Me want cookie!

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Chapter 1

Hierarchical 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:

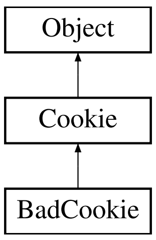
Chapter 3

Class Documentation

3.1 BadCookie Class Reference

```
#include <cookie.h>
```

Inheritance diagram for BadCookie:



Public Member Functions

- BadCookie (float x, float y)

Additional Inherited Members

3.1.1 Detailed Description

Defines the BadCookie.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 BadCookie()

```
BadCookie::BadCookie (
            float x,
            float y )
```

Constructor that takes coordinates as parameters.

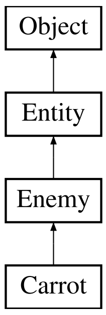
The documentation for this class was generated from the following files:

- cookie.h
- cookie.cc

3.2 Carrot Class Reference

```
#include <enemy.h>
```

Inheritance diagram for Carrot:



Public Member Functions

- Carrot (float x, float y, int dir_1, int dir_2, int dir_3, int dir_4, float dist)
- ∼Carrot ()=default

Additional Inherited Members

3.2.1 Detailed Description

Defines the carrot.

3.2.2 Constructor & Destructor Documentation

3.2.2.1 Carrot()

```
Carrot::Carrot (
            float x,
            float y,
            int dir_1,
            int dir_2,
            int dir_3,
            int dir_4,
            float dist )
```

Construcor that takes the carrots possition, route and distance as paramenters.

3.2.2.2 ~Carrot()

```
Carrot::~Carrot ( )  [default]
```

Destructor set to default.

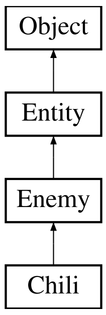
The documentation for this class was generated from the following files:

- enemy.h
- enemy.cc

3.3 Chili Class Reference

```
#include <enemy.h>
```

Inheritance diagram for Chili:



Public Member Functions

- Chili (float x, float y, int dir_1, int dir_2, int dir_3, int dir_4, float dist)
- ~Chili ()=default
- bool collision (Object const &object) const override

Additional Inherited Members

3.3.1 Detailed Description

Defines the chili.

3.3.2 Constructor & Destructor Documentation

3.3.2.1 Chili()

```
Chili::Chili (
              float x,
              float y,
              int dir_1,
              int dir_2,
              int dir_3,
              int dir_4,
              float dist )
```

Construcor that takes the chilis possition, route and distance as paramenters.

3.3.2.2 ∼Chili()

```
Chili::∼Chili ( )  [default]
```

Destructor set to default.

3.3.3 Member Function Documentation

3.3.3.1 collision()

```
bool Chili::collision (
              Object const & object ) const  [override], [virtual]
```

Checks if the player is within a certain range of the chili.

Reimplemented from Object.

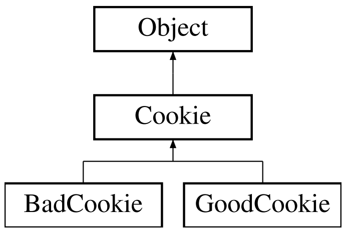
The documentation for this class was generated from the following files:

- enemy.h
- enemy.cc

3.4 Cookie Class Reference

```
#include <cookie.h>
```

Inheritance diagram for Cookie:



Public Member Functions

- Cookie (std::string, float x, float y, int points)
- ∼Cookie ()=default
- void update (Player &object, sf::Time time)

Additional Inherited Members

3.4.1 Detailed Description

Defines the cookies

3.4.2 Constructor & Destructor Documentation

3.4.2.1 Cookie()

```
Cookie::Cookie (
            std::string image,
            float x,
            float y,
            int points )
```

Constructor that takes the texture, coordinates and the amount of points the cookie will give to the player.

3.4.2.2 ∼Cookie()

```
Cookie::∼Cookie ( )  [default]
```

Destructor set to default.

3.4.3 Member Function Documentation

3.4.3.1 update()

```
void Cookie::update (
             Player & object,
             sf::Time time )  [virtual]
```

Updates the player in the game loop when it has collided with a cookie.

Implements Object.

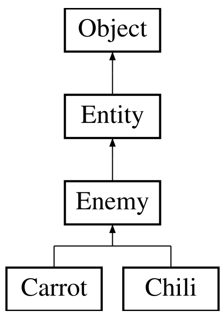
The documentation for this class was generated from the following files:

- cookie.h
- cookie.cc

3.5 Enemy Class Reference

```
#include <enemy.h>
```

Inheritance diagram for Enemy:



Public Member Functions

- Enemy (std::string, float, float, int, int, int, int, float, int)
- ∼Enemy ()=default
- void move (sf::Time)
- void update (Player &object, sf::Time time)

Additional Inherited Members

3.5.1 Detailed Description

Defines the games enemies.

3.5.2 Constructor & Destructor Documentation

3.5.2.1 Enemy()

```
Enemy::Enemy (
             std::string image,
             float x,
             float y,
             int dir_1,
             int dir_2,
             int dir_3,
             int dir_4,
             float dist,
             int lives )
```

Constructor that takes the texture, coordinates and route of the enemy as well as how far it walks and how many lives it takes.

3.5.2.2 ∼Enemy()

```
Enemy::∼Enemy ( ) [default]
```

The enemys destructor set to default.

3.5.3 Member Function Documentation

3.5.3.1 move()

```
void Enemy::move (
             sf::Time time ) [virtual]
```

Moves the enemy according to it's route.

Implements Entity.

3.5.3.2 update()

```
void Enemy::update (
             Player & object,
             sf::Time time ) [virtual]
```

Updates enemy and player in the game loop.

Implements Entity.

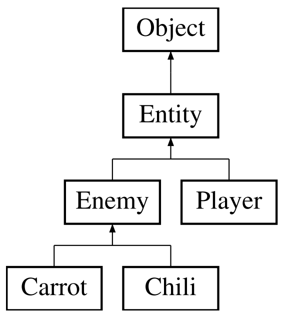
The documentation for this class was generated from the following files:

- enemy.h
- enemy.cc

3.6 Entity Class Reference

```
#include <entity.h>
```

Inheritance diagram for Entity:



Public Member Functions

- Entity (std::string text, float w, float h, float x, float y)
- ∼Entity ()=default
- virtual void move (sf::Time)=0
- virtual void update (Player &object, sf::Time time)=0

Protected Attributes

- int move_direction {}
- sf::Time movement {}

3.6.1 Detailed Description

Defines the entities in the game.

3.6.2 Constructor & Destructor Documentation

3.6.2.1 Entity()

```
Entity::Entity (
          std::string text,
          float w,
          float h,
          float x,
          float y )
```

Constructor that takes 4 floats as parameter that represent the size and placement of the entity. The constructor also takes the texture that the sprite will be set to.

3.6.2.2 ∼Entity()

```
Entity::∼Entity ( )  [default]
```

Default destructor.

3.6.3 Member Function Documentation

3.6.3.1 move()

```
virtual void Entity::move (
             sf::Time   )  [pure virtual]
```

Defines how the entities move in the game.

Implemented in Player, and Enemy.

3.6.3.2 update()

```
virtual void Entity::update (
             Player & object,
             sf::Time time )  [pure virtual]
```

Defines how the object and player will be updated in the game loop.

Implements Object.

Implemented in Player, and Enemy.

3.6.4 Member Data Documentation

3.6.4.1 move_direction

```
int Entity::move_direction {}  [protected]
```

Private variable that contains an integer that represent the direction that the entity is moving.

3.6.4.2 movement

```
sf::Time Entity::movement {}  [protected]
```

Private varaiable that is used to check how the entity should moves.

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

- entity.h
- entity.cc

3.7 Game Class Reference

```
#include <game.h>
```

Public Member Functions

- Game (std::string const &level)
- void run (sf::RenderWindow &window)

3.7.1 Detailed Description

Runs and updates the game.

3.7.2 Constructor & Destructor Documentation

3.7.2.1 Game()

```
Game::Game (
             std::string const & level )
```

The constructor takes the name of the file that contains the level the game will run as parameter.

3.7.3 Member Function Documentation

3.7.3.1 run()

```
void Game::run (
             sf::RenderWindow & window )
```

Runs the game loop.

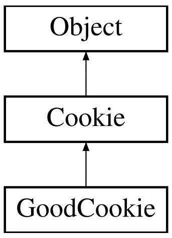
The documentation for this class was generated from the following files:

- game.h
- game.cc

3.8 GoodCookie Class Reference

```
#include <cookie.h>
```

Inheritance diagram for GoodCookie:



Public Member Functions

- GoodCookie (float x, float y)

Additional Inherited Members

3.8.1 Detailed Description

Defines the GoodCookie.

3.8.2 Constructor & Destructor Documentation

3.8.2.1 GoodCookie()

```
GoodCookie::GoodCookie (
             float x,
             float y )
```

Constructor that takes coordinates as parameters.

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

- cookie.h
- cookie.cc

3.9 Menu Class Reference

```
#include <Menu.h>
```

Public Member Functions

- Menu (float width, float height)
- int getPressedItem ()
- int run (sf::RenderWindow &window)

3.9.1 Detailed Description

Handles showing the menu and selecting options on screen.

3.9.2 Constructor & Destructor Documentation

3.9.2.1 Menu()

```
Menu::Menu (
             float width,
             float height )
```

The constructor takes the width and height to know how to center the menu.

3.9.3 Member Function Documentation

3.9.3.1 getPressedItem()

```
int Menu::getPressedItem ( )
```

Returns the ItemIndex variable to find which button was pressed.

3.9.3.2 run()

```
int Menu::run (
             sf::RenderWindow & window )
```

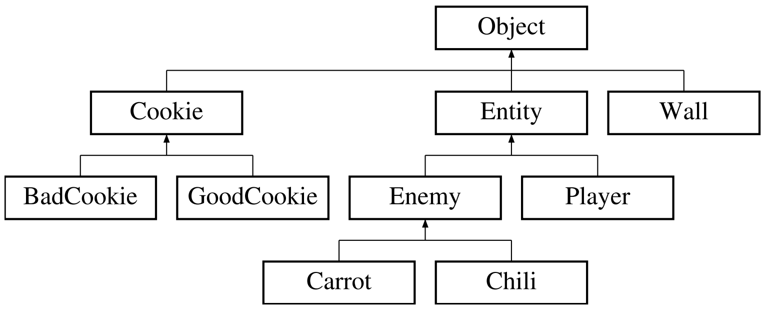
Function that runs the menu loop and checks if a button has been pressed.

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

- Menu.h
- Menu.cc

3.10 Object Class Reference

Inheritance diagram for Object:



Public Member Functions

- Object (std::string text, float w, float h, float x, float y)
- virtual ∼Object ()=default
- void draw (sf::RenderWindow &window) const
- virtual void update (Player &object, sf::Time time)=0
- virtual bool collision (Object const &other) const
- sf::Sprite getsprite () const

Protected Attributes

- sf::Sprite sprite
- sf::Texture texture

3.10.1 Constructor & Destructor Documentation

3.10.1.1 Object()

```
Object::Object (
            std::string text,
            float w,
            float h,
            float x,
            float y )
```

Constructor that takes texture, the scale and position as parameters for the objects sprite.

3.10.1.2 ∼Object()

```
virtual Object::∼Object ( )  [virtual], [default]
```

Default destructor.

3.10.2 Member Function Documentation

3.10.2.1 collision()

```
bool Object::collision (
            Object const & other ) const  [virtual]
```

Defines when tow objects have collided with eachother.

Reimplemented in Chili.

3.10.2.2 draw()

```
void Object::draw (
            sf::RenderWindow & window ) const
```

Draws the saved sprite to a RenderWindow.

3.10.2.3 getsprite()

```
sf::Sprite Object::getsprite ( ) const
```

Returns the saved sprite.

3.10.2.4 update()

```
virtual void Object::update (
             Player & object,
             sf::Time time )  [pure virtual]
```

Defines how the player will be updated in the game loop.

Implemented in Entity, Wall, Player, Enemy, and Cookie.

3.10.3 Member Data Documentation

3.10.3.1 sprite

```
sf::Sprite Object::sprite  [protected]
```

Private variable that holdes the sprite that represents the object.

3.10.3.2 texture

```
sf::Texture Object::texture  [protected]
```

Private variable that contains the texter that the sprite has.

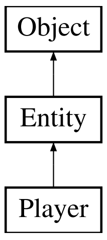
The documentation for this class was generated from the following files:

- object.h
- object.cc

3.11 Player Class Reference

```
#include <player.h>
```

Inheritance diagram for Player:



Public Member Functions

- Player ()
- void input (int, sf::Time)
- void move (sf::Time)
- void update (Player &object, sf::Time time)
- void collision_with_wall ()
- void set_points (int new_points)
- int get_points () const
- void set_lives (int new_lives)
- int get_lives () const
- void set_speed (float)
- void change_coordinates (float, float)

Additional Inherited Members

3.11.1 Detailed Description

Defines the player.

3.11.2 Constructor & Destructor Documentation

3.11.2.1 Player()

```
Player::Player ( )
```

The constructor does not take any parameters.

3.11.3 Member Function Documentation

3.11.3.1 change_coordinates()

```
void Player::change_coordinates (
             float x,
             float y )
```

Changes players coordinates when initialized in world.

3.11.3.2 collision_with_wall()

```
void Player::collision_with_wall ( )
```

Checks if player collides with wall and change direction.

3.11.3.3 get_lives()

```
int Player::get_lives ( ) const
```

Retrieves the amount of lives the player has.

3.11.3.4 get_points()

```
int Player::get_points ( ) const
```

Retrieves the amount of points the player has.

3.11.3.5 input()

```
void Player::input (
             int direction,
             sf::Time time )
```

Takes the input from game and initializes movement.

3.11.3.6 move()

```
void Player::move (
             sf::Time time )  [virtual]
```

Checks if player can move in said direction and then execute.

Implements Entity.

3.11.3.7 set_lives()

```
void Player::set_lives (
             int new_lives )
```

Changes the lives variable.

3.11.3.8 set_points()

```
void Player::set_points (
             int new_points )
```

Changes the points variable.

3.11.3.9 set_speed()

```
void Player::set_speed (
             float new_speed )
```

Changes the speed variable.

3.11.3.10 update()

```
void Player::update (
             Player & object,
             sf::Time time )  [inline], [virtual]
```

Players update does not do anything.

Implements Entity.

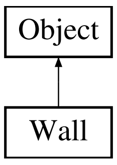
The documentation for this class was generated from the following files:

- player.h
- player.cc

3.12 Wall Class Reference

```
#include <wall.h>
```

Inheritance diagram for Wall:



Public Member Functions

- Wall (float, float, float, float)
- ∼Wall ()=default
- void update (Player &object, sf::Time time)

Additional Inherited Members

3.12.1 Detailed Description

Defines the walls in the game

3.12.2 Constructor & Destructor Documentation

3.12.2.1 Wall()

```
Wall::Wall (
            float h,
            float w,
            float x,
            float y )
```

Constructor that takes 4 floats that represent the size and placement of the wall.

3.12.2.2 ∼Wall()

```
Wall::∼Wall ( )  [default]
```

Destructor set to default.

3.12.3 Member Function Documentation

3.12.3.1 update()

```
void Wall::update (
            Player & object,
            sf::Time time )  [inline], [virtual]
```

Walls update does not do anything.

Implements Object.

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

- wall.h
- wall.cc

3.13 World Class Reference

```
#include <world.h>
```

Public Member Functions

- World (std::string levelname)
- ∼World ()
- void remove_object (Object &object)

Public Attributes

- std::vector< Object ∗ > walls
- std::vector< Object ∗ > entities
- Player myPlayer
- sf::Sprite win {}

3.13.1 Detailed Description

Holds all the game objects, and reads them from a file.

3.13.2 Constructor & Destructor Documentation

3.13.2.1 World()

```
World::World (
             std::string levelname )
```

The constructor takes the name of the file that contains the level.

3.13.2.2 ∼World()

```
World::∼World ( )
```

Deletes all objects that are stored on the heap.

3.13.3 Member Function Documentation

3.13.3.1 remove_object()

```
void World::remove_object (
             Object & object )
```

Removes one object from the entities vector.

3.13.4 Member Data Documentation

3.13.4.1 entities

```
std::vector<Object*> World::entities
```

Public variable that contains entity objects.

3.13.4.2 myPlayer

```
Player World::myPlayer
```

Public variable an object of type player.

3.13.4.3 walls

```
std::vector<Object*> World::walls
```

Public variable that contains wall objects.

3.13.4.4 win

```
sf::Sprite World::win {}
```

A sprite that represent the goal for the player to reach.

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

- world.h
- world.cc

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