

# wxBlokus Reference Manual

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# Chapter 1

## wxBlokus Hierarchical Index

### 1.1 wxBlokus Class Hierarchy

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

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Game . . . . .	14
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## Chapter 2

# wxBlokus Class Index

### 2.1 wxBlokus Class List

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

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<b>BlokusTile</b> (Blokus tile ) . . . . .	6
<b>DefaultRules</b> (Default rules ) . . . . .	9
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## Chapter 3

# wxBlokus Class Documentation

### 3.1 BlokusApp Class Reference

Application entry point.

```
#include <blokusApp.h>
```

#### 3.1.1 Detailed Description

Application entry point.

Sets up a **wxBlokus** (p. 30) frame as a top-level window when the application starts.

Definition at line 10 of file `blokusApp.h`.

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

- `blokusApp.h`
- `blokusApp.cpp`

## 3.2 BlokusTile Class Reference

Blokus tile.

```
#include <BlokusTile.h>
```

### Public Member Functions

- **u8 getAmount ()**  
*Get amount.*
- **void setAmount (u8 amount)**  
*Set amount.*
- **u8 getScore ()**  
*Get score.*
- **void setScore (u8 score)**  
*Set score.*
- **Tile \* getTileData ()**  
*Get **Tile** (p. 25) data.*
- **void setTile (Tile \*tile)**  
*Set **Tile** (p. 25) data.*

### Protected Attributes

- **Tile \* TileData**
- **u8 Amount**
- **u8 Score**

#### 3.2.1 Detailed Description

Blokus tile.

Wraps tile data and adds amount and score to it.

Definition at line 8 of file BlokusTile.h.

#### 3.2.2 Member Function Documentation

##### 3.2.2.1 u8 BlokusTile::getAmount () [inline]

Get amount.

Returns amount of tiles.

Definition at line 13 of file BlokusTile.h.

References Amount.

Referenced by `Player::getScore()`, `TilePanel::OnPaint()`, `DefaultRules::PlacedTile()`, `Game::SaveGame()`, `Player::setNextValidTile()`, and `DefaultRules::ValidPlaceTile()`.

#### 3.2.2.2 void BlokusTile::setAmount (u8 *amount*) [inline]

Set amount.

Sets amount of tiles.

Definition at line 17 of file `BlokusTile.h`.

References `Amount`.

Referenced by `Game::LoadGame()`, and `DefaultRules::PlacedTile()`.

#### 3.2.2.3 u8 BlokusTile::getScore () [inline]

Get score.

Gets score per tiles.

Definition at line 21 of file `BlokusTile.h`.

References `Score`.

Referenced by `Player::getScore()`.

#### 3.2.2.4 void BlokusTile::setScore (u8 *score*) [inline]

Set score.

Sets score per tiles.

Definition at line 25 of file `BlokusTile.h`.

References `Score`.

#### 3.2.2.5 Tile\* BlokusTile::getTileData () [inline]

Get **Tile** (p. 25) data.

Returns pointer to actual tile data.

Definition at line 29 of file `BlokusTile.h`.

References `TileData`.

Referenced by `wxBlokus::KeyDown()`, `TilePanel::OnPaint()`, `FieldPanel::OnPaint()`, `Game::PlaceTile()`, and `DefaultRules::ValidPlaceTile()`.

#### 3.2.2.6 void BlokusTile::setTile (Tile \* *tile*) [inline]

Set **Tile** (p. 25) data.

Associates **BlokusTile** (p. 6) with actual data.

Definition at line 33 of file `BlokusTile.h`.

References `TileData`.

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

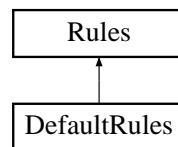
- [BlokusTile.h](#)

## 3.3 DefaultRules Class Reference

Default rules.

```
#include <DefaultRules.h>
```

Inheritance diagram for DefaultRules::



### Public Member Functions

- **DefaultRules** ()  
*DefaultRules* (p. 9) constructor.
- virtual **~DefaultRules** ()  
*DefaultRules* (p. 9) destructor.
- **Player \* CreatePlayers** ()  
*Create players.*
- bool **ValidPlaceTile** (**Field** \*field, **Player** \*player, **BlokusTile** \*tile, u8 x, u8 y)  
*Checks if a tile can be placed at a certain location.*
- void **PlacedTile** (**Field** \*field, **Player** \*player, **BlokusTile** \*tile, u8 x, u8 y)  
*Called after a tile has been placed.*

#### 3.3.1 Detailed Description

Default rules.

The default Blokus rules

Definition at line 8 of file DefaultRules.h.

#### 3.3.2 Constructor & Destructor Documentation

##### 3.3.2.1 DefaultRules::DefaultRules ()

**DefaultRules** (p. 9) constructor.

Sets field width, height, **Player** (p. 18) count and initialize standard tiles.

Definition at line 5 of file DefaultRules.cpp.

References **Rules::FieldHeight**, **Rules::FieldWidth**, and **Rules::PlayerCount**.

### 3.3.2.2 DefaultRules::~~DefaultRules () [virtual]

**DefaultRules** (p. 9) destructor.

Destroy the standard tiles.

Definition at line 15 of file DefaultRules.cpp.

## 3.3.3 Member Function Documentation

### 3.3.3.1 Player \* DefaultRules::CreatePlayers () [virtual]

Create players.

Allocates a list of players and gives them a **TileSet** (p. 28).

Implements **Rules** (p. 24).

Definition at line 204 of file DefaultRules.cpp.

References Rules::PlayerCount.

### 3.3.3.2 bool DefaultRules::ValidPlaceTile (Field \* *field*, Player \* *player*, BlokusTile \* *tile*, u8 *x*, u8 *y*) [virtual]

Checks if a tile can be placed at a certain location.

Checks if a tile can be placed at a certain location, according to the official Blokus rules.

Implements **Rules** (p. 24).

Definition at line 20 of file DefaultRules.cpp.

References Tile::Blocks, BlokusTile::getAmount(), Player::getTeam(), BlokusTile::getTileData(), Tile::Height, Player::PlacedFirstTile(), and Tile::Width.

### 3.3.3.3 void DefaultRules::PlacedTile (Field \* *field*, Player \* *player*, BlokusTile \* *tile*, u8 *x*, u8 *y*) [virtual]

Called after a tile has been placed.

Removes a tile from the count and sets that player has used a tile.

Implements **Rules** (p. 24).

Definition at line 198 of file DefaultRules.cpp.

References BlokusTile::getAmount(), BlokusTile::setAmount(), and Player::UsedTile().

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

- DefaultRules.h
- DefaultRules.cpp

## 3.4 FieldPanel Class Reference

Field panel.

```
#include <FieldPanel.h>
```

### Public Member Functions

- **FieldPanel** (**Game** \*game, wxWindow \*parent, wxWindowID id=wxID\_ANY, const wxPoint &pos=wxDefaultPosition, const wxSize &size=wxDefaultSize)  
*FieldPanel* (p. 11) constructor.
- void **OnPaint** (wxPaintEvent &event)  
*Paint event.*
- u8 **getTileX** ()  
*Gets X coordinate for the tile.*
- u8 **getTileY** ()  
*Gets Y coordinate for the tile.*
- void **setTileX** (u8 value)  
*Sets X coordinate for the tile.*
- void **setTileY** (u8 value)  
*Sets Y coordinate for the tile.*
- void **setGame** (**Game** \*game)  
*Sets pointer to game.*

### 3.4.1 Detailed Description

Field panel.

Displays a field.

Definition at line 9 of file FieldPanel.h.

### 3.4.2 Constructor & Destructor Documentation

- #### 3.4.2.1 FieldPanel::FieldPanel (Game \* game, wxWindow \* parent, wxWindowID id = wxID\_ANY, const wxPoint & pos = wxDefaultPosition, const wxSize & size = wxDefaultSize)

**FieldPanel** (p. 11) constructor.

Shows itself, initialises and sets values.

Definition at line 10 of file FieldPanel.cpp.

### 3.4.3 Member Function Documentation

#### 3.4.3.1 void FieldPanel::OnPaint (wxPaintEvent & *event*)

Paint event.

Paints out the field.

Definition at line 22 of file FieldPanel.cpp.

References Tile::Blocks, Game::getCurrentPlayer(), Player::getCurrentTile(), Game::getField(), Player::getTeam(), BlokusTile::getTileData(), Tile::Height, Game::isValidPlace(), and Tile::Width.

#### 3.4.3.2 u8 FieldPanel::getTileX () [inline]

Gets X coordinate for the tile.

Gets the X coordinate for the displayed tile.

Definition at line 23 of file FieldPanel.h.

Referenced by wxBlokus::KeyDown().

#### 3.4.3.3 u8 FieldPanel::getTileY () [inline]

Gets Y coordinate for the tile.

Gets the Y coordinate for the displayed tile.

Definition at line 27 of file FieldPanel.h.

Referenced by wxBlokus::KeyDown().

#### 3.4.3.4 void FieldPanel::setTileX (u8 *value*) [inline]

Sets X coordinate for the tile.

Sets the X coordinate for the displayed tile.

Definition at line 31 of file FieldPanel.h.

Referenced by wxBlokus::KeyDown(), and wxBlokus::OnNew().

#### 3.4.3.5 void FieldPanel::setTileY (u8 *value*) [inline]

Sets Y coordinate for the tile.

Sets the Y coordinate for the displayed tile.

Definition at line 35 of file FieldPanel.h.

Referenced by wxBlokus::KeyDown(), and wxBlokus::OnNew().

#### 3.4.3.6 void FieldPanel::setGame (Game \* *game*) [inline]

Sets pointer to game.

Sets the **Game** (p. 14) pointer from which the class reads.



Definition at line 39 of file FieldPanel.h.

Referenced by wxBlokus::OnNew().

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

- FieldPanel.h
- FieldPanel.cpp

## 3.5 Game Class Reference

**Game** (p. 14) class.

`#include <Game.h>`

### Public Member Functions

- **Game** (**Rules** \*rules, void(\*endGameCallback)())  
*Game* (p. 14) constructor.
- **~Game** ()  
*Game* (p. 14) destructor.
- bool **PlaceTile** (**BlokusTile** \*tile, u8 x, u8 y)  
*Place tile.*
- bool **isValidPlace** (**BlokusTile** \*tile, u8 x, u8 y)  
*Checks if tile placement is valid.*
- **Field** \* **getField** ()  
*Get Field.*
- **Rules** \* **getRules** ()  
*Get Riield.*
- u8 **getPlayerCount** ()  
*Get **Player** (p. 18) count.*
- **Player** \* **getPlayerList** ()  
*Get **Player** (p. 18) list.*
- **Player** \* **getCurrentPlayer** ()  
*Get current **Player** (p. 18).*
- **Player** \* **getPlayer** (u8 index)  
*Get **Player** (p. 18).*
- void **CyclePlayers** ()  
*Cycle players.*
- void **EndGame** ()  
*End game.*
- bool **SaveGame** (const char \*path)  
*Save game.*
- bool **LoadGame** (const char \*path)  
*Load game.*

### 3.5.1 Detailed Description

**Game** (p. 14) class.

Most game-related stuff happens here.

Definition at line 10 of file Game.h.

### 3.5.2 Constructor & Destructor Documentation

#### 3.5.2.1 **Game::Game** (Rules \* *rules*, void(\*)() *endGameCallback*)

**Game** (p. 14) constructor.

Has all game components allocated by **Rules** (p. 23).

Definition at line 5 of file Game.cpp.

References Rules::CreateField(), Rules::CreatePlayers(), and Rules::getPlayerCount().

#### 3.5.2.2 **Game::~~Game** ()

**Game** (p. 14) destructor.

Destroys field and players.

Definition at line 20 of file Game.cpp.

### 3.5.3 Member Function Documentation

#### 3.5.3.1 **bool Game::PlaceTile** (BlokusTile \* *tile*, u8 *x*, u8 *y*)

Place tile.

Places a tile if possible.

Definition at line 29 of file Game.cpp.

References Tile::Blocks, CyclePlayers(), EndGame(), getCurrentPlayer(), Player::getTeam(), BlokusTile::getTileData(), Tile::Height, Rules::PlacedTile(), Rules::ValidPlaceTile(), and Tile::Width.

Referenced by wxBlokus::KeyDown().

#### 3.5.3.2 **bool Game::isValidPlace** (BlokusTile \* *tile*, u8 *x*, u8 *y*) [inline]

Checks if tile placement is valid.

Calls GameRules::ValidPlaceTile, returns true if tile placement is valid.

Definition at line 28 of file Game.h.

References getCurrentPlayer(), and Rules::ValidPlaceTile().

Referenced by FieldPanel::OnPaint().

#### 3.5.3.3 Field\* Game::getField () [inline]

Get Field.

Returns field.

Definition at line 32 of file Game.h.

Referenced by wxBlokus::KeyDown(), and FieldPanel::OnPaint().

#### 3.5.3.4 Rules\* Game::getRules () [inline]

Get Rield.

Returns current **Rules** (p. 23).

Definition at line 36 of file Game.h.

#### 3.5.3.5 u8 Game::getPlayerCount () [inline]

Get **Player** (p. 18) count.

Returns player count.

Definition at line 40 of file Game.h.

Referenced by wxBlokus::ShowScore().

#### 3.5.3.6 Player\* Game::getPlayerList () [inline]

Get **Player** (p. 18) list.

Returns pointer to player list.

Definition at line 44 of file Game.h.

#### 3.5.3.7 Player\* Game::getCurrentPlayer () [inline]

Get current **Player** (p. 18).

Returns pointer to current player.

Definition at line 48 of file Game.h.

Referenced by isValidPlace(), wxBlokus::KeyDown(), FieldPanel::OnPaint(), PlaceTile(), wxBlokus::RefreshTilePanels(), and wxBlokus::wxBlokus().

#### 3.5.3.8 Player\* Game::getPlayer (u8 *index*) [inline]

Get **Player** (p. 18).

Returns pointer to requested player.

Definition at line 52 of file Game.h.

Referenced by LoadGame(), SaveGame(), and wxBlokus::ShowScore().

**3.5.3.9 void Game::CyclePlayers () [inline]**

Cycle players.

Sets next player as current.

Definition at line 56 of file Game.h.

Referenced by wxBlokus::OnSkip(), and PlaceTile().

**3.5.3.10 void Game::EndGame () [inline]**

End game.

Calls endgame callback.

Definition at line 66 of file Game.h.

Referenced by PlaceTile().

**3.5.3.11 bool Game::SaveGame (const char \* *path*)**

Save game.

Saves current state to path.

Definition at line 74 of file Game.cpp.

References Tile::Blocks, BlokusTile::getAmount(), TileSet::getNumTiles(), getPlayer(), TileSet::getTile(), Tile::Height, Player::PlacedFirstTile(), and Tile::Width.

Referenced by wxBlokus::OnSave().

**3.5.3.12 bool Game::LoadGame (const char \* *path*)**

Load game.

Loads previous state from path.

Definition at line 108 of file Game.cpp.

References Tile::Blocks, TileSet::getNumTiles(), getPlayer(), TileSet::getTile(), Tile::Height, BlokusTile::setAmount(), and Tile::Width.

Referenced by wxBlokus::OnLoad().

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

- Game.h
- Game.cpp

## 3.6 Player Class Reference

**Player** (p. 18).

```
#include <Player.h>
```

### Public Member Functions

- **Player** ()  
*Player* (p. 18) constructor.
- **u8 getTeam** ()  
*Get team.*
- **void setTeam** (u8 team)  
*Set team.*
- **void setNextTile** ()  
*Set next tile.*
- **void setPreviousTile** ()  
*Set previous tile.*
- **BlokusTile \* getPreviousTile** ()  
*Get previous tile.*
- **BlokusTile \* getNextTile** ()  
*Get next tile.*
- **BlokusTile \* getCurrentTile** ()  
*Get current tile.*
- **bool setNextValidTile** ()  
*Set next valid tile.*
- **TileSet \* getTileSet** ()  
*Get TileSet* (p. 28).
- **bool PlacedFirstTile** ()  
*Gets player's placed first tile status.*
- **void UsedTile** ()  
*Used tile.*
- **u16 getScore** ()  
*Get score.*

## Protected Member Functions

- **u8 NextIndex ()**  
*Next index.*
- **u8 PreviousIndex ()**  
*Previous index.*

## Protected Attributes

- **u8 Team**
- **u8 TileIndex**
- **TileSet Tiles**
- **bool HasPlacedTile**

### 3.6.1 Detailed Description

**Player** (p. 18).

Contains information on a certain player.

Definition at line 11 of file Player.h.

### 3.6.2 Constructor & Destructor Documentation

#### 3.6.2.1 **Player::Player ()** [inline]

**Player** (p. 18) constructor.

Sets default properties.

Definition at line 16 of file Player.h.

References `HasPlacedTile`, `setTeam()`, and `TileIndex`.

### 3.6.3 Member Function Documentation

#### 3.6.3.1 **u8 Player::getTeam ()** [inline]

Get team.

Returns player's team.

Definition at line 21 of file Player.h.

References `Team`.

Referenced by `FieldPanel::OnPaint()`, `Game::PlaceTile()`, `wxBlokus::RefreshTilePanels()`, `DefaultRules::ValidPlaceTile()`, and `wxBlokus::wxBlokus()`.

#### 3.6.3.2 **void Player::setTeam (u8 team)** [inline]

Set team.

Sets player's team.

Definition at line 25 of file Player.h.

References Team.

Referenced by Player().

#### **3.6.3.3 void Player::setNextTile () [inline]**

Set next tile.

Sets next tile as current.

Definition at line 29 of file Player.h.

References NextIndex(), and TileIndex.

Referenced by wxBlokus::KeyDown().

#### **3.6.3.4 void Player::setPreviousTile () [inline]**

Set previous tile.

Sets previous tile as current.

Definition at line 33 of file Player.h.

References PreviousIndex(), and TileIndex.

Referenced by wxBlokus::KeyDown().

#### **3.6.3.5 BlokusTile\* Player::getPreviousTile () [inline]**

Get previous tile.

Gets previous tile.

Definition at line 37 of file Player.h.

References TileSet::getTile(), PreviousIndex(), and Tiles.

Referenced by wxBlokus::RefreshTilePanels(), and wxBlokus::wxBlokus().

#### **3.6.3.6 BlokusTile\* Player::getNextTile () [inline]**

Get next tile.

Gets next tile.

Definition at line 41 of file Player.h.

References TileSet::getTile(), NextIndex(), and Tiles.

Referenced by wxBlokus::RefreshTilePanels(), and wxBlokus::wxBlokus().

#### **3.6.3.7 BlokusTile\* Player::getCurrentTile () [inline]**

Get current tile.

Gets current tile.



Definition at line 45 of file Player.h.

References `TileSet::getTile()`, `TileIndex`, and `Tiles`.

Referenced by `wxBlokus::KeyDown()`, `FieldPanel::OnPaint()`, `wxBlokus::RefreshTilePanels()`, `setNextValidTile()`, and `wxBlokus::wxBlokus()`.

#### 3.6.3.8 `bool Player::setNextValidTile ()` [inline]

Set next valid tile.

Sets next valid tile as current, if there are any.

Definition at line 49 of file Player.h.

References `BlokusTile::getAmount()`, `getCurrentTile()`, `TileSet::getNumTiles()`, `TileSet::getTile()`, `NextIndex()`, `TileIndex`, and `Tiles`.

#### 3.6.3.9 `TileSet* Player::getTileSet ()` [inline]

Get `TileSet` (p. 28).

Gets player's `TileSet` (p. 28).

Definition at line 71 of file Player.h.

References `Tiles`.

#### 3.6.3.10 `bool Player::PlacedFirstTile ()` [inline]

Gets player's placed first tile status.

Returns true if the player has placed a tile, else false.

Definition at line 75 of file Player.h.

References `HasPlacedTile`.

Referenced by `Game::SaveGame()`, and `DefaultRules::ValidPlaceTile()`.

#### 3.6.3.11 `void Player::UsedTile ()` [inline]

Used tile.

Sets player's tile as used.

Definition at line 79 of file Player.h.

References `HasPlacedTile`.

Referenced by `DefaultRules::PlacedTile()`.

#### 3.6.3.12 `u16 Player::getScore ()` [inline]

Get score.

Calculates and returns player's score.

Definition at line 83 of file Player.h.

References `BlokusTile::getAmount()`, `TileSet::getNumTiles()`, `BlokusTile::getScore()`, `TileSet::getTile()`, and `Tiles`.

Referenced by `wxBlokus::ShowScore()`.

#### **3.6.3.13   u8 Player::NextIndex ()   [inline, protected]**

Next index.

Returns next index.

Definition at line 98 of file `Player.h`.

References `TileSet::getNumTiles()`, `TileIndex`, and `Tiles`.

Referenced by `getNextTile()`, `setNextTile()`, and `setNextValidTile()`.

#### **3.6.3.14   u8 Player::PreviousIndex ()   [inline, protected]**

Previous index.

Returns previous index.

Definition at line 107 of file `Player.h`.

References `TileSet::getNumTiles()`, `TileIndex`, and `Tiles`.

Referenced by `getPreviousTile()`, and `setPreviousTile()`.

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

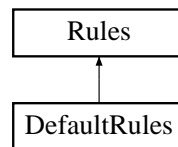
- `Player.h`

## 3.7 Rules Class Reference

**Rules** (p. 23).

```
#include <Rules.h>
```

Inheritance diagram for Rules::



### Public Member Functions

- virtual **Field** \* **CreateField** ()  
*Create field.*
- virtual **Player** \* **CreatePlayers** ()=0  
*Create players.*
- u8 **getPlayerCount** ()  
*Get player count.*
- virtual bool **ValidPlaceTile** (**Field** \*field, **Player** \*player, **BlokusTile** \*tile, u8 x, u8 y)=0  
*Tells if tile can be placed at location.*
- virtual void **PlacedTile** (**Field** \*field, **Player** \*player, **BlokusTile** \*tile, u8 x, u8 y)=0  
*Placed **Tile** (p. 25).*

### Protected Attributes

- u8 **FieldWidth**
- u8 **FieldHeight**
- u8 **PlayerCount**

#### 3.7.1 Detailed Description

**Rules** (p. 23).

Virtual base class. Handles creation of field, players etc..

Definition at line 10 of file Rules.h.

## 3.7.2 Member Function Documentation

### 3.7.2.1 `virtual Field* Rules::CreateField ()` [inline, virtual]

Create field.

Allocates and returns a field.

Definition at line 15 of file Rules.h.

References Tile::Blocks, FieldHeight, FieldWidth, Tile::Height, and Tile::Width.

Referenced by Game::Game().

### 3.7.2.2 `virtual Player* Rules::CreatePlayers ()` [pure virtual]

Create players.

Returns array of players.

Implemented in **DefaultRules** (p.10).

Referenced by Game::Game().

### 3.7.2.3 `u8 Rules::getPlayerCount ()` [inline]

Get player count.

Returns player count.

Definition at line 30 of file Rules.h.

References PlayerCount.

Referenced by Game::Game().

### 3.7.2.4 `virtual bool Rules::ValidPlaceTile (Field * field, Player * player, BlokusTile * tile, u8 x, u8 y)` [pure virtual]

Tells if tile can be placed at location.

Returns true if the tile can be placed by player at the location.

Implemented in **DefaultRules** (p.10).

Referenced by Game::IsValidPlace(), and Game::PlaceTile().

### 3.7.2.5 `virtual void Rules::PlacedTile (Field * field, Player * player, BlokusTile * tile, u8 x, u8 y)` [pure virtual]

Placed **Tile** (p.25).

Gets called by game after tile has been placed.

Implemented in **DefaultRules** (p.10).

Referenced by Game::PlaceTile().

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

- Rules.h

## 3.8 Tile Struct Reference

**Tile** (p. 25) struct.

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

### Public Attributes

- **u8 Width**
- **u8 Height**
- **Block \* Blocks**

#### 3.8.1 Detailed Description

**Tile** (p. 25) struct.

Contains width, height and Block array.

Definition at line 9 of file Tile.h.

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

- Tile.h

## 3.9 TilePanel Class Reference

**Tile** (p. 25) panel.

`#include <TilePanel.h>`

### Public Member Functions

- **TilePanel** (**BlokusTile** \*tile, u8 team, wxWindow \*parent, wxWindowID id=wxID\_ANY, const wxPoint &pos=wxDefaultPosition, const wxSize &size=wxDefaultSize)  
***TilePanel** (p. 26) constructor.*
- void **OnPaint** (wxPaintEvent &event)  
*Paint event.*
- void **setTeam** (u8 team)  
*Set team.*
- void **setTile** (**BlokusTile** \*tile)  
*Set **Tile** (p. 25).*

### 3.9.1 Detailed Description

**Tile** (p. 25) panel.

Displays a tile with color related to set team.

Definition at line 9 of file TilePanel.h.

### 3.9.2 Constructor & Destructor Documentation

- 3.9.2.1** **TilePanel::TilePanel** (**BlokusTile** \* *tile*, u8 *team*, wxWindow \* *parent*, wxWindowID *id* = wxID\_ANY, const wxPoint & *pos* = wxDefaultPosition, const wxSize & *size* = wxDefaultSize)

**TilePanel** (p. 26) constructor.

Sets tile and team.

Definition at line 11 of file TilePanel.cpp.

### 3.9.3 Member Function Documentation

- 3.9.3.1** void **TilePanel::OnPaint** (wxPaintEvent & *event*)

Paint event.

Draws the tile.

Definition at line 21 of file TilePanel.cpp.

References `Tile::Blocks`, `BlokusTile::getAmount()`, `BlokusTile::getTileData()`, `Tile::Height`, and `Tile::Width`.

**3.9.3.2 void TilePanel::setTeam (u8 *team*) [inline]**

Set team.

Sets display team for the tile.

Definition at line 23 of file TilePanel.h.

Referenced by wxBlokus::RefreshTilePanels().

**3.9.3.3 void TilePanel::setTile (BlokusTile \* *tile*) [inline]**

Set **Tile** (p. 25).

Sets tile to be displayed.

Definition at line 27 of file TilePanel.h.

Referenced by wxBlokus::RefreshTilePanels().

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

- TilePanel.h
- TilePanel.cpp

## 3.10 TileSet Class Reference

**Tile** (p. 25) set.

```
#include <TileSet.h>
```

### Public Member Functions

- **~TileSet** ()  
*TileSet* (p. 28) destructor.
- **u8 getNumTiles** ()  
*Get number of tiles.*
- **BlokusTile \* getTile** (u8 index)  
*Get a certain tile.*
- **void setTile** (u8 index, **BlokusTile** \*tile)  
*Set a certain tile.*
- **void setTileAmount** (u8 tileAmount)  
*Set tile amount.*
- **void setTileList** (**BlokusTile** \*tileList)  
*Set tile list.*

### 3.10.1 Detailed Description

**Tile** (p. 25) set.

**Tile** (p. 25) set for the player, contains amount of tiles and which tiles they are.

Definition at line 8 of file TileSet.h.

### 3.10.2 Constructor & Destructor Documentation

#### 3.10.2.1 TileSet::~~TileSet () [inline]

**TileSet** (p. 28) destructor.

Deletes tiles.

Definition at line 13 of file TileSet.h.

### 3.10.3 Member Function Documentation

#### 3.10.3.1 u8 TileSet::getNumTiles () [inline]

Get number of tiles.

Gets the amount of tiles in the set.



Definition at line 17 of file TileSet.h.

Referenced by Player::getScore(), Game::LoadGame(), Player::NextIndex(), Player::PreviousIndex(), Game::SaveGame(), and Player::setNextValidTile().

#### 3.10.3.2 **BlokusTile\*** TileSet::getTile (u8 *index*) [inline]

Get a certain tile.

Gets the requested tile.

Definition at line 21 of file TileSet.h.

Referenced by Player::getCurrentTile(), Player::getNextTile(), Player::getPreviousTile(), Player::getScore(), Game::LoadGame(), Game::SaveGame(), and Player::setNextValidTile().

#### 3.10.3.3 **void** TileSet::setTile (u8 *index*, BlokusTile \* *tile*) [inline]

Set a certain tile.

Overwrites a tile in the set to a specified one.

Definition at line 25 of file TileSet.h.

#### 3.10.3.4 **void** TileSet::setTileAmount (u8 *tileAmount*) [inline]

Set tile amount.

Sets amount of tiles, used during creation.

Definition at line 31 of file TileSet.h.

#### 3.10.3.5 **void** TileSet::setTileList (BlokusTile \* *tileList*) [inline]

Set tile list.

Sets the pointer to a **BlokusTile** (p. 6) array.

Definition at line 35 of file TileSet.h.

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

- TileSet.h

## 3.11 wxBlokus Class Reference

Main frame for Blokus.

```
#include <wxBlokus.h>
```

### Public Member Functions

- **wxBlokus** (const wxString &title, const wxPoint &pos, const wxSize &size)  
*wxBlokus* (p. 30) *constructor*
- **~wxBlokus** ()  
*wxBlokus* (p. 30) *destructor*
- void **OnQuit** (wxCommandEvent &event)  
*Quit event.*
- void **OnLoad** (wxCommandEvent &event)  
*Load event.*
- void **OnSave** (wxCommandEvent &event)  
*Save event.*
- void **OnAbout** (wxCommandEvent &event)  
*About event.*
- void **OnSkip** (wxCommandEvent &event)  
*Skip event.*
- void **OnCountScore** (wxCommandEvent &event)  
*Count score event.*
- void **OnNew** (wxCommandEvent &event)  
*New event.*
- void **KeyDown** (wxKeyEvent &event)  
*KeyDown event.*
- void **OnGameEnd** ()  
*Game* (p. 14) *End callback.*
- void **RefreshTilePanels** ()  
*Refresh tile panels.*
- void **ShowScore** ()  
*ShowScore.*

## Static Public Member Functions

- static void **GameEnd** ()  
*Static **Game** (p. 14) End callback.*

### 3.11.1 Detailed Description

Main frame for Blokus.

Main window. Contains **Rules** (p. 23) and **Game** (p. 14) for gameplay mechanics. A **FieldPanel** (p. 11), and a few instances of **TilePanel** (p. 26) show the previous, current and next **Tile** (p. 25). This frame also handles key events from child windows and have a couple of commands from menus that allows players save, load, skip one's turn etc.

Definition at line 20 of file wxBlokus.h.

### 3.11.2 Constructor & Destructor Documentation

#### 3.11.2.1 wxBlokus::wxBlokus (const wxString & *title*, const wxPoint & *pos*, const wxSize & *size*)

**wxBlokus** (p. 30) constructor

Allocates **Game** (p. 14), **Rules** (p. 23), and panels etc.

Definition at line 7 of file wxBlokus.cpp.

References `GameEnd()`, `Game::getCurrentPlayer()`, `Player::getCurrentTile()`, `Player::getNextTile()`, `Player::getPreviousTile()`, and `Player::getTeam()`.

#### 3.11.2.2 wxBlokus::~~wxBlokus ()

**wxBlokus** (p. 30) destructor

Deletes game and rules.

Definition at line 89 of file wxBlokus.cpp.

### 3.11.3 Member Function Documentation

#### 3.11.3.1 void wxBlokus::OnQuit (wxCommandEvent & *event*)

Quit event.

Closes the frame.

Definition at line 166 of file wxBlokus.cpp.

#### 3.11.3.2 void wxBlokus::OnLoad (wxCommandEvent & *event*)

Load event.

Loads a previously saved game from file selector.

Definition at line 181 of file wxBlokus.cpp.

References `Game::LoadGame()`, and `RefreshTilePanels()`.

#### **3.11.3.3 void wxBlokus::OnSave (wxCommandEvent & *event*)**

Save event.

Saves the current game.

Definition at line 198 of file `wxBlokus.cpp`.

References `Game::SaveGame()`.

#### **3.11.3.4 void wxBlokus::OnAbout (wxCommandEvent & *event*)**

About event.

Displays Blokus information.

Definition at line 171 of file `wxBlokus.cpp`.

#### **3.11.3.5 void wxBlokus::OnSkip (wxCommandEvent & *event*)**

Skip event.

Closes the frame.

Definition at line 110 of file `wxBlokus.cpp`.

References `Game::CyclePlayers()`, and `RefreshTilePanels()`.

#### **3.11.3.6 void wxBlokus::OnCountScore (wxCommandEvent & *event*)**

Count score event.

Displays the score in a message box.

Definition at line 156 of file `wxBlokus.cpp`.

References `ShowScore()`.

#### **3.11.3.7 void wxBlokus::OnNew (wxCommandEvent & *event*)**

New event.

Resets the game.

Definition at line 119 of file `wxBlokus.cpp`.

References `GameEnd()`, `RefreshTilePanels()`, `FieldPanel::setGame()`, `FieldPanel::setTileX()`, and `FieldPanel::setTileY()`.

#### **3.11.3.8 void wxBlokus::KeyDown (wxKeyEvent & *event*)**

KeyDown event.

Moves, changes and manipulates tiles based on key presses.

Definition at line 210 of file `wxBlokus.cpp`.

References `Game::getCurrentPlayer()`, `Player::getCurrentTile()`, `Game::getField()`, `BlokusTile::getTileData()`, `FieldPanel::getTileX()`, `FieldPanel::getTileY()`, `Tile::Height`, `Game::PlaceTile()`, `RefreshTilePanels()`, `Player::setNextTile()`, `Player::setPreviousTile()`, `FieldPanel::setTileX()`, `FieldPanel::setTileY()`, and `Tile::Width`.

#### 3.11.3.9 void wxBlokus::OnGameEnd ()

**Game** (p. 14) End callback.

Displays the score in a message box.

Definition at line 161 of file `wxBlokus.cpp`.

References `ShowScore()`.

Referenced by `GameEnd()`.

#### 3.11.3.10 void wxBlokus::RefreshTilePanels ()

Refresh tile panels.

Updates tile panels and has them redrawn.

Definition at line 95 of file `wxBlokus.cpp`.

References `Game::getCurrentPlayer()`, `Player::getCurrentTile()`, `Player::getNextTile()`, `Player::getPreviousTile()`, `Player::getTeam()`, `TilePanel::setTeam()`, and `TilePanel::setTile()`.

Referenced by `KeyDown()`, `OnLoad()`, `OnNew()`, and `OnSkip()`.

#### 3.11.3.11 static void wxBlokus::GameEnd () [inline, static]

Static **Game** (p. 14) End callback.

Calls the current `wxBlokus`' `GameEnd` function.

Definition at line 73 of file `wxBlokus.h`.

References `OnGameEnd()`.

Referenced by `OnNew()`, and `wxBlokus()`.

#### 3.11.3.12 void wxBlokus::ShowScore ()

`ShowScore`.

Displays the score in a message box.

Definition at line 136 of file `wxBlokus.cpp`.

References `Game::getPlayer()`, `Game::getPlayerCount()`, and `Player::getScore()`.

Referenced by `OnCountScore()`, and `OnGameEnd()`.

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

- `wxBlokus.h`
- `wxBlokus.cpp`

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