Code conversion from VB to C#

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UtilityFunction.cs

Comment out - using System.Data

Add - using SwinGameSDK;

Replace Line 139

switch (grid.Item(row, col))

with

switch (grid[row, col])

Comment out Lines 140-142

//case TileView.Ship:

//draw = false;

//break;

Replace Line 202

SwinGame.DrawBitmap(GameImage(shipName), colLeft, rowTop);

with

SwinGame.DrawBitmap(GameResources.GameImage(shipName), colLeft, rowTop);

Replace all occurences of GameImage with GameResources.GameImage - 5 instances

Replace all occurences of GameFont with GameResources.GameFont - 2 instances

Replace s.animationHasEnded with s.AnimationHasEnded

Replace DrawScreen() with GameController.DrawScreen()

Replace CurrentState with GameController.CurrentState

-------------------------------------------------------------------------MenuController.cs

Comment out Line 6 - using System.Data;

Lines 44, 45, 70, 72 - use of different colours (double check)

Line 114 - Replace KeyCode.VK\_ESCAPE with KeyCode.vk\_ESCAPE

Replace all occurences of EndCurrentState() with GameController.EndCurrentState() - 7 instances

Line 201 - Replace

for (i = 0; i <= \_menuStructure(menu).Length - 1; i++) {

with

for (i = 0; i <= \_menuStructure[menu].Length - 1; i++) {

Line 205 - Replace

SwinGame.DrawTextLines(\_menuStructure(menu)(i), MENU\_COLOR, Color.Black, GameFont("Menu"), FontAlignment.AlignCenter, btnLeft + TEXT\_OFFSET, btnTop + TEXT\_OFFSET, BUTTON\_WIDTH, BUTTON\_HEIGHT);

With

SwinGame.DrawTextLines(\_menuStructure(menu)(i), MENU\_COLOR, Color.Black, GameResources.GameFont("Menu"), FontAlignment.AlignCenter, btnLeft + TEXT\_OFFSET, btnTop + TEXT\_OFFSET, BUTTON\_WIDTH, BUTTON\_HEIGHT);

Line 121 - Replace

for (i = 0; i <= \_menuStructure(menu).Length - 1; i++) {

with

for (i = 0; i <= \_menuStructure(menu).Length - 1; i++) {

Line 235 - Replace

return IsMouseInRectangle(btnLeft, btnTop, BUTTON\_WIDTH, BUTTON\_HEIGHT);

with

return UtilityFunctions.IsMouseInRectangle(btnLeft, btnTop, BUTTON\_WIDTH, BUTTON\_HEIGHT);

Append GameController. to StartGame(), AddNewState() and SetDifficulty

-------------------------------------------------------------------------HighScoreController.cs

Comment out line 6 - using System.Data

~~Lines 19, 21 - some changes to the values assigned to variables~~

Line 137 - Replace

s = \_Scores.Item(i);

with

s = \_Scores[i];

Replace all instances of GameFont with GameResources.GameFont - 6 instances

Line 157 - replace VK\_ESCAPE with vk\_ESCAPE, and VK\_RETURN with vk\_RETURN

Append GameController. to all occurences of EndCurrentState(), AddNewState()

Append UtilityFunctions. to DrawBackground()

Line 177 - Replace

if (value > \_Scores.Item(\_Scores.Count - 1).Value) {

with

if (value > \_Scores[\_Scores.Count - 1].Value) {

-------------------------------------------------------------------------GameState.cs

Comment out Line 6 - using System.Data

-------------------------------------------------------------------------GameResources.cs

Comment out Line 6 - using System.Data

Line 75 - Replace return \_Fonts(font); with return return \_Fonts[font];

Line 86 - Replace return \_Images(image); with return \_Images[image];

Line 97 - Replace return \_Sounds(sound); with return \_Sounds[sound];

Line 108 - Replace return \_Music(music); with return \_Music[music];

Delete line 273 - Font obj = default(Font);

Edit line 274 - foreach ( obj in \_Fonts.Values) {

Change to foreach (Font obj in \_Fonts.Values) {

Do similarly for the methods FreeImages(), FreeSounds() and FreeMusic()

-------------------------------------------------------------------------GameLogic.cs

Comment out line 6 - using System.Data

Add - using SwinGameSDK;

Append GameResources to LoadResources(), GameMusic(...)and FreeResources()

Append GameController. to HandleUserInput(), DrawScreen() and CurrentState

-------------------------------------------------------------------------GameController.cs

Comment out using System.Data

Replace public GameController() with static GameController() - Line 54

Append UtilityFunctions. to AddExplosion(..), DrawAnimationSequence(), AddSplash(..), Message, UpdateAnimations(), DrawBackground() and DrawAnimations()

Append GameResources. to all occurrences of GameSound(..) - 8 instances

Append MenuController. to HandleMainMenuInput(), HandleGameMenuInput(), HandleSetupMenuInput(), DrawMainMenu(), DrawGameMenu(), DrawSettings()

Append DeploymentController. to HandleDeploymentInput() and DrawDeployment()

Append DiscoveryController. to HandleDiscoveryInput() and DrawDiscovery()

Append EndingGameController. to HandleEndOfGameInput() and DrawEndOfGame()

Append HighScoreController. to HandleHighScoreInput() and DrawHighScores()

-------------------------------------------------------------------------EndingGameController.cs

Comment out using System.Data

Append UtilityFunctions. to DrawField(...) and DrawSmallField(..)

Append GameController. to ComputerPlayer.PlayerGrid, ComputerPlayer, HumanPlayer.PlayerGrid, HumanPlayer, HumanPlayer.IsDestroyed, HumanPlayer.Score and EndCurrentState()

Append GameResources. to GameFont (2 occurrences)

Replace KeyCode.VK\_RETURN with KeyCode.vk\_RETURN and KeyCode.VK\_ESCAPE with KeyCode.vk\_ESCAPE

Append HighScoreController. to ReadHighScore

-------------------------------------------------------------------------DiscoveryGameController.cs

Comment out using System.Data

Append GameController. to AddNewState

Replace KeyCode.VK\_ESCAPE with KeyCode.vk\_ESCAPE

Append UtilityFunctions. to FIELD\_TOP, CELL\_HEIGHT, CELL\_GAP, FIELD\_LEFT, CELL\_WIDTH

Append GameController. to HumanPlayer and ComputerPlayer

Append GameController. to Attack(row, col)

Append UtilityFunctions. to DrawField, DrawSmallField and DrawMessage

Append GameResources. to GameFont

Replace KeyCode.VK\_LSHIFT with KeyCode.vk\_LSHIFT, KeyCode.VK\_RSHIFT with KeyCode.vk\_RSHIFT and KeyCode.VK\_C with KeyCode.vk\_c

-------------------------------------------------------------------------DeploymentController.cs

Comment out using System.Data

Correct all KeyCode settings.

Add GameController. to AddNewState(..), HumanPlayer., EndDeployment(),

Add UtilityFunctions. to IsMouseInRectangle(..), Message, DrawField(...), DrawMessage(), FIELD\_TOP, CELL\_HEIGHT, CELL\_GAP, FIELD\_LEFT, CELL\_WIDTH

Lines 178, 144 - Replace i = Conversion.Int(sn) - 1; with i =((int)sn) - 1;

Append GameResources to GameImage - 5 instances

Append GameResources to GameSound -

-------------------------------------------------------------------------AIHardPlayer.cs

Comment out using System.Data;

Line 125 and 351 - Replace EnemyGrid.Item(row, column) with EnemyGrid[row, column]

Line 194 - Replace Location source = default(Location); with Location source = null

-------------------------------------------------------------------------AIMediumPlayer.cs

Comment out using System.Data;

Line 55 and 116 - Replace EnemyGrid.Item(row, column) with EnemyGrid[row, column]

-------------------------------------------------------------------------AIOption.cs

Comment out using System.Data;

-------------------------------------------------------------------------AIPlayer.cs

Comment out using System.Data;

Add using SwinGameSDK;

Replace SwinGame.WindowCloseRequested with SwinGame.WindowCloseRequested()

Line 66, Replace

return @this != null && other != null && @this.Row == other.Row && @this.Column == other.Column;

with

return !ReferenceEquals(@this, null) && !ReferenceEquals(other, null) && @this.Row == other.Row && @this.Column == other.Column;

Line 77, Replace

return @this == null || other == null || @this.Row != other.Row || @this.Column != other.Column;

with

return ReferenceEquals(@this, null) || ReferenceEquals(other, null) || @this.Row != other.Row || @this.Column != other.Column;

-------------------------------------------------------------------------AttackResult.cs

Comment out using System.Data;

-------------------------------------------------------------------------BattleShipsGame.cs

Comment out using System.Data;

Line 43, replace get { return \_players(\_playerIndex); } with get { return \_players[\_playerIndex]; }

Replace lines 53-56

if (\_players(0) == null) {

\_players(0) = p;

} else if (\_players(1) == null) {

\_players(1) = p;

with

if (\_players[0] == null) {

\_players[0] = p;

} else if (\_players[1] == null) {

\_players[1] = p;

Replace line 69

\_players(0).Enemy = new SeaGridAdapter(\_players(1).PlayerGrid);

with

\_players[0].Enemy = new SeaGridAdapter(\_players[1].PlayerGrid);

Replace line 70

\_players(1).Enemy = new SeaGridAdapter(\_players(0).PlayerGrid);

with

\_players[1].Enemy = new SeaGridAdapter(\_players[0].PlayerGrid);

Replace line 88

if (\_players(otherPlayer).IsDestroyed) {

with

if (\_players[otherPlayer].IsDestroyed) {

-------------------------------------------------------------------------Direction.cs

Comment out using System.Data;

-------------------------------------------------------------------------ISeaGrid.cs

Comment out using System.Data;

Line 32, Replace TileView Item { get; } with TileView this[int row, int col] { get; }

-------------------------------------------------------------------------Player.cs

Comment out using System.Data;

Line 17 - Replace private SeaGrid \_playerGrid = new SeaGrid(\_Ships);

with private SeaGrid \_playerGrid;

Add line \_playerGrid = new SeaGrid(\_Ships); after line 45

Update method Ship (line 92)

Replace

public Ship Ship {

get {

if (name == ShipName.None)

return null;

return \_Ships.Item(name);

}

}

with

public Ship Ship(ShipName name) {

if (name == ShipName.None)

return null;

return \_Ships[name];

}

Additional code added at lines 192 and 197 (double check)

-------------------------------------------------------------------------ResultOfAttack.cs

Comment out using System.Data;

-------------------------------------------------------------------------SeaGrid.cs

Comment out using System.Data;

Line 22 - Replace private Tile[,] \_GameTiles = new Tile[Width, Height]; with private Tile[,] \_GameTiles;

Line 29 - Replace public event EventHandler ISeaGrid.Changed; with public event EventHandler Changed;

Lines 62-64, Replace

public TileView Item {

get { return \_GameTiles(x, y).View; }

}

with

public TileView this[int x, int y]

{

get { return \_GameTiles[x, y].View; }

}

Add line \_GameTiles = new Tile[Width, Height]; at start of method public SeaGrid(...) Line 85

Line 92 - Replace \_GameTiles(i, j) with \_GameTiles[i,j]

Line 108 - Replace Ship newShip = \_Ships(ship); with Ship newShip = \_Ships[ship];

Line 129 - Replace if (direction == direction.LeftRight) { with if (direction == Direction.LeftRight) {

Line 144 - Replace \_GameTiles(currentRow, currentCol).Ship = newShip; with \_GameTiles[currentRow, currentCol].Ship = newShip;

Replace \_GameTiles(row, col) with \_GameTiles[row, col] - 6 occurrences from line 174 onwards

-------------------------------------------------------------------------SeaGridAdapter.cs

Comment out using System.Data;

Replace lines 47-75 public TileView Item {

get {

TileView result = \_MyGrid.Item(x, y);

if (result == TileView.Ship) {

return TileView.Sea;

} else {

return result;

}

}

}

with

public TileView this[int x, int y] {

get {

TileView result = \_MyGrid[x, y];

if (result == TileView.Ship) {

return TileView.Sea;

} else {

return result;

}

}

}

Line 62 public event EventHandler ISeaGrid.Changed; with public event EventHandler Changed;

-------------------------------------------------------------------------

Ship.cs

Comment out using System.Data;

Line 83, replace \_sizeOfShip = \_shipName; with \_sizeOfShip = (int) \_shipName;

-------------------------------------------------------------------------

ShipName.cs

Comment out using System.Data;

-------------------------------------------------------------------------

Tile.cs

Comment out using System.Data;

-------------------------------------------------------------------------Tileview.cs

Comment out using System.Data;