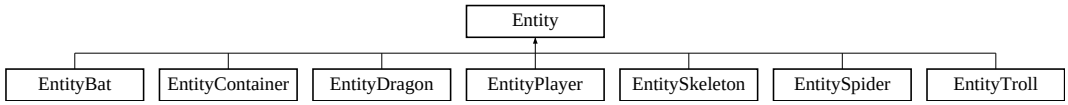
The documentation for this class was generated from the following file:

- Attributes.h

3.3 Entity Class Reference

Entity class.

`#include <Entity.h>`Inheritance diagram for Entity::



Public Member Functions

- virtual bool attack (Entity &entity)=0

  Attacks the given entity.

- virtual bool isAlive ()=0

  Returns true if the entity is alive, false if dead.

- virtual void getLoot (Entity &entity)=0

  Updates the entity so that it can make decisions per turn.

- virtual bool hasLoot ()=0

  Returns true if the entity has items in their inventory, false otherwise.

- std::vector< Item * > & getInventory ()

  Returns the entity's inventory of items.

- Attributes & getAttributes ()

  Returns the entity's Attributes object.

- void **setAttributes** (Attributes x)
- void setInventory (std::vector< Item * > x)

  Sets the attribute abject to another attribute object.

- void setName (std::string &y)

  Sets the name of the Entity.

- std::string getName ()

  Gets the name of the Entity.

3.3.1 Detailed Description

Entity class.

3.3.2 Member Function Documentation

3.3.2.1 virtual bool Entity::attack (Entity & *entity*) [pure virtual]

Attacks the given entity.

Parameters:

← ***entity,a*** reference to the entity that will be attacked

3.3.2.2 Attributes& Entity::getAttributes () [inline]

Returns the entity's Attributes object.

Returns:

Retuns a referance the entitys Attributes object

3.3.2.3 std::vector<Item*>& Entity::getInventory () [inline]

Returns the entity's inventory of items.

Returns:

Retuns a vector of items that the entity owns

3.3.2.4 virtual void Entity::getLoot (Entity & *entity*) [pure virtual]

Updates the entity so that it can make decisions per turn.

Returns:

Returns void Gives the loot from the entity to the given entity (transfers inventory to the referenced entity)

Parameters:

← ***entity,transfers*** the inventory from the given entity to the current entity

Returns:

Returns void

3.3.2.5 std::string Entity::getName () [inline]

Gets the name of the Entity.

Returns:

Name of the Entity

3.3.2.6 virtual bool Entity::hasLoot () [pure virtual]

Returns true if the entity has items in their inventory, false otherwise.

Returns:

Returns void

Implemented in EntityBat, EntityContainer, EntityDragon, EntityPlayer, EntitySkeleton, EntitySpider, and EntityTroll.

3.3.2.7 virtual bool Entity::isAlive () [pure virtual]

Returns true if the entity is alive, false if dead.

Returns:

Returns true if the entity is alive, false if dead

Implemented in EntityBat, EntityDragon, EntityPlayer, EntitySkeleton, EntitySpider, and EntityTroll.

3.3.2.8 void Entity::setInventory (std::vector< Item * > x) [inline]

Sets the attribute abject to another attribute object.

Parameters:

← ***Attribbutes*** to set

3.3.2.9 void Entity::setName (std::string & y) [inline]

Sets the name of the Entity.

Parameters:

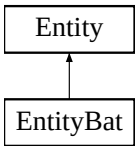
← ***Name*** to set to

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

- Entity.h

3.4 EntityBat Class Reference

Inheritance diagram for EntityBat::



Public Member Functions

- bool attack (Entity &entity)

  Function that calls an attack on the given Bat.

- bool isAlive ()

  Function that checks to see if the Bat is alive, returns a boolean value to determine such.

- void update ()

  Function that updates the Bat to make its next decision ∗UNUSED∗.

- void getLoot (Entity &entity)

  Function that gives the loot to the selected Bat.

- bool hasLoot ()

  Function that checks to see if the current Bat has loot or not.

3.4.1 Member Function Documentation

3.4.1.1 bool EntityBat::attack (Entity & *entity*)

Function that calls an attack on the given Bat.

Parameters:

← ***Entity*** &entity

3.4.1.2 void EntityBat::getLoot (Entity & *entity*)

Function that gives the loot to the selected Bat.

Parameters:

← ***Entity*** &entity

3.4.1.3 bool EntityBat::hasLoot () [virtual]

Function that checks to see if the current Bat has loot or not.

Returns:

boolean if bat has loot yes(true), no(false)

Implements Entity.

3.4.1.4 bool EntityBat::isAlive () [virtual]

Function that checks to see if the Bat is alive, returns a boolean value to determine such.

Returns:

boolean returns if the bat is alive(true) or dead(false)

Implements Entity.

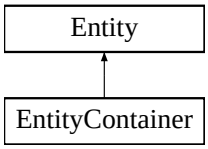
The documentation for this class was generated from the following files:

- EntityBat.h
- EntityBat.cc

3.5 EntityContainer Class Reference

CLASS SCRAPPED DUE TO TIME CONTRAINTS.

`#include <EntityContainer.h>`Inheritance diagram for EntityContainer::



Public Member Functions

- EntityContainer (Entity &entity)
  Constructor for Container that creates a Container in the world.
- void getLoot (Entity &entity)
  Function that gives the currently selected Container loot.
- bool hasLoot ()
  Function that checks to see if the Entity contains loot or not.

3.5.1 Detailed Description

CLASS SCRAPPED DUE TO TIME CONTRAINTS.

3.5.2 Constructor & Destructor Documentation

3.5.2.1 EntityContainer::EntityContainer (Entity & *entity*)

Constructor for Container that creates a Container in the world. detailed description

Parameters:

← ***Entity*** &entity

Returns:

none

3.5.3 Member Function Documentation

3.5.3.1 void EntityContainer::getLoot (Entity & *entity*)

Function that gives the currently selected Container loot. detailed description

Parameters:

← ***EntityContainer*** &entity

Returns:

void

3.5.3.2 bool EntityContainer::hasLoot () [virtual]

Function that checks to see if the Entity contains loot or not. detailed description

Parameters:

← ***none***

Returns:

boolean

Implements Entity.

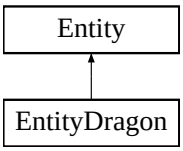
The documentation for this class was generated from the following file:

- EntityContainer.h

3.6 EntityDragon Class Reference

class EntityDragon

`#include <EntityDragon.h>`Inheritance diagram for EntityDragon::



Public Member Functions

- EntityDragon ()

  Constructor for the Dragon that puts a Dragon into the world.

- void attack (Entity &entity)

  Function that calls an attack on the currently selected Dragon.

- bool isAlive ()

  Function that checks to see if the Entity is alive and returns a boolean value that does such.

- void update ()

  Function that updates the Entity's next decision UNUSED.

- void getLoot (Entity &entity)

  Function that gives loot to the currently selected Dragon.

- bool hasLoot ()

  Function that checks to see if the Entity has loot and returns a boolean value to determine such.

3.6.1 Detailed Description

class EntityDragon

3.6.2 Member Function Documentation

3.6.2.1 void EntityDragon::attack (Entity & *entity*)

Function that calls an attack on the currently selected Dragon.

Parameters:

← ***EntityDragon*** &entity

3.6.2.2 void EntityDragon::getLoot (Entity & *entity*)

Function that gives loot to the currently selected Dragon.

Parameters:

← ***EntityDragon*** &entity

3.6.2.3 bool EntityDragon::hasLoot () `[virtual]`

Function that checks to see if the Entity has loot and returns a boolean value to determine such.

Returns:

boolean if yes(true) or no(false)

Implements Entity.

3.6.2.4 bool EntityDragon::isAlive () `[virtual]`

Function that checks to see if the Entity is alive and returns a boolean value that does such.

Parameters:

← ***none***

Returns:

boolean to check if alive(true) or dead(false)

Implements Entity.

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

- EntityDragon.h

3.7 EntityFactory Class Reference

Public Member Functions

- Entity * getEnemy (ENTITYTYPE e, Room *x)

  Returns a generated enemy entity.

- std::vector< Item * > makeInventory (Room *x)

  Returns an inventory containing a random item, uses room as a seed.

Static Public Member Functions

- static EntityFactory * getInstance ()

  Grabs the current single instance of EntityFactory.

3.7.1 Member Function Documentation

3.7.1.1 Entity * EntityFactory::getEnemy (ENTITYTYPE *e*, Room * *x*)

Returns a generated enemy entity.

Parameters:

← ***Entity*** enum you want to make

← ***Room*** where entity is made, This is used to scale the entity as the dungeon progresses

Returns:

Returns the generated enemy

3.7.1.2 EntityFactory * EntityFactory::getInstance () `[static]`

Grabs the current single instance of EntityFactory.

Returns:

EntityFactory, the current instance of the entity factory

3.7.1.3 std::vector< Item * > EntityFactory::makeInventory (Room * *x*)

Returns an inventory containing a random item, uses room as a seed.

Parameters:

← ***Room*** to make the item in, this is used to scale the item

Returns:

Returns an inventory containing a random item

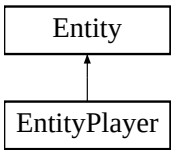
The documentation for this class was generated from the following files:

- EntityFactory.h
- EntityFactory.cc

3.8 EntityPlayer Class Reference

Entity class.

`#include <EntityPlayer.h>`Inheritance diagram for EntityPlayer::



Public Member Functions

- EntityPlayer ()

  constructor for player

- ~EntityPlayer ()

  destructor for player

- bool attack (Entity &entity)

  Attacks the given entity.

- bool isAlive ()

  Returns true if the entity is alive, false if dead.

- void getLoot (Entity &entity)

  Gives the loot from the entity to the given entity (transfers inventory to the referenced entity).

- bool hasLoot ()

  Returns true if the entity has items in their inventory, false otherwise.

- void equipArmor (Item *item)

  Updates the player's stats based on their new item.

- void equipWeapon (Item *item)

  equips item to available spot

- void usePotion (Item *item, int x)

  uses potion

3.8.1 Detailed Description

Entity class.

3.8.2 Constructor & Destructor Documentation

3.8.2.1 EntityPlayer::EntityPlayer ()

constructor for player constructs the player

3.8.2.2 EntityPlayer::~EntityPlayer ()

destructor for player destructs the player pointer

3.8.3 Member Function Documentation

3.8.3.1 bool EntityPlayer::attack (Entity & *entity*)

Attacks the given entity. Detailed description

Parameters:

← ***entity,a*** reference to the entity that will be attacked

3.8.3.2 void EntityPlayer::equipArmor (Item * *item*)

Updates the player's stats based on their new item. Detailed description

Parameters:

none equips item to available spot Changes the equipped weapon slot then forces updates to player's stats

none

3.8.3.3 void EntityPlayer::equipWeapon (Item * *item*)

equips item to available spot Changes the equipped armor slot then forces update to player's stats

3.8.3.4 void EntityPlayer::getLoot (Entity & *entity*)

Gives the loot from the entity to the given entity (transfers inventory to the referenced entity). Detailed description

Parameters:

← ***entity,the*** entity you want to get its inventory from

3.8.3.5 bool EntityPlayer::hasLoot () `[virtual]`

Returns true if the entity has items in their inventory, false otherwise. Detailed description

Returns:

boolean returns if the entity has loot or not

Implements Entity.

3.8.3.6 bool EntityPlayer::isAlive () [virtual]

Returns true if the entity is alive, false if dead. Detailed description

Returns:

Returns true if the entity is alive, false if dead

Implements Entity.

3.8.3.7 void EntityPlayer::usePotion (Item * *item*, int *x*)

uses potion Uses the potion and gets rid of it

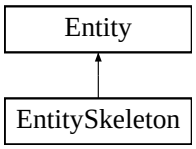
The documentation for this class was generated from the following files:

- EntityPlayer.h
- EntityPlayer.cc

3.9 EntitySkeleton Class Reference

EntitySkeleton.

`#include <EntitySkeleton.h>`Inheritance diagram for EntitySkeleton::



Public Member Functions

- bool attack (Entity &entity)
  Function that will call an attack on the Skeleton provided.
- bool isAlive ()
  Function that checks to see if the Skeleton is alive or not, a boolean value does so.
- void update ()
  Function that updates the Skeleton's next decision.
- void getLoot (Entity &entity)
  Function that gives loot to the selected Skeleton.
- bool hasLoot ()
  Function that checks to see if the Entity has loot and returns a boolean value to do so.

3.9.1 Detailed Description

EntitySkeleton.

3.9.2 Member Function Documentation

3.9.2.1 bool EntitySkeleton::attack (Entity & *entity*)

Function that will call an attack on the Skeleton provided.

Parameters:

← ***Entity*** &entity

3.9.2.2 void EntitySkeleton::getLoot (Entity & *entity*)

Function that gives loot to the selected Skeleton.

Parameters:

← ***Entity*** &entity

3.9.2.3 bool EntitySkeleton::hasLoot () [virtual]

Function that checks to see if the Entity has loot and returns a boolean value to do so.

Returns:

boolean to see if has loot(true) or not(false)

Implements Entity.

3.9.2.4 bool EntitySkeleton::isAlive () [virtual]

Function that checks to see if the Skeleton is alive or not, a boolean value does so.

Returns:

boolean to see if alive(true) or dead(false)

Implements Entity.

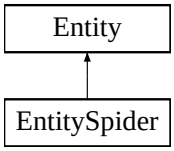
The documentation for this class was generated from the following files:

- EntitySkeleton.h
- EntitySkeleton.cc

3.10 EntitySpider Class Reference

class EntitySpider

`#include <EntitySpider.h>`Inheritance diagram for EntitySpider::



Public Member Functions

- bool attack (Entity &entity)
  Function that will call an attack on the Spider given.
- bool isAlive ()
  Function checks to see if the Spider is currently alive or not and returns a boolean value to determine so.
- void update ()
  Function updates the Spider to make a decision one thing at a time.
- void getLoot (Entity &entity)
  Function that gives loot to the Spider passed in.
- bool hasLoot ()
  Function checks to see if Spider passed in contains loot.

3.10.1 Detailed Description

class EntitySpider

3.10.2 Member Function Documentation

3.10.2.1 bool EntitySpider::attack (Entity & *entity*)

Function that will call an attack on the Spider given.

Parameters:

← ***Entity*** &entity

3.10.2.2 void EntitySpider::getLoot (Entity & *entity*)

Function that gives loot to the Spider passed in.

Parameters:

← ***Entity*** &entity

3.10.2.3 bool EntitySpider::hasLoot () [virtual]

Function checks to see if Spider passed in contains loot.

Returns:

boolean if has loot(true) or not(false)

Implements Entity.

3.10.2.4 bool EntitySpider::isAlive () [virtual]

Function checks to see if the Spider is currently alive or not and returns a boolean value to determine so.

Returns:

boolean to see if alive(true) or dead(false)

Implements Entity.

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

- EntitySpider.h
- EntitySpider.cc

3.11 EntityTester Class Reference

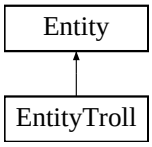
The documentation for this class was generated from the following files:

- EntityTest.h
- EntityTest.cc

3.12 EntityTroll Class Reference

class EntityTroll

`#include <EntityTroll.h>`Inheritance diagram for EntityTroll::



Public Member Functions

- bool attack (Entity &entity)

  Function that calls an attack on the given Troll.

- bool isAlive ()

  Function that checks to see if the Entity is alive and returns a boolean value to determine such.

- void getLoot (Entity &entity)

  Function that updates the Entity's next decision.

- bool hasLoot ()

  Function that checks to see if the Entity has loot and returns a boolean value to do so.

3.12.1 Detailed Description

class EntityTroll

3.12.2 Member Function Documentation

3.12.2.1 bool EntityTroll::attack (Entity & *entity*)

Function that calls an attack on the given Troll.

Parameters:

← ***EntityTroll*** &entity

3.12.2.2 void EntityTroll::getLoot (Entity & *entity*)

Function that updates the Entity's next decision. Function that gives loot to the currently selected Troll

Parameters:

← ***EntityTroll*** &entity

3.12.2.3 bool EntityTroll::hasLoot () [virtual]

Function that checks to see if the Entity has loot and returns a boolean value to do so.

Returns:

boolean if has loot(true) or not(false)

Implements Entity.

3.12.2.4 bool EntityTroll::isAlive () [virtual]

Function that checks to see if the Entity is alive and returns a boolean value to determine such.

Returns:

boolean if alive(true) or dead(false)

Implements Entity.

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

- EntityTroll.h
- EntityTroll.cc

3.13 Game Class Reference

`#include <Game.h>`

Public Member Functions

- ~Game ()

  game destructor

- void start ()

  Initializes and starts a new game.

- void createCharacter ()

  Asks user details to create their character.

- bool generateMap ()

  Generates the game map and sets the generated map to the current game map.

- void mainLoop ()

  Main loop of the game, responsible for updating game logic/game world.

- void roomOption ()

  checks the rooms options

- void combat (Room *room)

  checks the combat choices of the room

- void inventory ()

  checks the inventory of the player

- void displayOptions ()

  Displays the avaliable options that the user has in each room based on player state.

- void openInventory (EntityPlayer &player)

  Displays the users inventory to the screen.

- int getOption ()

  Asks the user for a integer input.

- void print (std::string text)

  Outputs the given text to the screen.

- int getDifficulty () const

  Returns the difficulty of the game.

- void setDifficulty (int difficulty)

  sets the difficulty of the game

- void log (std::string message)

logs a debug message to the console

- void setDebug (bool d)

  sets debug messages on or off

- bool getDebug () const

  gets the current debug state on or off

- void exit ()

  Exits the game safely.

- void clear ()

  Clears the console screen.

3.13.1 Detailed Description

/brief Game class

3.13.2 Member Function Documentation

3.13.2.1 bool Game::getDebug () const

gets the current debug state on or off

Returns:

bool, true if on false if off

3.13.2.2 int Game::getDifficulty () const

Returns the difficulty of the game.

Returns:

Returns the difficulty of the game

3.13.2.3 int Game::getOption ()

Asks the user for a integer input.

Returns:

Returns the option the user picked

3.13.2.4 void Game::log (std::string *message*)

logs a debug message to the console

Parameters:

← ***message*** to log to console

3.13.2.5 void Game::openInventory (EntityPlayer & *player*)

Displays the users inventory to the screen.

Parameters:

inout] player, the player you wish to display inventory of

3.13.2.6 void Game::print (std::string *text*)

Outputs the given text to the screen.

Parameters:

← ***Text*** to be outputed to the screen

3.13.2.7 void Game::setDebug (bool *d*)

sets debug messages on or off [in] the toggle on or off

3.13.2.8 void Game::setDifficulty (int *difficulty*)

sets the difficulty of the game

Parameters:

← ***difficulty,the*** difficulty you want to set the game to (1 - 3)

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

- Game.h
- Game.cc

3.14 GameTest Class Reference

Public Member Functions

- void **setUp** ()
- void **testMapWorks** ()
- void **tearDown** ()

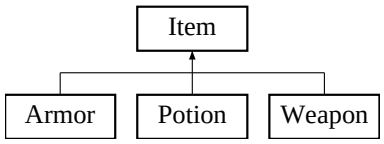
The documentation for this class was generated from the following files:

- GameTest.h
- GameTest.cc

3.15 Item Class Reference

Item Class pure virtual interface for item classes.

`#include <Item.h>`Inheritance diagram for Item::



Public Member Functions

- virtual ~Item ()

  virtual destructor

- std::string getName ()

  Gets the name of the item and returns it.

- std::string getDescription ()

  Gets the description of the item and returns it.

- virtual bool use ()=0

  Equips the item.

- void setName (std::string n)

  sets name

- void setDescription (std::string n)

  sets description

- Attributes & getStats ()

  gets stats

- bool isWeapon ()

  checks if weapon

- bool isArmor ()

  checks ifarmor

- bool isPotion ()

  checks if potion

- void setNum (int num)

  sets the number

3.15.1 Detailed Description

Item Class pure virtual interface for item classes.

3.15.2 Member Function Documentation

3.15.2.1 std::string Item::getDescription () [inline]

Gets the description of the item and returns it. Detailed description /return string of the items description

3.15.2.2 std::string Item::getName () [inline]

Gets the name of the item and returns it.

Returns:

string containing the item name

3.15.2.3 bool Item::isArmor () [inline]

checks ifarmor

Returns:

boolean telling whether it is armor or not

3.15.2.4 bool Item::isPotion () [inline]

checks if potion

Returns:

boolean telling whether it is potion or not

3.15.2.5 bool Item::isWeapon () [inline]

checks if weapon

Returns:

boolean telling whether it is weapon or not

3.15.2.6 virtual bool Item::use () [pure virtual]

Equips the item. Detailed description /return bool if the item was sucesfully used

Implemented in Armor, Potion, and Weapon.

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

- Item.h

3.16 ItemFactory Class Reference

ItemFactory class for creation of weapons, armor, and potions.

`#include <ItemFactory.h>`

Public Member Functions

- Item * getItem (ITEMTYPE i, Room *roomIn)

  Creates a item based on the given type and level Detailed description.

Static Public Member Functions

- static ItemFactory * getInstance ()

  Gets current instance of the item factory.

3.16.1 Detailed Description

ItemFactory class for creation of weapons, armor, and potions.

3.16.2 Member Function Documentation

3.16.2.1 ItemFactory * ItemFactory::getInstance () [static]

Gets current instance of the item factory.

Returns:

ItemFactory, the current instance of the item factory

3.16.2.2 Item * ItemFactory::getItem (ITEMTYPE *i*, Room * *roomIn*)

Creates a item based on the given type and level Detailed description.

Parameters:

← ***ItemType,the*** type of item you want to create

← ***level,Integer*** passed in by room to determine the power of the item

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

- ItemFactory.h
- ItemFactory.cc

3.17 ItemTest Class Reference

Public Member Functions

- void createItem ()
  create the Items
- void destructItem ()
  destruct items created
- void isUsed ()
  check to see if item is actually used properly
- void properDescription ()
  check to see if the proper description is returned
- void properName ()
  check to see if the proper item name is returned
- void isRightItem ()
  check to see if its the right item

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

- ItemTest.h
- ItemTest.cc

3.18 Map Class Reference

Map Class.

`#include <Map.h>`

Public Member Functions

- Map (int diff, EntityPlayer ∗p)

  Constructs the map of the game.

- ∼Map ()

  Deconstructs the map of the game.

- bool generate ()

  Generates map of the rooms.

- void movePlayer (Room ∗room)

  Moves player to given room in map.

- bool displayDescription ()

  Displays description of the room.

- Room ∗ getCurRoom () const

  gets the hieght of the room in the map tree.

- void **getRandomRoom** (Room ∗&c)
- int **getX** ()
- int **getY** ()
- std::vector< int > **getOpVec** ()
- Room ∗ **getMap** (int x, int y)
- std::vector< std::vector< Room ∗ > > **getFullMap** ()

3.18.1 Detailed Description

Map Class.

3.18.2 Constructor & Destructor Documentation

3.18.2.1 Map::Map (int *diff*, EntityPlayer ∗ *p*)

Constructs the map of the game.

Parameters:

← ***difficulty,the*** difficulty of the game.

inout] &player, a reference to the player.

3.18.3 Member Function Documentation

3.18.3.1 bool Map::displayDescription ()

Displays description of the room.

Returns:

Bool: returns true if description succesfully prints.

3.18.3.2 bool Map::generate ()

Generates map of the rooms.

Returns:

bool : returns true if map is generated correctly.

3.18.3.3 Room* Map::getCurRoom () const [inline]

gets the hieght of the room in the map tree. /param[in] &room, a reference to the room that the height is need for. /return const int: returns the hieght of the room in the map tree.

3.18.3.4 void Map::movePlayer (Room * *room*)

Moves player to given room in map.

Parameters:

← ***the*** pointer to the room you want to move the player to

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

- Map.h
- Map.cc

3.19 MapTest Class Reference

Public Member Functions

- void **setUp** ()
- void **tearDown** ()
- void **generation** ()
- void **isDescribed** ()

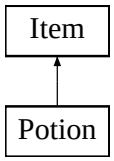
The documentation for this class was generated from the following files:

- MapTest.h
- MapTest.cc

3.20 Potion Class Reference

Weapon Class to be generated by the ItemFactory.

`#include <Potion.h>`Inheritance diagram for Potion::



Public Member Functions

- bool use ()

  Equips the potion.

3.20.1 Detailed Description

Weapon Class to be generated by the ItemFactory.

3.20.2 Member Function Documentation

3.20.2.1 bool Potion::use () `[virtual]`

Equips the potion. Detailed description /return bool if the potion was sucessfully used

Implements Item.

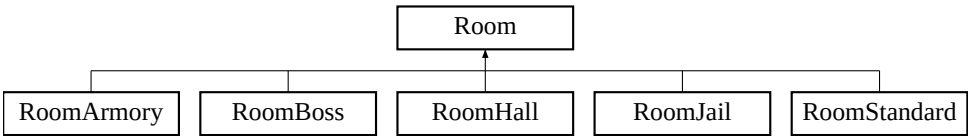
The documentation for this class was generated from the following files:

- Potion.h
- Potion.cc

3.21 Room Class Reference

Class Room.

`#include <Room.h>`Inheritance diagram for Room::



Public Member Functions

- virtual void generate ()=0

  Generates the room.

- virtual std::string getDescription ()=0

  Gets the description for the room.

- void **setNorth** (Room *p)
- void **setSouth** (Room *p)
- void **setEast** (Room *p)
- void **setWest** (Room *p)
- Room * **getNorth** ()
- Room * **getSouth** ()
- Room * **getEast** ()
- Room * **getWest** ()
- void **setX** (int x)
- void **setY** (int y)
- int **getX** ()
- int **getY** ()
- int **getOptions** (int x)
- std::vector< int > **setOptions** ()
- Room & **operator=** (const Room &r)
- bool **operator==** (const Room &r1)
- void **setVEC** (int x, int y)
- void **setEntity** (Entity *x)
- Entity * **getEntity** ()

3.21.1 Detailed Description

Class Room.

3.21.2 Member Function Documentation

3.21.2.1 virtual void Room::generate () [pure virtual]

Generates the room. This function generates which enemies will appear in the room with player

Parameters:

← ***none***

Returns:

void

Implemented in RoomArmory, RoomBoss, RoomHall, RoomJail, and RoomStandard.

3.21.2.2 virtual std::string Room::getDescription () [pure virtual]

Gets the description for the room. This function tells the user what is in and around the room

Parameters:

← ***none***

Returns:

string-that describes the room's condition

Implemented in RoomArmory, RoomBoss, RoomHall, RoomJail, and RoomStandard.

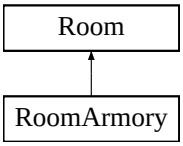
The documentation for this class was generated from the following file:

- Room.h

3.22 RoomArmory Class Reference

Class RoomArmory.

`#include <RoomArmory.h>`Inheritance diagram for RoomArmory::



Public Member Functions

- void generate ()

  Generates the armory room.

- std::string getDescription ()

  Gets the description for the armory room.

- bool isEmpty ()

  Checks to see if the room enemies are in the armory room.

3.22.1 Detailed Description

Class RoomArmory.

3.22.2 Member Function Documentation

3.22.2.1 void RoomArmory::generate () `[virtual]`

Generates the armory room. This function generates which enemies will appear in the armory with player

Parameters:

← ***none***

Returns:

void

Implements Room.

3.22.2.2 std::string RoomArmory::getDescription () `[virtual]`

Gets the description for the armory room. This function tells the user what is in and around the armory

Parameters:

← ***none***

Returns:

string-that describes the armory's condition

Implements Room.

3.22.2.3 bool RoomArmory::isEmpty ()

Checks to see if the room enemies are in the armory room. This function checks to see if anything is in the armory with player

Parameters:

← ***none***

Returns:

bool - true if the armory is empty otherwise false

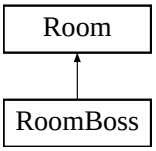
The documentation for this class was generated from the following files:

- RoomArmory.h
- RoomArmory.cc

3.23 RoomBoss Class Reference

Class RoomBoss.

`#include <RoomBoss.h>`Inheritance diagram for RoomBoss::



Public Member Functions

- void generate ()

  Generates the boss room.

- std::string getDescription ()

  Gets the description for the boss room.

- bool isEmpty ()

  Checks to see if the room enemies are in the boss room.

3.23.1 Detailed Description

Class RoomBoss.

3.23.2 Member Function Documentation

3.23.2.1 void RoomBoss::generate () `[virtual]`

Generates the boss room. This function generates the boss that will appear in the boss room with player

Parameters:

← ***none***

Returns:

void

Implements Room.

3.23.2.2 std::string RoomBoss::getDescription () `[virtual]`

Gets the description for the boss room. This function tells the user what is in and around the boss room

Parameters:

← ***none***

Returns:

string-that describes the boss room's condition

Implements Room.

3.23.2.3 bool RoomBoss::isEmpty ()

Checks to see if the room enemies are in the boss room. This function checks to see if anything is in the room with playe

Parameters:

← ***none***

Returns:

bool - true if the boss room is empty otherwise false

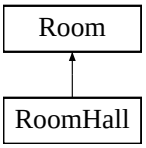
The documentation for this class was generated from the following files:

- RoomBoss.h
- RoomBoss.cc

3.24 RoomHall Class Reference

Class RoomHall.

`#include <RoomHall.h>`Inheritance diagram for RoomHall::



Public Member Functions

- void generate ()
  Generates the hall room.
- std::string getDescription ()
  Gets the description for the hall room.
- bool isEmpty ()
  Checks to see if the room enemies are in the hall room.

3.24.1 Detailed Description

Class RoomHall.

3.24.2 Member Function Documentation

3.24.2.1 void RoomHall::generate () `[virtual]`

Generates the hall room. This function generates which enemies will appear in the hall with player

Parameters:

← ***none***

Returns:

void

Implements Room.

3.24.2.2 std::string RoomHall::getDescription () `[virtual]`

Gets the description for the hall room. This function tells the user what is in and around the hall

Parameters:

← ***none***

Returns:

string-that describes the room's condition

Implements Room.

3.24.2.3 bool RoomHall::isEmpty ()

Checks to see if the room enemies are in the hall room. This function checks to see if anything is in the hall with player

Parameters:

← ***none***

Returns:

bool - true if the room is empty otherwise false

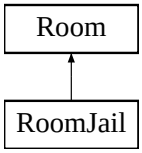
The documentation for this class was generated from the following files:

- RoomHall.h
- RoomHall.cc

3.25 RoomJail Class Reference

Class RoomJail.

`#include <RoomJail.h>`Inheritance diagram for RoomJail::



Public Member Functions

- void generate ()
  Generates the jail room.
- std::string getDescription ()
  Gets the description for the jail room.
- bool isEmpty ()
  Checks to see if the room enemies are in the jail room.

3.25.1 Detailed Description

Class RoomJail.

3.25.2 Member Function Documentation

3.25.2.1 void RoomJail::generate () [virtual]

Generates the jail room. This function generates which enemies will appear in the jail with player

Parameters:

← ***none***

Returns:

void

Implements Room.

3.25.2.2 std::string RoomJail::getDescription () [virtual]

Gets the description for the jail room. This function tells the user what is in and around the jail

Parameters:

← ***none***

Returns:

string-that describes the jail's condition

Implements Room.

3.25.2.3 bool RoomJail::isEmpty ()

Checks to see if the room enemies are in the jail room. This function checks to see if anything is in the jail with player

Parameters:

← ***none***

Returns:

bool - true if the jail is empty otherwise false

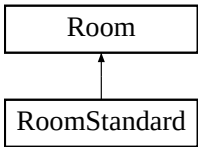
The documentation for this class was generated from the following files:

- RoomJail.h
- RoomJail.cc

3.26 RoomStandard Class Reference

Class RoomStandard.

`#include <RoomStandard.h>`Inheritance diagram for RoomStandard::



Public Member Functions

- void generate ()

  Generates the standard room.

- std::string getDescription ()

  Gets the description for the standard room.

- bool isEmpty ()

  Checks to see if the room enemies are in the standard room.

3.26.1 Detailed Description

Class RoomStandard.

3.26.2 Member Function Documentation

3.26.2.1 void RoomStandard::generate () `[virtual]`

Generates the standard room. This function generates which enemies will appear in the room with player

Parameters:

← ***none***

Returns:

void

Implements Room.

3.26.2.2 std::string RoomStandard::getDescription () `[virtual]`

Gets the description for the standard room. This function tells the user what is in and around the room

Parameters:

← ***none***

Returns:

string-that describes the room's condition

Implements Room.

3.26.2.3 bool RoomStandard::isEmpty ()

Checks to see if the room enemies are in the standard room. This function checks to see if anything is in the room with player

Parameters:

← ***none***

Returns:

bool- true if the room is empty otherwise false

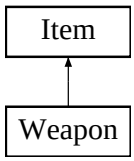
The documentation for this class was generated from the following files:

- RoomStandard.h
- RoomStandard.cc

3.27 Weapon Class Reference

Weapon Class to be generated by the ItemFactory.

`#include <Weapon.h>`Inheritance diagram for Weapon::



Public Member Functions

- bool use ()

  Equips the weapon.

3.27.1 Detailed Description

Weapon Class to be generated by the ItemFactory.

3.27.2 Member Function Documentation

3.27.2.1 bool Weapon::use () `[virtual]`

Equips the weapon. /return bool if the item was used

Implements Item.

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

- Weapon.h
- Weapon.cc

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