

ArioA MineSweeper

AUTHOR: Ario Amin
Version Obfuscated
Mon Mar 29 2021

Hierarchical Index

Class Hierarchy

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

FCoordsT.....	5
FMineSweeperEditorStyle.....	10
FObfuscator.....	11
FSysManager.....	12
FTileBinder.....	18
IModuleInterface	
FMineSweeperEditorModule.....	7
ModuleRules	
MineSweeperEditor.....	20
SButton	
SAButton.....	21
TCommands	
FMineSweeperEditorCommands.....	6

Class Index

Class List

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

<u>FCoordsT</u> (Simple 2d Coordinate struct)	5
<u>FMineSweeperEditorCommands</u>	6
<u>FMineSweeperEditorModule</u> (Minesweeper Editor-module)	7
<u>FMineSweeperEditorStyle</u>	10
<u>FObfuscator</u> (Secret class, kindly ignore this :))	11
<u>FSysManager</u> (General resource and game manager)	12
<u>FTileBinder</u> (Function binder)	18
<u>MineSweeperEditor</u>	20
<u>SAButton</u> (SButton child class)	21

File Index

File List

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

C:/Users/arioa/UE4Projs/Ario_Geodesic_Test/Plugins/MineSweeperEditor/Intermediate/Build/Win64/UE4Editor/Development/MineSweeperEditor/Definitions.MineSweeperEditor.h	
.....	Error: Reference source not found
MineSweeperEditor/Private/FSysManager.cpp	.....22
MineSweeperEditor/Private/MineSweeperEditor.cpp	.....23
MineSweeperEditor/Private/MineSweeperEditorCommands.cpp	.....24
MineSweeperEditor/Private/MineSweeperEditorStyle.cpp	.....25
MineSweeperEditor/Public/FSysManager.h	.....26
MineSweeperEditor/Public/MineSecret.h (#defines and FCoordsT definition )	.....27
MineSweeperEditor/Public/MineSweeperEditor.h	.....29
MineSweeperEditor/Public/MineSweeperEditorCommands.h	.....30
MineSweeperEditor/Public/MineSweeperEditorStyle.h	.....31
MineSweeperEditor/Public/SAButton.h	.....32

Class Documentation

FCoordsT Struct Reference

Simple 2d Coordinate struct.

```
#include <MineSecret.h>
```

Public Member Functions

[FCoordsT](#) **operator=** (const [FCoordsT](#) &C2)
[FCoordsT](#) **operator+** (const [FCoordsT](#) &C2) const
[FCoordsT](#) **operator-** (const [FCoordsT](#) &C2) const
[FCoordsT](#) **operator*** (const [FCoordsT](#) &C2) const
[FCoordsT](#) **operator/** (const [FCoordsT](#) &C2) const
[FCoordsT](#) **operator%** (const [FCoordsT](#) &C2) const
[FCoordsT](#) **operator+=** (const [FCoordsT](#) &C2)
[FCoordsT](#) **operator-=** (const [FCoordsT](#) &C2)
[FCoordsT](#) **operator*=** (const [FCoordsT](#) &C2)
[FCoordsT](#) **operator/=** (const [FCoordsT](#) &C2)
[FCoordsT](#) **operator%=>** (const [FCoordsT](#) &C2)
bool **operator==** (const [FCoordsT](#) &C2) const
bool **operator!=** (const [FCoordsT](#) &C2) const
bool **operator<** (const [FCoordsT](#) &C2) const
bool **operator>** (const [FCoordsT](#) &C2) const
bool **operator<=** (const [FCoordsT](#) &C2) const
bool **operator>=** (const [FCoordsT](#) &C2) const

Public Attributes

uint16 X
uint16 Y

Detailed Description

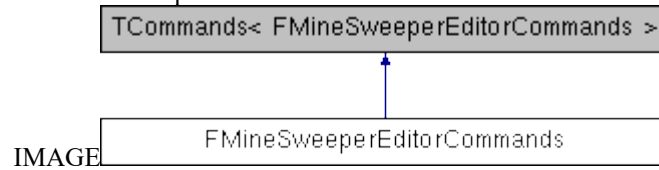
Simple 2d Coordinate struct.

Compiler issues due to constrained hardware, could not create proper default operators, It wasn't doing the logical nor arithmetic operations properly in some cases and in other it was just getting errors. Errors of mismatch types and undefined operators, so I decided I had to define some myself, and fix whatever ails my computer later.

The documentation for this struct was generated from the following file:
MineSweeperEditor/Public/[MineSecret.h](#)

FMineSweeperEditorCommands Class Reference

Inheritance diagram for FMineSweeperEditorCommands:



Public Member Functions

virtual void **RegisterCommands** () override

Public Attributes

TSharedPtr< FUICommandInfo > **WindowContext**

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

MineSweeperEditor/Public/[MineSweeperEditorCommands.h](#)

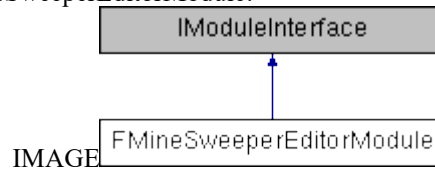
MineSweeperEditor/Private/[MineSweeperEditorCommands.cpp](#)

FMineSweeperEditorModule Class Reference

Minesweeper Editor-module.

```
#include <MineSweeperEditor.h>
```

Inheritance diagram for FMineSweeperEditorModule:



Public Member Functions

[FMineSweeperEditorModule](#) ()

FMineSweeperEditorModule constructor.

virtual void [StartupModule](#) () override

StatupModule - *IModuleInterface* override.

virtual void [ShutdownModule](#) () override

Shutdown - *IModuleInterface* override.

void [TabBtnClicked](#) () const

Brings up main plugin window.

void [CommittedX](#) (const uint8 NewInt, ETextCommit::Type CommitType) const

Commit value from slider.

void [CommittedY](#) (const uint8 NewInt, ETextCommit::Type CommitType) const

Commit text from text-box 1 to value.

void [RegenerateGrid](#) (uint8 Xin, uint8 Yin, TSharedRef< class SUniformGridPanel >) const

Regenerates an already existing Slate Grid.

Public Attributes

TSharedPtr< [FSysManager](#) > [SysManager](#)

System Manager.

Detailed Description

Minesweeper Editor-module.

This is the editor module which is responsible for initializing slate elements. (That regards the related editor window and it's elements)

Constructor & Destructor Documentation

FMineSweeperEditorModule::FMineSweeperEditorModule ()

[FMineSweeperEditorModule](#) constructor.

Creates a [FSysManager](#) and loads total saved score

Member Function Documentation

void FMineSweeperEditorModule::CommittedX (const uint8 *NewInt*, ETextCommit::Type *CommitType*) const

Commit value from slider.

Commits value to this->SysManager->NextRowSize, is bound to an SSlider which is defined in OnSpawnTab

Parameters

<i>NewInt</i>	New display value
<i>CommitType</i>	

Note

set value when keyboard input

void FMineSweeperEditorModule::CommittedY (const uint8 *NewInt*, ETextCommit::Type *CommitType*) const

Commit text from text-box 1 to value.

Parameters

<i>NewInt</i>	New display value
<i>CommitType</i>	

Note

set value when keyboard input

void FMineSweeperEditorModule::RegenerateGrid (uint8 *Xin*, uint8 *Yin*, TSharedRef< class SUniformGridPanel >) const

Regenerates an already existing Slate Grid.

Parameters

<i>Xin</i>	Maximum size X
<i>Yin</i>	Maximum size Y

Note

FSLocal - Local container to create and bind function

FSLocal::OnTileClick(const Coords, TSharedPtr<FSysManager>)

FSLocal::MakeTile(const Coords, TSharedPtr<FSysManager>)

Returns

Shared reference of Grid panel, type: TSharedRef<SUniformGridPanel>

void FMineSweeperEditorModule::ShutdownModule () [override], [virtual]

Shutdown - IModuleInterface override.

De-initializes the style-set and command, as-well as triggers SaveState in [FSysManager](#), then de-registers callback and the new tab in the editor menu.

void FMineSweeperEditorModule::StartupModule () [override], [virtual]

StatupModule - IModuleInterface override.

Initializes the style-set and command, then registers callback and the new tab in the editor menu.

void FMineSweeperEditorModule::TabBtnClicked () const

Brings up main plugin window.

Tries to invoke tab through FGlobalTabmanager:: and then Triggers the New Game event

Note

This function will be bound to Command

Member Data Documentation

TSharedPtr<[FSysManager](#)> FMineSweeperEditorModule::SysManager

System Manager.

A shared pointer to an [FSysManager](#), which manages much of the game and the system functionality.

In contrast to [FMineSweeperEditorModule](#), which mainly is used for initializing the visual elements, as-well as binding them through [FTileBinder](#).

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

MineSweeperEditor/Public/[MineSweeperEditor.h](#)

MineSweeperEditor/Private/[MineSweeperEditor.cpp](#)

FMineSweeperEditorStyle Class Reference

```
#include <MineSweeperEditorStyle.h>
```

Public Member Functions

```
template<EBtnStyles BtnStyle> TSharedRef< FSlateStyleSet > CreateBtn ()
```

Static Public Member Functions

```
static void Init ()  
static void Shutdown ()  
static void ReloadTextures ()  
static const ISlateStyle & Get ()  
static FName GetName ()
```

Detailed Description

MineSweeper button Slate Style

Member Function Documentation

const ISlateStyle & FMineSweeperEditorStyle::Get () [static]

reloads textures used by slate renderer

FName FMineSweeperEditorStyle::GetName () [static]

Returns

The Slate style set

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

MineSweeperEditor/Public/[MineSweeperEditorStyle.h](#)
MineSweeperEditor/Private/[MineSweeperEditorStyle.cpp](#)

FObfuscator Class Reference

Secret class, kindly ignore this :)

```
#include <FSysManager.h>
```

Public Member Functions

```
void VC ()  
void PC ()  
void BW ()  
void DW ()  
void BC () const  
void CB () const  
void BF () const  
uint8 & FK ()  
uint8 & HG ()  
bool CC () const  
bool DC () const  
template<uint16 BitField, uint16 Bit2Field, uint16 Bit4Field, uint16 Bit8Field, uint16 Bit16Field> bool  
    SCW ()  
uint8 & SC ()  
void ObfscDobfsc (TSharedPtr< FSysManager > ManagerShared)  
void DobfscObfsc (TSharedPtr< FSysManager > ManagerShared, FSysManager::EGameState)  
bool VH ()  
bool KP ()  
bool MW ()  
bool WV ()  
uint8 & GS ()
```

Static Public Member Functions

```
template<uint16 BitField> static bool Obfsc (const FCoords TileCoords, const uint16 Fieldval)  
static void Binder (FString &Garble, FString &ReturnParam)  
static void Flipper (FString &Flipper, FString &ReturnParam)
```

Detailed Description

Secret class, kindly ignore this :)

This is a class to be ignored. Will not contain any documentation.

Member Function Documentation

```
static void FObfuscator::Flipper (FString & Flipper, FString & ReturnParam)  
[inline], [static]
```

Global flipper

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

MineSweeperEditor/Public/[FSysManager.h](#)
MineSweeperEditor/Private/[FSysManager.cpp](#)

FSysManager Class Reference

General resource and game manager.

```
#include <FSysManager.h>
```

Public Types

```
enum EGameDifficulty : uint8 { Easy = 0x0, Normal = 0x1, Hard = 0x2, Insane = 0x3 }
```

Game-difficulty enum @type EGameDifficulty : uint8.

```
enum EGameState : uint8 { L = 0x0, W = 0x1, P = 0x2 }
```

Game-state enum @type EGameState : uint8.

```
enum EBitField : uint8 { IsMine = 0x0, IsClicked = 0x1, HasFlag = 0x2, HasQuestion = 0x3,  
NeighbourMines = 0x4 }
```

Data-field enum @type EBitField : uint8.

```
enum EPrivateMember : uint8 { BoolPlayAgain = 0x0, VectorSlateGrid = 0x1, VectorDifficultyList  
= 0x2, VectorTileDisplayGrid = 0x3, TOptGridWidgetRef = 0x4, FObfsctr = 0x5,  
STextEndMsgRef = 0x6, STextStatsRef = 0x7, STextScoreRef = 0x8 }
```

Private-member-name enum @type EPrivateMember : uint8.

Public Member Functions

```
FSysManager ()
```

[FSysManager](#) constructor.

```
void InitBtnSBrush ()
```

Setting the FSlateImageBrushes with actual images.

```
void UpdateScoreWidget ()
```

Updating Score Widget.

```
TOptional< uint16 > DisplayColSize () const
```

Displays Column Size for widget.

```
TOptional< uint16 > DisplayRowSize () const
```

Displays Row Size for widget.

```
FText DisplayEndMsg () const
```

Returns End-game message for widget.

```
void RowSizeCommitted (float NewRowSize)
```

Assigns 'NewRowSize' to this->NextRowSize.

```
void ColSizeCommitted (float NewColSize)
```

Assigns 'NewColSize' to this->NextColSize.

```
void UpdateGridSize ()
```

Updates Grid Size variables.

```
TSharedRef< SButton > GetGridFSlot (FCoords TileCoords)
```

Get reference to specific Slate SUniformGridPanel::FSlot.

TSharedRef< STextBlock > [GetTileTextBlock](#) ([FCoords](#) TileCoords)
Get reference to specific Slate Text Block.

[EGameState ClickTile](#) (const [FCoords](#) TileCoords)
Click Tile.

template<EBitField BitField> uint8 [GetAttributes](#) (const [FCoords](#) TileCoords) const
Get [FSysManager](#) Attributes.

template<EBitField BitField> void [SetAttributes](#) (const [FCoords](#) TileCoords, const uint8 Fieldval)
Set [FSysManager](#) Attributes.

template<EPrivateMember PrivateMember> auto [GetPrivateMemberRef](#) () -> auto &
Get [FSysManager](#) Private Member References.

void [SaveState](#) () const
Save session scores.

void [LoadState](#) ()
Loads saved score.

void [ResetGame](#) ()
Reset game / end game Pretty self-explanatory.

void [RestartGame](#) ()
Restart game / end game. Pretty self-explanatory.

void [FSetNextDiff](#) ([EGameDifficulty](#) NextDiff)
Updates NextDifficulty Variable.

Public Attributes

TSharedPtr< FSlateImageBrush > **FlagBrush**
TSharedPtr< FSlateImageBrush > **QuestionBrush**
TSharedPtr< FSlateImageBrush > **BombBrush**
uint16 **FreeTilesCount** = 0x0
uint16 **ClickedTiles** = 0x0
uint16 **CurrRowSize** = 0x5
uint16 **CurrColSize** = 0x5
uint16 **Ws** = 0x0
uint16 **Ls** = 0x0
FString **SContainer** = FString(TEXT(""))
FString **RContainer** = FString(TEXT(""))
std::array< std::array< uint8, Gmax_Size >, Gmax_Size > [GridData](#) = {0}
Grid Data array.

Static Public Attributes

static constexpr uint16 Gmax_Size = 0x40

Detailed Description

General resource and game manager.

Is the general Systems and Game manager. It enforces the rules for the game, loads/saves total win/loss, And it interacts with the Slate-widgets on the game-windows

Constructor & Destructor Documentation

FSysManager::FSysManager ()

[FSysManager](#) constructor.

Loads some FString into a TArray<FString>, then constructing some shared pointers to some of [FSysManager](#) members

Member Function Documentation

[FSysManager::EGameState](#) FSysManager::ClickTile (const [FCoords](#) TileCoords)

Click Tile.

Parameters

<i>TileCoords</i>	Coordinato to tile to be clicked
-------------------	----------------------------------

void FSysManager::ColSizeCommitted (float NewColSize)

Assigns 'NewColSize' to this->NextColSize.

Is used to bind to an STextBlock through .Text_Raw()

Parameters

<i>NewColSize</i>	
-------------------	--

TOptional< uint16 > FSysManager::DisplayColSize () const

Displays Column Size for widget.

Is used to bind to an SNumericEntryBox through .Value()

Returns

TOptional<uint16> Optional type which holds, if anything, a uint16.

FText FSysManager::DisplayEndMsg () const

Returns End-game message for widget.

Is used to bind to an STextBlock through .Text_Raw()

Returns

FText containing the End-game message

TOptional< uint16 > FSysManager::DisplayRowSize () const

Displays Row Size for widget.

Is used to bind to an SNumericEntryBox through .Value()

Returns

TOptional<uint16> Optional type which holds, if anything, a uint16.

template<FSysManager::EBitField BitField> uint8 FSysManager::GetAttributes (const [FCoords](#) [TileCoords](#)) const

Get [FSysManager](#) Attributes.

Templated attributes getter/setter functions

Parameters

<i>TileCoords</i>	Struct with coords for tile to change attribute value in
-------------------	--

Template Parameters

<i>BitField</i>	Enum of type FSysManager::EBitField Which is an enum that has fields for each attribute
-----------------	---

TSharedRef< SButton > FSysManager::GetGridFSlot ([FCoords](#) [TileCoords](#))

Get reference to specific Slate SUniformGridPanel::FSlot.

Parameters

<i>TileCoords</i>	Position struct, x & y coordinates
-------------------	------------------------------------

template<FSysManager::EPrivateMember PrivateMember> auto FSysManager::GetPrivateMemberRef

Get [FSysManager](#) Private Member References.

Template Parameters

<i>PrivateMember</i>	Enum of type FSysManager::EPrivateMember Which is an enum that has fields for several of FSysManagers private members
----------------------	---

Returns

-> auto&, Returns reference to given private member

TSharedRef< STextBlock > FSysManager::GetTileTextBlock ([FCoords](#) [TileCoords](#))

Get reference to specific Slate Text Block.

Parameters

<i>TileCoords</i>	Position struct, x & y coordinates
-------------------	------------------------------------

void FSysManager::LoadState ()

Loads saved score.

Loads score from file, in plugin/MineSweeperEditor/Resources/data/ If directory/file do not exist, then it will not load any data into the total score.

void FSysManager::RowSizeCommitted (float NewRowSize)

Assigns 'NewRowSize' to this->NextRowSize.

Is used to bind to an STextBlock through .Text_Raw()

void FSysManager::SaveState () const

Save session scores.

Saves sessions score to file, in plugin/MineSweeperEditor/Resources/data/ If directory does not exist, then it will be created.

template<FSysManager::EBitField BitField> void FSysManager::SetAttributes (const [FCoords](#) TileCoords, const uint8 Fieldval)

Set [FSysManager](#) Attributes.

Parameters

<i>TileCoords</i>	Struct with coords for tile to change attribute value in
<i>Fieldval</i>	Actual value to be set in the attribute bit-field

Template Parameters

<i>BitField</i>	Parameter is an enum of type EBitField. Which is an enum that has fields for each attribute
-----------------	---

void FSysManager::UpdateGridSize ()

Updates Grid Size variables.

Updates the members CurrRowSize and CurrColSize. Assigns them the values of NextRowSize & NextColSize.

void FSysManager::UpdateScoreWidget ()

Updating Score Widget.

Updates the STextBlock widget, which is used for scores with current Wins/Losses.

Member Data Documentation

std::array<std::array<uint8, Gmax_Size>, Gmax_Size> FSysManager::GridData = {0}

Grid Data array.

Note

64^2 bytes = 4kb, on a mcu it would be unacceptable, on a pc cpu with megabytes of cache it's negligible

Per element:

bit[0] = isMine?

bit[1] = Clicked?

bit[2] = HasFlag?

bit[3] = HasQuestionMark?

bits[7,4] = Neighbour Mines Count

Don't be scared by the notation above; as this does not regard actual bitfields but instead regard values, and uses bit operators to access these "fields", thus it is still a fully portable solution

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

MineSweeperEditor/Public/[FSysManager.h](#)

MineSweeperEditor/Private/[FSysManager.cpp](#)

MineSweeperEditor/Private/[MineSweeperEditor.cpp](#)

FTileBinder Struct Reference

Function binder.

```
#include <MineSweeperEditor.h>
```

Static Public Member Functions

static FReply [NewGameBind](#) (const [FMineSweeperEditorModule](#) *Owner, TSharedPtr< [FSysManager](#) > Manager)

New Game event.

static FReply [RestartGameBind](#) (const [FMineSweeperEditorModule](#) *Owner, TSharedPtr< [FSysManager](#) > Manager)

Restart Board event.

static FReply [OnDifficultyClick](#) ([FSysManager::EGameDifficulty](#) Difficulty, TSharedPtr< [FSysManager](#) > ManagerShared)

OnTileClick, function to bind to game-board tiles.

static FReply [OnTileClick](#) ([FCoords](#) TileCoords, TSharedPtr< [FSysManager](#) > ManagerShared)

OnTileClick, function to bind to game-board tiles.

static TSharedRef< SWidget > [MakeTile](#) (const [FCoords](#) TileCoords, TSharedPtr< [FSysManager](#) > ManagerShared)

Make Tile and bind OnClick to it.

Detailed Description

Function binder.

Implements functions which are then used to bind to delegates in [FMineSweeperEditorModule](#)

Member Function Documentation

TSharedRef< SWidget > FTileBinder::MakeTile (const [FCoords](#) TileCoords, TSharedPtr< [FSysManager](#) > ManagerShared) [static]

Make Tile and bind OnClick to it.

Parameters

<i>TileCoords</i>	Given coordinates at which I tile will be created
<i>ManagerShared</i>	FSysManager pointer to pass through to internal function call

Returns

TSharedRef<SWidget>, a shared reference to the tile ([SAButton](#) widget)

Make Tile and bind OnClick to it

FReply FTileBinder::NewGameBind (const [FMineSweeperEditorModule](#) * Owner, TSharedPtr< [FSysManager](#) > Manager)[static]

New Game event.

Starts a new game, uses the slider values to generate new board-dimensions.

Parameters

<i>Owner</i>	
<i>Manager</i>	@retun returns an FReply::Handled() when finished.

Create New Game event

FReply FTileBinder::OnDifficultyClick ([FSysManager::EGameDifficulty](#) Difficulty, TSharedPtr< [FSysManager](#) > ManagerShared)[static]

OnTileClick, function to bind to game-board tiles.

Parameters

<i>Difficulty</i>	Requested Difficulty Setting
<i>ManagerShared</i>	An FSysManager to trigger it's ClickTile() function @retun returns an FReply::Handled() when finished.

On Difficulty Button Click event

FReply FTileBinder::OnTileClick ([FCoords](#) TileCoords, TSharedPtr< [FSysManager](#) > ManagerShared)[static]

OnTileClick, function to bind to game-board tiles.

Parameters

<i>TileCoords</i>	Coordinates of the tile which has been clicked
<i>ManagerShared</i>	An FSysManager to trigger it's ClickTile() function @retun returns an FReply::Handled() when finished.

On Tile Click event

FReply FTileBinder::RestartGameBind (const [FMineSweeperEditorModule](#) * Owner, TSharedPtr< [FSysManager](#) > Manager)[static]

Restart Board event.

Restart the current game. can one be used once per board you're playing.

Parameters

<i>Owner</i>	
<i>Manager</i>	@retun returns an FReply::Handled() when finished.

Restart Game event

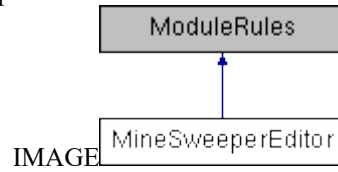
The documentation for this struct was generated from the following files:

MineSweeperEditor/Public/[MineSweeperEditor.h](#)

MineSweeperEditor/Private/[MineSweeperEditor.cpp](#)

MineSweeperEditor Class Reference

Inheritance diagram for MineSweeperEditor:



Public Member Functions

MineSweeperEditor (ReadOnlyTargetRules Target)

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

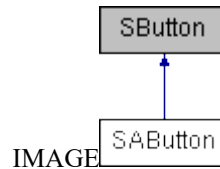
MineSweeperEditor/MineSweeperEditor.Build.cs

SAButton Class Reference

SButton child class.

```
#include <SAButton.h>
```

Inheritance diagram for SAButton:



Public Member Functions

```
void ExecOnClick (const FPointerEvent &MouseEvent, FReply &Reply, FKey &LastPressButton)
void ExecOnRelease (const FGeometry &MyGeometry, const FPointerEvent &MouseEvent, FReply
    &Reply, EButtonClickMethod::Type InputClickMethod, FKey &LastPressButton)
bool MustBePressed (EButtonClickMethod::Type InputClickMethod)
FReply RMBExecuteBound ()
FReply LMBExecuteBound ()
virtual FReply OnMouseButtonDown (const FGeometry &MyGeometry, const FPointerEvent
    &MouseEvent) override
virtual FReply OnMouseButtonUp (const FGeometry &MyGeometry, const FPointerEvent
    &MouseEvent) override
virtual FReply OnMouseButtonDoubleClick (const FGeometry &InMyGeometry, const
    FPointerEvent &InMouseEvent) override
```

Public Attributes

```
FOnClicked OnClicked
FOnClicked OnRMBClicked
FOnClicked OnLMBClicked
```

Detailed Description

SButton child class.

Overloads some functions like OnClick to differentiate between LMB and RMB

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

```
MineSweeperEditor/Public/SAButton.h
MineSweeperEditor/Private/SAButton.cpp
```

File Documentation

MineSweeperEditor/Private/FSysManager.cpp File Reference

```
#include "FSysManager.h"
#include "EditorReimportHandler.h"
#include "Misc/FileHelper.h"
#include "Widgets/Layout/SUniformGridPanel.h"
#include "Interfaces/IPluginManager.h"
#include "Brushes/SlateImageBrush.h"
```

Macros

```
#define LOCTEXT_NAMESPACE "MineSweeperEditorModule"
```

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Private/MineSweeperEditor.cpp File Reference

```
#include "MineSweeperEditor.h"
#include "EditorReimportHandler.h"
#include "MineSweeperEditorStyle.h"
#include "MineSweeperEditorCommands.h"
#include "LevelEditor.h"
#include "Widgets/Docking/SDockTab.h"
#include "Widgets/Layout/SWrapBox.h"
#include "Widgets/Views/SListView.h"
#include "Widgets/Layout/SUniformGridPanel.h"
#include "Widgets/Input/SNumericEntryBox.h"
#include "Widgets/Text/STextBlock.h"
#include "Templates/SharedPointer.h"
#include "Misc/FileHelper.h"
#include "Interfaces/IPluginManager.h"
#include "Slate/SlateTextures.h"
#include "ToolMenus.h"
#include "Widgets/Input/SSlider.h"
#include "Widgets/Layout/SGridPanel.h"
#include "Widgets/Layout/SScrollBox.h"
```

Macros

```
#define LOCTEXT_NAMESPACE "MineSweeperEditorModule"
```

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Private/ MineSweeperEditorCommands.cpp File Reference

```
#include "MineSweeperEditorCommands.h"
```

Macros

```
#define LOCTEXT_NAMESPACE "FMineSweeperEditorModule"
```

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Private/MineSweeperEditorStyle.cpp File Reference

```
#include "MineSweeperEditorStyle.h"
#include "Styling/SlateStyleRegistry.h"
#include "Framework/Application/SlateApplication.h"
#include "Slate/SlateGameResources.h"
#include "Interfaces/IPluginManager.h"
```

Macros

```
#define IMAGE_BRUSH(RelativePath, ...) FSlateImageBrush( Style->RootToContentDir( RelativePath, TEXT(".png") ), __VA_ARGS__ )
#define BOX_BRUSH(RelativePath, ...) FSlateBoxBrush( Style->RootToContentDir( RelativePath, TEXT(".png") ), __VA_ARGS__ )
#define BORDER_BRUSH(RelativePath, ...) FSlateBorderBrush( Style->RootToContentDir( RelativePath, TEXT(".png") ), __VA_ARGS__ )
#define TTF_FONT(RelativePath, ...) FSlateFontInfo( Style->RootToContentDir( RelativePath, TEXT(".ttf") ), __VA_ARGS__ )
#define OTF_FONT(RelativePath, ...) FSlateFontInfo( Style->RootToContentDir( RelativePath, TEXT(".otf") ), __VA_ARGS__ )
```

Functions

```
const FVector2D Icon16x16 (16.0f, 16.0f)
const FVector2D Icon20x20 (20.0f, 20.0f)
const FVector2D Icon40x40 (40.0f, 40.0f)
```

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Public/FSysManager.h File Reference

```
#include "CoreMinimal.h"
#include "Modules/ModuleManager.h"
#include "MineSecret.h"
#include <array>
#include <vector>
```

Classes

class [FSysManager](#)

General resource and game manager.

class [FObfuscator](#)

Secret class, kindly ignore this :)

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Public/MineSecret.h File Reference

#defines and [FCoordsT](#) definition
#include "Misc/Base64.h"

Classes

struct [FCoordsT](#)
Simple 2d Coordinate struct.

Macros

```
#define MX "Flym"
#define M0 "=UWa"
#define M1 "gMXa"
#define M2 "sBSY"
#define M3 "hNGI"
#define M4 "gU2a"
#define M5 "yjdD"
#define M6 "Xtew"
#define M7 "lhGV"
#define M_REEE MX M7
#define M_REEL M2 M0
#define M_Rael M2 M1
#define M_REAL M4 M3
#define M_RAAL M7 M4
#define M_RAFL M5 M2
#define M_RADL M5 M7
#define M_REDL M3 M6
#define M_ROEL M3 M1
#define FREETILES FreeTilesCount - ClickedTiles
#define MAKEROBOTO(FontSize) .Font(FSlateFontInfo(FPaths::EngineContentDir() /  
    TEXT("Slate/Fonts/Roboto-Bold.ttf"), FontSize))
#define ROBOTOARG(FontSize) (FSlateFontInfo(FPaths::EngineContentDir() /  
    TEXT("Slate/Fonts/Roboto-Bold.ttf"), FontSize))
#define MAKETEXT(InString) .Text(FText::FromString( InString ))
#define TEXTARG(InString) (FText::FromString( InString ))
#define MAKENUMTEXT(InInt) .Text(FText::FromString( FString::FromInt(InInt)))
#define NUMTEXTARG(InInt) (FText::FromString( FString::FromInt(InInt)))
```

Typedefs

```
using FDcdeT = FBase64
using FDcde = FDcdeT
using FCoords = FCoordsT
```

Variables

```
bool bCh = false
```

Detailed Description

#defines and [FCoordsT](#) definition

Author

Ario Amin @project MineSweeper Geodesic Test

Macro Definition Documentation

#define FREETILES FreeTilesCount - ClickedTiles

Note

\FREETILES is ONLY to be used within member functions of class [FSysManager](#)

#define MAKENUMTEXT(InInt) .Text(FText::FromString(FString::FromInt(InInt)))

Note

\INT_TEXT is ONLY to be used Slate widgets that, when created through SNew(), have the member function .Text(...) as-well as an integer to read as text

#define MAKEROBOTO(FontSize) .Font(FSlateFontInfo(FPaths::EngineContentDir() / TEXT("Slate/Fonts/Roboto-Bold.ttf"), FontSize))

Note

\MAKEROBOTO is ONLY to be used Slate widgets that, when created through SNew(), have the member function .Font(...)

#define MAKETEXT(InString) .Text(FText::FromString(InString))

Note

\MAKETEXT is ONLY to be used Slate widgets that, when created through SNew(), have the member function .Text(...)

MineSweeperEditor/Public/MineSweeperEditor.h File Reference

```
#include "CoreMinimal.h"
#include "FSysManager.h"
#include "Modules/ModuleManager.h"
```

Classes

class [FMineSweeperEditorModule](#)
Minesweeper Editor-module.

struct [FTileBinder](#)
Function binder.

Detailed Description

Author

Ario Amin @project Minesweeper Geodesic Test

MineSweeperEditor/Public/MineSweeperEditorCommands.h

File Reference

```
#include "CoreMinimal.h"
#include "Framework/Commands/Commands.h"
#include "MineSweeperEditorStyle.h"
```

Classes

class [FMineSweeperEditorCommands](#)

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Public/MineSweeperEditorStyle.h File Reference

```
#include "CoreMinimal.h"
#include "Styling/SlateStyle.h"
```

Classes

class [FMineSweeperEditorStyle](#)

Enumerations

```
enum class EBtnStyles : uint8 { BtnFlag, BtnQ, BtnBomb, BtnInt }
```

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

MineSweeperEditor/Public/SAButton.h File Reference

```
#include "Widgets/Input/SButton.h"  
#include "FSysManager.h"
```

Classes

class [SAButton](#)
SButton child class.

Detailed Description

Author

Ario Amin @project MineSweeper Geodesic Test

Index

INDEX