

Main

```
private Maze maze;
private Image[][] images;
private int height;
private int width;

private void generateMazeAnimate(object sender, RoutedEventArgs e)
private void generatePath_Click(object sender, RoutedEventArgs e)
private void generateMazeFunction(object sender, RoutedEventArgs e)
private void DisplayWithAnimation()
```

PathFinding

```
private Maze Maze;
private Case[][] MazeArray;
private int[][] PathTake;
private int[][] Priority;
private string[] direction;
private int[] Start;
private int[] End;
private int x;
private int y;

public PathFinding(Maze maze)
private void MakePath()
public bool IsCaseInPath(int posx,int posy)
public string GetDirectionOfCase(int posx,int posy)
private bool IsAllPrioritySet()
private void Attributepriority()
public int[][] GetPriority()
public int[][] GetPathTake()
private Case GetLeftCase(int posx, int posy)
private Case GetRightCase(int posx, int posy)
private Case GetTopCase(int posx, int posy)
private Case GetBottomCase(int posx, int posy)
```

Maze

```
public Case[][] MazeArray;
private int x;
private int y;
private int startX;
private int startY;
private int endX;
private int endY;
private Random rnd;

public Maze(int x, int y)
public void GenerateMaze(int mod = 1)
public bool IsAllCaseLinked()
private void MakeAllLinkMod1()
private void MakeAllLinkMod2()
private void ChooseRandomConnexion(int i, int j, bool
    bool isTopAuthorised, bool isBottomAuthorised,
    bool isRightAuthorised, bool isLeftAuthorised)
private void ChangeAllCase(int from, int to)
private void ConnectCaseWithTopCase(int posx, int posy)
private void ConnectCaseWithBottomCase(int posx, int posy)
private void ConnectCaseWithLeftCase(int posx, int posy)
private void ConnectCaseWithRightCase(int posx, int posy)
private Case GetLeftCase(int posx, int posy)
private Case GetRightCase(int posx, int posy)
private Case GetTopCase(int posx, int posy)
private Case GetBottomCase(int posx, int posy)
public int GetStartX()
public int GetStartY()
public int GetLenX()
public int GetLenY()
public int GetEndX()
public int GetEndY()
public Case[][] GetMazeArray()
```

Case

```
private bool top;
private bool bottom;
private bool left;
private bool right;
private int posx;
private int posy;
private int connectedTo;
private int nbConnexion = 0;
private int Value;

public Case(int value,int posx,int
posy,int connectedTo)

public int GetValue()
public void SetValue(int val)
public bool GetTop()
public void SetTop(bool b)
public bool GetBottom()
public void SetBottom(bool b)
public bool GetRight()
public void SetRight(bool b)
public bool GetLeft()
public void SetLeft(bool b)
public int GetPosX()
public int GetPosY()
public int GetConnectedTo()
public void SetConnectedTo(int i)
public int GetNbConnexion()
public void SetNbConnexion(int i)

private void FromBoolToValue()
private void FromValueToBool()
```