Bomberman

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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

File Index

3.1 File List

Here is a list of all documented files with brief descriptions:

Chapter 4

Class Documentation

4.1 Bomb Class Reference

classe de la bombe

`#include <Bomb.h>`

Public Member Functions

- Bomb ()
  Construct a new Bomb object.
- Bomb (int x, int y, int degat, int portee)
  Construct a new Bomb object.
- int getPortee () const
  Get the Portee object.
- int getDegat () const
  Get the Degat object.
- int getX () const
- int getY () const
- int getVarb () const
  Get the Varb object.
- int getBomb () const
  Get the Bomb object.
- int getExplosionH () const
  Get the Explosion H object.
- int getExplosionV () const
  Get the Explosion V object.
- int getCompteur () const
  Get the Compteur object.
- int getTmpi () const
  Get the Tmpi object.
- int getTmpj () const
  Get the Tmpj object.
- void setPortee (int portee)
  Set the Portee object.

- void setDegat (int degat)

  Set the Degat object.
- void setX (int x)
- void setY (int y)
- void setCompteur (int compteur)

  Set the Compteur object.
- void setTmpi (int tmpi)

  Set the Tmpi object.
- void setTmpj (int tmpj)

  Set the Tmpj object.
- void **BombePosee** ()

Public Attributes

- bool **poser** = false

Protected Attributes

- int **portee** = 1
- int **degat** = 50
- int **x**
- int **y**
- int **varb** = 11
- int **bomb** = 111
- int **explosionH** = 1111
- int **explosionV** = 11111
- int **compteur** = 0
- int **tmpi** = -1
- int **tmpj** = -1

Friends

- std::ostream & operator<< (std::ostream &os, const Bomb &p)

  surcharge de l'opérateur cout
- std::istream & operator>> (std::istream &is, Bomb &p)

  surcharge de l'opérateur cin

4.1.1 Detailed Description

classe de la bombe

4.1.2 Constructor & Destructor Documentation

4.1.2.1 Bomb() [1/2]

```
Bomb::Bomb ( )
```

Construct a new Bomb object.

Construct a new Bomb:: Bomb object.

Author

sami DRIOUCHE & walid AIT ERRAMI
Sami DRIOUCHE & Walid AIT-ERRAMI

4.1.2.2 Bomb() [2/2]

```
Bomb::Bomb (
            int x,
            int y,
            int degat,
            int portee )
```

Construct a new Bomb object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	
degat	
portee	

4.1.3 Member Function Documentation

4.1.3.1 getBomb()

```
int Bomb::getBomb ( ) const
```

Get the Bomb object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.2 getCompteur()

```
int Bomb::getCompteur ( ) const
```

Get the Compteur object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.3 getDegat()

```
int Bomb::getDegat ( ) const
```

Get the Degat object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.4 getExplosionH()

```
int Bomb::getExplosionH ( ) const
```

Get the Explosion H object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.5 getExplosionV()

```
int Bomb::getExplosionV ( ) const
```

Get the Explosion V object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.6 getPortee()

```
int Bomb::getPortee ( ) const
```

Get the Portee object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

int

4.1.3.7 getTmpi()

```
int Bomb::getTmpi ( ) const
```

Get the Tmpi object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.8 getTmpj()

```
int Bomb::getTmpj ( ) const
```

Get the Tmpj object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.9 getVarb()

```
int Bomb::getVarb ( ) const
```

Get the Varb object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.10 getX()

```
int Bomb::getX ( ) const
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.11 getY()

```
int Bomb::getY ( ) const
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.1.3.12 setCompteur()

```
void Bomb::setCompteur (
            int compteur )
```

Set the Compteur object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

compteur	

4.1.3.13 setDegat()

```
void Bomb::setDegat (
            int degat )
```

Set the Degat object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

degat	

4.1.3.14 setPortee()

```
void Bomb::setPortee (
            int portee )
```

Set the Portee object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

portee	
portee	

4.1.3.15 setTmpi()

```
void Bomb::setTmpi (
            int tmpi )
```

Set the Tmpi object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

tmpi	

4.1.3.16 setTmpj()

```
void Bomb::setTmpj (
            int tmpj )
```

Set the Tmpj object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

tmpj	

4.1.3.17 setX()

```
void Bomb::setX (
            int x )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	

4.1.3.18 setY()

```
void Bomb::setY (
            int y )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

y	

4.1.4 Friends And Related Function Documentation

4.1.4.1 operator<<

```
std::ostream & operator<< (
            std::ostream & os,
            const Bomb & p )  [friend]
```

surcharge de l'opérateur cout

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

os	
p	

Returns

std::ostream&

Parameters

os	
p	

Returns

std::ostream&

4.1.4.2 operator>>

```
std::istream & operator>> (
             std::istream & is,
             Bomb & p )  [friend]
```

surcharge de l'opérateur cin

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

is	
p	

Returns

std::istream&

Parameters

is	
p	

Returns

std::istream&

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

- Joueur/entete/Bomb.h
- Joueur/Bomb.cpp

4.2 Bomberman Class Reference

classe du bomberman

`#include <Bomberman.h>`

Public Member Functions

- Bomberman (std::string nom, int vie, int x, int y, int vitesse, int nbBomb, Bomb boom)
  Construct a new Bomberman object.
- Bomberman ()
  Construct a new Bomberman object.
- int getX () const
- int getY () const
- int getVie () const
  Get the Vie object.
- int getVitesse () const
  Get the Vitesse object.
- int getNbBomb () const
  Get the Nb Bomb object.
- int getValeur () const
  Get the Valeur object.
- void setX (int x)
- void setY (int y)
- void setVie (int vie)
  Set the Vie object.
- void setVitesse (int vitesse)
  Set the Vitesse object.
- void setNbBomb (int nbBomb)
  Set the Nb Bomb object.

Public Attributes

- bool **Vivant** = false
- std::vector< Bomb > **tabB**
- Bomb **boom**

Protected Attributes

- std::string **nom**
- int **vie** = 100
- int **x**
- int **y**
- int **vitesse** = 1
- int **nbBomb** = 3
- int **valeur** = 1

Friends

- std::ostream & operator<< (std::ostream &os, const Bomberman &p)
- std::istream & operator>> (std::istream &is, Bomberman &p)

4.2.1 Detailed Description

classe du bomberman

Author

sami DRIOUCHE

4.2.2 Constructor & Destructor Documentation

4.2.2.1 Bomberman() [1/2]

```
Bomberman::Bomberman (
            std::string nom,
            int vie,
            int x,
            int y,
            int vitesse,
            int nbBomb,
            Bomb boom )
```

Construct a new Bomberman object.

Author

sami DRIOUCHE

Parameters

nom	
vie	
x	
y	
vitesse	
nbBomb	
boom	

4.2.2.2 Bomberman() [2/2]

```
Bomberman::Bomberman ( )
```

Construct a new Bomberman object.

Author

sami DRIOUCHE

4.2.3 Member Function Documentation

4.2.3.1 getNbBomb()

```
int Bomberman::getNbBomb ( ) const
```

Get the Nb Bomb object.

Author

sami DRIOUCHE

Returns

int

4.2.3.2 getValeur()

```
int Bomberman::getValeur ( ) const
```

Get the Valeur object.

Author

sami DRIOUCHE

Returns

int

4.2.3.3 getVie()

```
int Bomberman::getVie ( ) const
```

Get the Vie object.

Author

sami DRIOUCHE

Returns

int

4.2.3.4 getVitesse()

```
int Bomberman::getVitesse ( ) const
```

Get the Vitesse object.

Author

sami DRIOUCHE

Returns

int

4.2.3.5 getX()

```
int Bomberman::getX ( ) const
```

Author

sami DRIOUCHE

Returns

int

4.2.3.6 getY()

```
int Bomberman::getY ( ) const
```

Author

sami DRIOUCHE

Returns

int

4.2.3.7 setNbBomb()

```
void Bomberman::setNbBomb (
            int nbBomb )
```

Set the Nb Bomb object.

Author

sami DRIOUCHE

Parameters

nbBomb	

4.2.3.8 setVie()

```
void Bomberman::setVie (
            int vie )
```

Set the Vie object.

Author

sami DRIOUCHE

Parameters

vie	

4.2.3.9 setVitesse()

```
void Bomberman::setVitesse (
            int vitesse )
```

Set the Vitesse object.

Author

sami DRIOUCHE

Parameters

vitesse	

4.2.3.10 setX()

```
void Bomberman::setX (
            int x )
```

Author

sami DRIOUCHE

Parameters

x	

4.2.3.11 setY()

```
void Bomberman::setY (
            int y )
```

Author

sami DRIOUCHE

Parameters

y	

4.2.4 Friends And Related Function Documentation

4.2.4.1 operator<<

```
std::ostream & operator<< (
            std::ostream & os,
            const Bomberman & p )  [friend]
```

Author

sami DRIOUCHE

Parameters

os	
p	

Returns

std::ostream&

4.2.4.2 operator>>

```
std::istream & operator>> (
            std::istream & is,
            Bomberman & p )  [friend]
```

Author

sami DRIOUCHE

Parameters

is	
p	

Returns

std::istream&

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

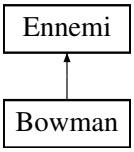
- Joueur/entete/Bomberman.h
- Joueur/Bomberman.cpp

4.3 Bowman Class Reference

classe du bowman

`#include <Bowman.h>`

Inheritance diagram for Bowman:



Public Member Functions

- **Bowman** ()
  Construct a new Bowman object.
- Bowman (int x, int y)
  Construct a new Bowman object.
- void attaquerPlayer (Bomberman &b)
  methode pour attaquer le player
- void recevoirDegat (Bomb &boom)
  methode pour recevoir les degats de la bombe

Friends

- std::ostream & operator<< (std::ostream &os, const Bowman &p)
  surcharge de l'operateur de sortie cout
- std::istream & operator>> (std::istream &is, Bowman &p)
  surcharge de l'operateur d'entrée cin

Additional Inherited Members

4.3.1 Detailed Description

classe du bowman

4.3.2 Constructor & Destructor Documentation

4.3.2.1 Bowman()

```
Bowman::Bowman (
            int x,
            int y )
```

Construct a new Bowman object.

Author

Walid AIT ERRAMI

Parameters

x	
y	

4.3.3 Member Function Documentation

4.3.3.1 attaquerPlayer()

```
void Bowman::attaquerPlayer (
            Bomberman & b )  [virtual]
```

methode pour attaquer le player

Author

Walid AIT ERRAMI

Parameters

b	

Reimplemented from Ennemi.

4.3.3.2 recevoirDegat()

```
void Bowman::recevoirDegat (
            Bomb & boom )  [virtual]
```

methode pour recevoir les degats de la bombe

Author

Walid AIT ERRAMI

Parameters

boom	

Reimplemented from Ennemi.

4.3.4 Friends And Related Function Documentation

4.3.4.1 operator<<

```
std::ostream & operator<< (
            std::ostream & os,
            const Bowman & p )  [friend]
```

surcharge de l'operateur de sortie cout

Parameters

os	
p	

Returns

std::ostream&

4.3.4.2 operator>>

```
std::istream & operator>> (
            std::istream & is,
            Bowman & p )  [friend]
```

surcharge de l'operateur d'entrée cin

Parameters

is	
p	

Returns

std::istream&

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

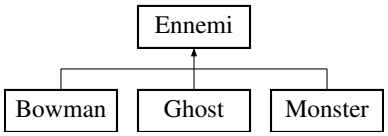
- Ennemi/entete/Bowman.h
- Ennemi/Bowman.cpp

4.4 Ennemi Class Reference

classe mère Ennemi

`#include <Ennemi.h>`

Inheritance diagram for Ennemi:



Public Member Functions

- int getX () const
- int getY () const
- int getNbvie () const

  Get the Nbvie object.
- int getNbattaque () const

  Get the Nbattaque object.
- int getValeur () const

  Get the Valeur object.
- void setX (int x)

  setter
- void setY (int y)

  setter
- void setNbvie (int nbvie)

  Set the Nbvie object.
- void setNbattaque (int nbattaque)

  Set the Nbattaque object.
- virtual void attaquerPlayer (Bomberman &b)

  methode virtual pour infliger des degats au joueur
- virtual void recevoirDegat (Bomb &boom)

  methode virtual pour recevoir des degats

Public Attributes

- int **tmp**
- bool **Vivant** = false

Protected Attributes

- int **x**
- int **y**
- int **nbvie** = 20
- int **nbattaque** = 50
- int **valeur** = 6

4.4.1 Detailed Description

classe mère Ennemi

4.4.2 Member Function Documentation

4.4.2.1 attaquerPlayer()

```
void Ennemi::attaquerPlayer (
            Bomberman & b )  [virtual]
```

methode virtual pour infliger des degats au joueur

Author

Walid AIT ERRAMI

Parameters

b	

Reimplemented in Bowman, Ghost, and Monster.

4.4.2.2 getNbattaque()

```
int Ennemi::getNbattaque ( ) const
```

Get the Nbattaque object.

Author

Walid AIT ERRAMI

Returns

int

4.4.2.3 getNbvie()

```
int Ennemi::getNbvie ( ) const
```

Get the Nbvie object.

Author

Walid AIT ERRAMI

Returns

int

4.4.2.4 getValeur()

```
int Ennemi::getValeur ( ) const
```

Get the Valeur object.

Author

Walid AIT ERRAMI

Returns

int

4.4.2.5 getX()

```
int Ennemi::getX ( ) const
```

Author

Walid AIT ERRAMI

Returns

int

4.4.2.6 getY()

```
int Ennemi::getY ( ) const
```

Author

Walid AIT ERRAMI

Returns

int

4.4.2.7 recevoirDegat()

```
void Ennemi::recevoirDegat (
            Bomb & boom )  [virtual]
```

methode virtual pour recevoir des degats

Author

Walid AIT ERRAMI

Parameters

boom	

Reimplemented in Bowman, Ghost, and Monster.

4.4.2.8 setNbattaque()

```
void Ennemi::setNbattaque (
            int nbattaque )
```

Set the Nbattaque object.

Author

Walid AIT ERRAMI

Parameters

nbattaque	

4.4.2.9 setNbvie()

```
void Ennemi::setNbvie (
            int nbvie )
```

Set the Nbvie object.

Author

Walid AIT ERRAMI

Parameters

nbvie	

4.4.2.10 setX()

```
void Ennemi::setX (
            int x )
```

setter

Author

Walid AIT ERRAMI

Parameters

x	

4.4.2.11 setY()

```
void Ennemi::setY (
            int y )
```

setter

Author

Walid AIT ERRAMI

Parameters

y	

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

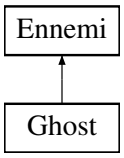
- Ennemi/entete/Ennemi.h
- Ennemi/Ennemi.cpp

4.5 Ghost Class Reference

classe du Ghost

`#include <Ghost.h>`

Inheritance diagram for Ghost:



Public Member Functions

- Ghost ()
  Construct a new Ghost object.
- Ghost (int x, int y)
  Construct a new Ghost object.
- void attaquerPlayer (Bomberman &b)
  methode pour attaquer le player
- void recevoirDegat (Bomb &boom)
  methode pour recevoir des degats

Friends

- std::ostream & operator<< (std::ostream &os, const Ghost &p)
  surcharge operateur
- std::istream & operator>> (std::istream &is, Ghost &p)
  surcharge operateur

Additional Inherited Members

4.5.1 Detailed Description

classe du Ghost

4.5.2 Constructor & Destructor Documentation

4.5.2.1 Ghost() [1/2]

```
Ghost::Ghost ( )
```

Construct a new Ghost object.

Author

sami DRIOUCHE

4.5.2.2 Ghost() [2/2]

```
Ghost::Ghost (
            int x,
            int y )
```

Construct a new Ghost object.

Author

sami DRIOUCHE

Parameters

x	
y	

4.5.3 Member Function Documentation

4.5.3.1 attaquerPlayer()

```
void Ghost::attaquerPlayer (
            Bomberman & b )  [virtual]
```

methode pour attaquer le player

Author

Walid AIT ERRAMI

Parameters

b	

Reimplemented from Ennemi.

4.5.3.2 recevoirDegat()

```
void Ghost::recevoirDegat (
            Bomb & boom )  [virtual]
```

methode pour recevoir des degats

Author

sami DRIOUCHE

Parameters

boom	

Reimplemented from Ennemi.

4.5.4 Friends And Related Function Documentation

4.5.4.1 operator<<

```
std::ostream & operator<< (
            std::ostream & os,
            const Ghost & p )  [friend]
```

surcharge operateur

Author

sami DRIOUCHE

Parameters

os	
p	

Returns

std::ostream&

Parameters

os	
p	

Returns

std::ostream&

4.5.4.2 operator>>

```
std::istream & operator>> (
            std::istream & is,
            Ghost & p )  [friend]
```

surcharge operateur

Author

sami DRIOUCHE

Parameters

is	
p	

Returns

std::istream&

Parameters

is	
p	

Returns

std::istream&

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

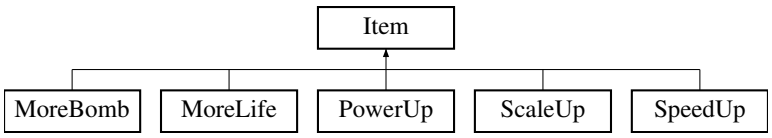
- Ennemi/entete/Ghost.h
- Ennemi/Ghost.cpp

4.6 Item Class Reference

classe mère item

`#include <Item.h>`

Inheritance diagram for Item:



Public Member Functions

- int getX () const
- int getY () const
- int getValeur () const

  Get the Valeur object.
- void setX (int x)
- void setY (int y)
- void setValeur (int valeur)

  Set the Valeur object.
- virtual void effetPlayer (Bomberman &b)
- virtual void effetBomb (Bomb &b)

Protected Attributes

- int **x**
- int **y**
- int **valeur** = 7

4.6.1 Detailed Description

classe mère item

4.6.2 Member Function Documentation

4.6.2.1 effetBomb()

```
void Item::effetBomb (
            Bomb & b )  [virtual]
```

Author

sami DRIOUCHE

Parameters

b	

Reimplemented in PowerUp, and ScaleUp.

4.6.2.2 effetPlayer()

```
void Item::effetPlayer (
            Bomberman & b )  [virtual]
```

Author

sami DRIOUCHE

Parameters

b	

Reimplemented in MoreBomb, MoreLife, and SpeedUp.

4.6.2.3 getValeur()

```
int Item::getValeur ( ) const
```

Get the Valeur object.

Author

sami DRIOUCHE

Returns

int

4.6.2.4 getX()

```
int Item::getX ( ) const
```

Author

sami DRIOUCHE

Returns

int

4.6.2.5 getY()

```
int Item::getY ( ) const
```

Author

sami DRIOUCHE

Returns

int

4.6.2.6 setValeur()

```
void Item::setValeur (
            int valeur )
```

Set the Valeur object.

Author

sami DRIOUCHE

Parameters

valeur	

4.6.2.7 setX()

```
void Item::setX (
            int x )
```

Author

sami DRIOUCHE

Parameters

x	

4.6.2.8 setY()

```
void Item::setY (
            int y )
```

Author

sami DRIOUCHE

Parameters

y	

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

- Item/entete/Item.h
- Item/Item.cpp

4.7 Map Class Reference

classe Map

```
#include <Map.h>
```

Public Member Functions

- Map (std::string nom)

  Construct a new Map object.
- void afficher ()
- void creerMap ()
- std::string convertir (int i, int j)
- void remplirMur (Tile w)
- void remplirSable (Tile w)
- void remplirItem (Item &k)
- void remplirPlayer (Bomberman &b)
- void mouvementPlayer (Bomberman &b, Bomb &bomb, Item &k1, Item &k2, Item &k3, Item &k4, Item &k5)
- void remplirMonstre (Ennemi &b)
- void mouvementMonstre (Ennemi &b, Bomberman &bo)
- void effetMonstre (Ennemi &b, Bomberman &bo, int DI, int DJ, int deplacement)
- void explosionBombe (Bomberman &b, Bomb &bomb)
- void effetItem (Bomberman &b, Bomb &bomb, Item &k1, Item &k2, Item &k3, Item &k4, Item &k5, int i, int j)
- void tuerMonstre ()
- bool victoire ()

Public Attributes

- int **tab** [nbligne][nbcolonne]
- std::string **nom**
- Monster **mons**
- Ghost **ghos**
- Bowman **bowm**
- Bomberman **player1**
- Bomb **bomb1**
- Wall **wall**
- Sand **sand**
- MoreLife **morL**
- MoreBomb **morB**
- SpeedUp **spee**
- ScaleUp **scal**
- PowerUp **power**
- std::vector< Ennemi * > **tabM**

Static Public Attributes

- int static const **nbligne** = 14
- int static const **nbcolonne** = 14

4.7.1 Detailed Description

classe Map

4.7.2 Constructor & Destructor Documentation

4.7.2.1 Map()

```
Map::Map (
            std::string nom )
```

Construct a new Map object.

Author

sami DRIOUCHE

Parameters

nom	

4.7.3 Member Function Documentation

4.7.3.1 afficher()

```
void Map::afficher ( )
```

Author

sami DRIOUCHE

4.7.3.2 convertir()

```
string Map::convertir (
            int i,
            int j )
```

Author

sami DRIOUCHE

Parameters

i	
j	

Returns

std::string

4.7.3.3 creerMap()

```
void Map::creerMap ( )
```

Author

sami DRIOUCHE

4.7.3.4 effetItem()

```
void Map::effetItem (
            Bomberman & b,
            Bomb & bomb,
            Item & k1,
            Item & k2,
            Item & k3,
            Item & k4,
            Item & k5,
            int i,
            int j )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	
bomb	
k1	
k2	
k3	
k4	
k5	
i	
j	

4.7.3.5 effetMonstre()

```
void Map::effetMonstre (
            Ennemi & b,
            Bomberman & bo,
            int DI,
            int DJ,
            int deplacement )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	
bo	
DI	
DJ	
deplacement	

4.7.3.6 explosionBombe()

```
void Map::explosionBombe (
            Bomberman & b,
            Bomb & bomb )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	
bomb	

4.7.3.7 mouvementMonstre()

```
void Map::mouvementMonstre (
            Ennemi & b,
            Bomberman & bo )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	
bo	

4.7.3.8 mouvementPlayer()

```
void Map::mouvementPlayer (
            Bomberman & b,
            Bomb & bomb,
            Item & k1,
            Item & k2,
            Item & k3,
            Item & k4,
            Item & k5 )
```

Author

sami DRIOUCHE

Parameters

b	
bomb	
k1	
k2	
k3	
k4	
k5	

4.7.3.9 remplirItem()

```
void Map::remplirItem (
            Item & k )
```

Author

sami DRIOUCHE

Parameters

k	

4.7.3.10 remplirMonstre()

```
void Map::remplirMonstre (
            Ennemi & b )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	

4.7.3.11 remplirMur()

```
void Map::remplirMur (
            Tile w )
```

Author

Walid AIT ERRAMI

Parameters

w	

4.7.3.12 remplirPlayer()

```
void Map::remplirPlayer (
            Bomberman & b )
```

Author

sami DRIOUCHE

Parameters

b	

4.7.3.13 remplirSable()

```
void Map::remplirSable (
            Tile w )
```

Author

Walid AIT ERRAMI

Parameters

w	

4.7.3.14 tuerMonstre()

```
void Map::tuerMonstre ( )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

4.7.3.15 victoire()

```
bool Map::victoire ( )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

true

false

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

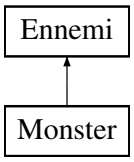
- Map/entete/Map.h
- Map/Map.cpp

4.8 Monster Class Reference

classe du monstre

```
#include <Monster.h>
```

Inheritance diagram for Monster:



Public Member Functions

- Monster ()
  Construct a new Monster object.
- Monster (int x, int y)
  Construct a new Monster object.
- void attaquerPlayer (Bomberman &b)
- void recevoirDegat (Bomb &boom)

Friends

- std::ostream & operator<< (std::ostream &os, const Monster &p)
  surcharge de l'opérateur cout
- std::istream & operator>> (std::istream &is, Monster &p)
  surcharge de l'opérateur cin

Additional Inherited Members

4.8.1 Detailed Description

classe du monstre

4.8.2 Constructor & Destructor Documentation

4.8.2.1 Monster() [1/2]

```
Monster::Monster ( )
```

Construct a new Monster object.

Author

sami DRIOUCHE

4.8.2.2 Monster() [2/2]

```
Monster::Monster (
            int x,
            int y )
```

Construct a new Monster object.

Author

sami DRIOUCHE

Parameters

x	
y	

4.8.3 Member Function Documentation

4.8.3.1 attaquerPlayer()

```
void Monster::attaquerPlayer (
            Bomberman & b )  [virtual]
```

Author

sami DRIOUCHE

Parameters

b	

Reimplemented from Ennemi.

4.8.3.2 recevoirDegat()

```
void Monster::recevoirDegat (
            Bomb & boom )  [virtual]
```

Author

sami DRIOUCHE

Parameters

boom	

Reimplemented from Ennemi.

4.8.4 Friends And Related Function Documentation

4.8.4.1 operator<<

```
std::ostream & operator<< (
            std::ostream & os,
            const Monster & p )  [friend]
```

surcharge de l'opérateur cout

Parameters

os	
p	

Returns

std::ostream&

4.8.4.2 operator>>

```
std::istream & operator>> (
            std::istream & is,
            Monster & p )  [friend]
```

surcharge de l'opérateur cin

Author

sami DRIOUCHE

Parameters

is	
p	

Returns

std::istream&

Parameters

is	
p	

Returns

std::istream&

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

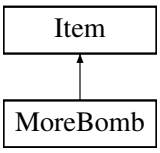
- Ennemi/entete/Monster.h
- Ennemi/Monster.cpp

4.9 MoreBomb Class Reference

classe morebomb

```
#include <MoreBomb.h>
```

Inheritance diagram for MoreBomb:



Public Member Functions

- MoreBomb ()

  Construct a new More Bomb object.
- MoreBomb (int x, int y)

  Construct a new More Bomb object.
- void effetPlayer (Bomberman &b)

Additional Inherited Members

4.9.1 Detailed Description

classe morebomb

4.9.2 Constructor & Destructor Documentation

4.9.2.1 MoreBomb() [1/2]

```
MoreBomb::MoreBomb ( )
```

Construct a new More Bomb object.

Author

sami DRIOUCHE & walid AIT ERRAMI

4.9.2.2 MoreBomb() [2/2]

```
MoreBomb::MoreBomb (
            int x,
            int y )
```

Construct a new More Bomb object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

4.9.3 Member Function Documentation

4.9.3.1 effetPlayer()

```
void MoreBomb::effetPlayer (
            Bomberman & b )  [virtual]
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	

Reimplemented from Item.

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

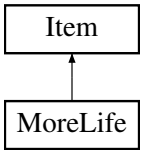
- Item/entete/MoreBomb.h
- Item/MoreBomb.cpp

4.10 MoreLife Class Reference

classe morelife

`#include <MoreLife.h>`

Inheritance diagram for MoreLife:



Public Member Functions

- MoreLife ()

  Construct a new More Life object.
- MoreLife (int x, int y)

  Construct a new More Life object.
- void effetPlayer (Bomberman &b)

Additional Inherited Members

4.10.1 Detailed Description

classe morelife

4.10.2 Constructor & Destructor Documentation

4.10.2.1 MoreLife() [1/2]

```
MoreLife::MoreLife ( )
```

Construct a new More Life object.

Author

sami DRIOUCHE & walid AIT ERRAMI

4.10.2.2 MoreLife() [2/2]

```
MoreLife::MoreLife (
            int x,
            int y )
```

Construct a new More Life object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

4.10.3 Member Function Documentation

4.10.3.1 effetPlayer()

```
void MoreLife::effetPlayer (
            Bomberman & b )  [virtual]
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	

Reimplemented from Item.

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

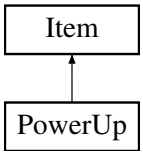
- Item/entete/MoreLife.h
- Item/MoreLife.cpp

4.11 PowerUp Class Reference

classe powerup

```
#include <PowerUp.h>
```

Inheritance diagram for PowerUp:



Public Member Functions

- PowerUp ()
  Construct a new Power Up object.
- PowerUp (int x, int y)
  Construct a new Power Up object.
- void effetBomb (Bomb &b)

Additional Inherited Members

4.11.1 Detailed Description

classe powerup

4.11.2 Constructor & Destructor Documentation

4.11.2.1 PowerUp() [1/2]

```
PowerUp::PowerUp ( )
```

Construct a new Power Up object.

Author

sami DRIOUCHE & walid AIT ERRAMI

4.11.2.2 PowerUp() [2/2]

```
PowerUp::PowerUp (
            int x,
            int y )
```

Construct a new Power Up object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

4.11.3 Member Function Documentation

4.11.3.1 effetBomb()

```
void PowerUp::effetBomb (
            Bomb & b )  [virtual]
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	

Reimplemented from Item.

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

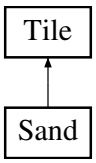
- Item/entete/PowerUp.h
- Item/PowerUp.cpp

4.12 Sand Class Reference

classe Sand

```
#include <Sand.h>
```

Inheritance diagram for Sand:



Public Member Functions

- Sand ()
  Construct a new Sand object.
- Sand (int x, int y)
  Construct a new Sand object.
- int getNbVie () const
  Get the Nb Vie object.
- void setNbVie (int nbvie)
  Set the Nb Vie object.

Public Attributes

- bool **Vivant** = false

Protected Attributes

- int **nbvie** = 5

4.12.1 Detailed Description

classe Sand

4.12.2 Constructor & Destructor Documentation

4.12.2.1 Sand() [1/2]

```
Sand::Sand ( )
```

Construct a new Sand object.

Author

walid AIT ERRAMI

4.12.2.2 Sand() [2/2]

```
Sand::Sand (
            int x,
            int y )
```

Construct a new Sand object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

4.12.3 Member Function Documentation

4.12.3.1 getNbVie()

```
int Sand::getNbVie ( ) const
```

Get the Nb Vie object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.12.3.2 setNbVie()

```
void Sand::setNbVie (
            int nbvie )
```

Set the Nb Vie object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

nbvie	

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

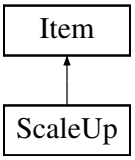
- Map/entete/Sand.h
- Map/Sand.cpp

4.13 ScaleUp Class Reference

classe scaleup

```
#include <ScaleUp.h>
```

Inheritance diagram for ScaleUp:



Public Member Functions

- ScaleUp ()

  Construct a new Scale Up object.
- ScaleUp (int x, int y)

  Construct a new Scale Up object.
- void effetBomb (Bomb &b)

Additional Inherited Members

4.13.1 Detailed Description

classe scaleup

4.13.2 Constructor & Destructor Documentation

4.13.2.1 ScaleUp() [1/2]

```
ScaleUp::ScaleUp ( )
```

Construct a new Scale Up object.

Author

sami DRIOUCHE & walid AIT ERRAMI

4.13.2.2 ScaleUp() [2/2]

```
ScaleUp::ScaleUp (
            int x,
            int y )
```

Construct a new Scale Up object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

4.13.3 Member Function Documentation

4.13.3.1 effetBomb()

```
void ScaleUp::effetBomb (
            Bomb & b )  [virtual]
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	

Reimplemented from Item.

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

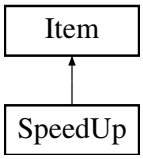
- Item/entete/ScaleUp.h
- Item/ScaleUp.cpp

4.14 SpeedUp Class Reference

classe speedup

```
#include <SpeedUp.h>
```

Inheritance diagram for SpeedUp:



Public Member Functions

- SpeedUp ()
  Construct a new Speed Up object.
- SpeedUp (int x, int y)
  Construct a new Speed Up object.
- void effetPlayer (Bomberman &b)

Additional Inherited Members

4.14.1 Detailed Description

classe speedup

4.14.2 Constructor & Destructor Documentation

4.14.2.1 SpeedUp() [1/2]

```
SpeedUp::SpeedUp ( )
```

Construct a new Speed Up object.

Author

sami DRIOUCHE & walid AIT ERRAMI

4.14.2.2 SpeedUp() [2/2]

```
SpeedUp::SpeedUp (
            int x,
            int y )
```

Construct a new Speed Up object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

4.14.3 Member Function Documentation

4.14.3.1 effetPlayer()

```
void SpeedUp::effetPlayer (
            Bomberman & b )  [virtual]
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

b	

Reimplemented from Item.

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

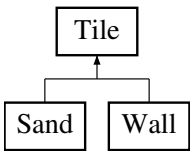
- Item/entete/SpeedUp.h
- Item/SpeedUp.cpp

4.15 Tile Class Reference

classe mère Tile

```
#include <Tile.h>
```

Inheritance diagram for Tile:



Public Member Functions

- int getX () const
- int getY () const
- int getValeur () const

  Get the Valeur object.
- void setX (int x)
- void setY (int y)

Protected Attributes

- int **x**
- int **y**
- int **valeur** = 2

4.15.1 Detailed Description

classe mère Tile

4.15.2 Member Function Documentation

4.15.2.1 getValeur()

```
int Tile::getValeur ( ) const
```

Get the Valeur object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.15.2.2 getX()

```
int Tile::getX ( ) const
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.15.2.3 getY()

```
int Tile::getY ( ) const
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Returns

int

4.15.2.4 setX()

```
void Tile::setX (
            int x )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	

4.15.2.5 setY()

```
void Tile::setY (
            int y )
```

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

y	

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

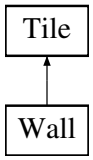
- Map/entete/Tile.h
- Map/Tile.cpp

4.16 Wall Class Reference

classe wall

```
#include <Wall.h>
```

Inheritance diagram for Wall:



Public Member Functions

- Wall ()

  Construct a new Wall object.
- Wall (int x, int y)

  Construct a new Wall object.

Additional Inherited Members

4.16.1 Detailed Description

classe wall

4.16.2 Constructor & Destructor Documentation

4.16.2.1 Wall() [1/2]

```
Wall::Wall ( )
```

Construct a new Wall object.

Author

sami DRIOUCHE & walid AIT ERRAMI

4.16.2.2 Wall() [2/2]

```
Wall::Wall (
            int x,
            int y )
```

Construct a new Wall object.

Author

sami DRIOUCHE & walid AIT ERRAMI

Parameters

x	
y	

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

- Map/entete/Wall.h
- Map/Wall.cpp

Chapter 5

File Documentation

5.1 Bowman.h

```
1 #ifndef __BOWMAN__
2 #define __BOWMAN__
3
4 #include "Ennemi.h"
5
10 class Bowman : public Ennemi
11 {
12
13 public:
18     Bowman();
19
26     Bowman(int x, int y);
27
33     void attaquerPlayer(Bomberman &b);
34
40     void recevoirDegat(Bomb &boom);
41
49     friend std::ostream &operator«(std::ostream &os, const Bowman &p);
50
58     friend std::istream &operator»(std::istream &is, Bowman &p);
59 };
60
61 #endif
```

5.2 Ennemi.h

```
1 #ifndef __ENNEMI__
2 #define __ENNEMI__
3
4 #include "../../Joueur/entete/Bomberman.h"
5
6 using namespace std;
7
12 class Ennemi
13 {
14
15 protected:
16     int x;
17     int y;
18     int nbvie = 20;
19     int nbattaque = 50;
20     int valeur = 6;
21
22 public:
23     int tmp;
24     bool Vivant = false;
25
31     int getX() const;
32
38     int getY() const;
39
45     int getNbvie() const;
46
52     int getNbattaque() const;
```

```
53
59      int getValeur() const;
60
66      void setX(int x);
67
73      void setY(int y);
74
80      void setNbvie(int nbvie);
81
87      void setNbattaque(int nbattaque);
88
94      virtual void attaquerPlayer(Bomberman &b);
95
101      virtual void recevoirDegat(Bomb &boom);
102 };
103
104 #endif
```

5.3 Ghost.h

```
1 #ifndef __GHOST__
2 #define __GHOST__
3 #include "Ennemi.h"
4
9 class Ghost : public Ennemi
10 {
11
12 protected:
13 public:
18      Ghost();
19
26      Ghost(int x, int y);
27
33      void attaquerPlayer(Bomberman &b);
34
40      void recevoirDegat(Bomb &boom);
41
49      friend std::ostream &operator«(std::ostream &os, const Ghost &p);
50
58      friend std::istream &operator»(std::istream &is, Ghost &p);
59 };
60
61 #endif
```

5.4 Monster.h

```
1 #ifndef __MONSTER__
2 #define __MONSTER__
3
4 #include "Ennemi.h"
5
10 class Monster : public Ennemi
11 {
12
13 public:
18      Monster();
19
26      Monster(int x, int y);
27
33      void attaquerPlayer(Bomberman &b);
34
40      void recevoirDegat(Bomb &boom);
41
49      friend std::ostream &operator«(std::ostream &os, const Monster &p);
50
58      friend std::istream &operator»(std::istream &is, Monster &p);
59 };
60
61 #endif
```

5.5 Item.h

```
1 #ifndef __ITEM__
2 #define __ITEM__
3
```

```
4 #include "../../Joueur/entete/Bomberman.h"
5
6 using namespace std;
7
12 class Item
13 {
14
15 protected:
16     int x;
17     int y;
18     int valeur = 7;
19
20 public:
26     int getX() const;
27
33     int getY() const;
34
40     int getValeur() const;
41
47     void setX(int x);
48
54     void setY(int y);
55
61     void setValeur(int valeur);
62
68     virtual void effetPlayer(Bomberman &b);
69
75     virtual void effetBomb(Bomb &b);
76 };
77
78 #endif
```

5.6 MoreBomb.h

```
1 #ifndef __MOREBOMB__
2 #define __MOREBOMB__
3
4 #include "Item.h"
5
6 using namespace std;
7
12 class MoreBomb : public Item
13 {
14
15 public:
21     MoreBomb();
22
30     MoreBomb(int x, int y);
31
38     void effetPlayer(Bomberman &b);
39 };
40
41 #endif
```

5.7 MoreLife.h

```
1 #ifndef __MORELIFE__
2 #define __MORELIFE__
3 #include "Item.h"
4
5 using namespace std;
6
11 class MoreLife : public Item
12 {
13
14 public:
20     MoreLife();
21
29     MoreLife(int x, int y);
30
37     void effetPlayer(Bomberman &b);
38 };
39
40 #endif
```

5.8 PowerUp.h

```
1 #ifndef __POWERUP__
2 #define __POWERUP__
3
4 #include "Item.h"
5
6 using namespace std;
7
12 class PowerUp : public Item
13 {
14
15 public:
21     PowerUp();
22
30     PowerUp(int x, int y);
31
38     void effetBomb(Bomb &b);
39 };
40
41 #endif
```

5.9 ScaleUp.h

```
1 #ifndef __SCALEUP__
2 #define __SCALEUP__
3 #include "Item.h"
4
5 using namespace std;
6
11 class ScaleUp : public Item
12 {
13
14 public:
20     ScaleUp();
21
29     ScaleUp(int x, int y);
30
37     void effetBomb(Bomb &b);
38 };
39
40 #endif
```

5.10 SpeedUp.h

```
1 #ifndef __SPEEDUP__
2 #define __SPEEDUP__
3 #include "Item.h"
4
5 using namespace std;
6
11 class SpeedUp : public Item
12 {
13
14 public:
20     SpeedUp();
21
29     SpeedUp(int x, int y);
30
37     void effetPlayer(Bomberman &b);
38 };
39
40 #endif
```

5.11 Bomb.h

```
1 #ifndef __BOMB__
2 #define __BOMB__
3
4 using namespace std;
5
10 class Bomb
11 {
12
13 protected:
```

```
14      int portee = 1;
15      int degat = 50;
16      int x;
17      int y;
18
19      int varb = 11;
20      int bomb = 111;
21      int explosionH = 1111;
22      int explosionV = 11111;
23
24      int compteur = 0;
25      int tmpi = -1;
26      int tmpj = -1;
27
28  public:
29      bool poser = false;
35      Bomb();
36
45      Bomb(int x, int y, int degat, int portee);
46
53      int getPortee() const;
54
61      int getDegat() const;
62
69      int getX() const;
70
77      int getY() const;
78
85      int getVarb() const;
86
93      int getBomb() const;
94
101      int getExplosionH() const;
102
108      int getExplosionV() const;
109
116      int getCompteur() const;
117
124      int getTmpi() const;
125
132      int getTmpj() const;
133
140      void setPortee(int portee);
141
148      void setDegat(int degat);
149
156      void setX(int x);
157
164      void setY(int y);
165
172      void setCompteur(int compteur);
173
180      void setTmpi(int tmpi);
181
188      void setTmpj(int tmpj);
189
190      void BombePosee();
191
200      friend std::ostream &operator«(std::ostream &os, const Bomb &p);
201
210      friend std::istream &operator»(std::istream &is, Bomb &p);
211  };
212
213  #endif
```

5.12 Bomberman.h

```
1  #ifndef __BOMBERMAN__
2  #define __BOMBERMAN__
3  #include <string>
4  #include "Bomb.h"
5  #include <vector>
6
11 class Bomberman
12 {
13
14 protected:
15         std::string nom;
16         int vie = 100;
17         int x;
18         int y;
19         int vitesse = 1;
20         int nbBomb = 3;
```

```
21
22          int valeur = 1;
23
24 public:
25          bool Vivant = false;
26          std::vector<Bomb> tabB;
27
28          Bomb boom;
29
41          Bomberman(std::string nom, int vie, int x, int y, int vitesse, int nbBomb, Bomb boom);
42
47          Bomberman();
48
54          int getX() const;
55
61          int getY() const;
62
68          int getVie() const;
69
75          int getVitesse() const;
76
82          int getNbBomb() const;
83
89          int getValeur() const;
90
96          void setX(int x);
97
103          void setY(int y);
104
110          void setVie(int vie);
111
117          void setVitesse(int vitesse);
118
124          void setNbBomb(int nbBomb);
125
133          friend std::ostream &operator«(std::ostream &os, const Bomberman &p);
134
142          friend std::istream &operator»(std::istream &is, Bomberman &p);
143 };
144
145 #endif
```

5.13 Map.h

```
1 #ifndef __MAP__
2 #define __MAP__
3 #include <windows.h>
4 #include <sstream>
5 #include <cstring>
6 #include <iostream>
7
8 #include "../../Item/entete/MoreLife.h"
9 #include "../../Item/entete/SpeedUp.h"
10 #include "../../Item/entete/MoreBomb.h"
11 #include "../../Item/entete/ScaleUp.h"
12 #include "../../Item/entete/PowerUp.h"
13
14 #include "Sand.h"
15 #include "Wall.h"
16
17 #include "../../Ennemi/entete/Monster.h"
18 #include "../../Ennemi/entete/Ghost.h"
19 #include "../../Ennemi/entete/Bowman.h"
20
25 class Map
26 {
27 public:
28     int const static nbligne = 14;
29     int const static nbcolonne = 14;
30     int tab[nbligne][nbcolonne];
31     std::string nom;
32
33     Monster mons;
34     Ghost ghos;
35     Bowman bowm;
36
37     Bomberman player1;
38     Bomb bomb1;
39
40     Wall wall;
41     Sand sand;
42
43     MoreLife morL;
```

```
44      MoreBomb morB;
45      SpeedUp spee;
46      ScaleUp scal;
47      PowerUp power;
48
49      std::vector<Ennemi *> tabM;
50
56      Map(std::string nom);
57
62      void afficher();
63
69      void creerMap();
70
79      std::string convertir(int i, int j);
80
87      void remplirMur(Tile w);
88
95      void remplirSable(Tile w);
96
103      void remplirItem(Item &k);
104
111      void remplirPlayer(Bomberman &b);
112
124      void mouvementPlayer(Bomberman &b, Bomb &bomb, Item &k1, Item &k2, Item &k3, Item &k4, Item &k5);
125
131      void remplirMonstre(Ennemi &b);
132
140      void mouvementMonstre(Ennemi &b, Bomberman &bo);
141
152      void effetMonstre(Ennemi &b, Bomberman &bo, int DI, int DJ, int deplacement);
153
161      void explosionBombe(Bomberman &b, Bomb &bomb);
162
177      void effetItem(Bomberman &b, Bomb &bomb, Item &k1, Item &k2, Item &k3, Item &k4, Item &k5, int i,
       int j);
178
184      void tuerMonstre();
185
193      bool victoire();
194 };
195
196 #endif
```

5.14 Sand.h

```
1 #ifndef __SAND__
2 #define __SAND__
3 #include "Tile.h"
4
5 using namespace std;
6
11 class Sand : public Tile
12 {
13
14 protected:
15      int nbvie = 5;
16
17 public:
18      bool Vivant = false;
19
25      Sand();
26
33      Sand(int x, int y);
34
40      int getNbVie() const;
41
47      void setNbVie(int nbvie);
48 };
49
50 #endif
```

5.15 Tile.h

```
1 #ifndef __TILE__
2 #define __TILE__
3
4 using namespace std;
5
10 class Tile
```

```
11 {
12 protected:
13     int x;
14     int y;
15     int valeur = 2;
16
17 public:
24     int getX() const;
25
32     int getY() const;
33
39     int getValeur() const;
40
47     void setX(int x);
48
55     void setY(int y);
56 };
57
58 #endif
```

5.16 Wall.h

```
1 #ifndef __WALL__
2 #define __WALL__
3 #include "Tile.h"
4
9 class Wall : public Tile
10 {
11 public:
17     Wall();
18
25     Wall(int x, int y);
26 };
27
28 #endif
```

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