

## Simulation Laby

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# Chapter 1

## Hierarchical Index

### 1.1 Class Hierarchy

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

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## Chapter 2

# Class Index

### 2.1 Class List

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

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## Chapter 3

# File Index

### 3.1 File List

Here is a list of all files with brief descriptions:

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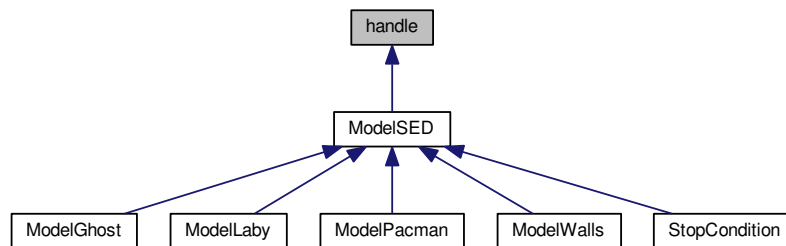


## Chapter 4

# Class Documentation

### 4.1 handle Class Reference

Inheritance diagram for handle:



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

- [ModelSED.m](#)

### 4.2 ModelCommand Class Reference

#### Public Member Functions

- [function f](#) (in obj, in [presentState](#))
- [function m](#) (in obj, in [presentState](#), in init)
- [function g](#) (in obj)

## Public Attributes

- Property [sizeTab](#)
- Property [knowCompart](#)
- Property [presentState](#)
- Property [Down](#)
- Property [Left](#)
- Property [Up](#)
- Property [Right](#)

## 4.2.1 Member Function Documentation

### 4.2.1.1 f()

```
function f (  
    in obj,  
    in presentState )
```

### 4.2.1.2 g()

```
function g (  
    in obj )
```

### 4.2.1.3 m()

```
function m (  
    in obj,  
    in presentState,  
    in init )
```

## 4.2.2 Member Data Documentation

### 4.2.2.1 Down

Property Down

#### 4.2.2.2 knowCompart

Property knowCompart

#### 4.2.2.3 Left

Property Left

#### 4.2.2.4 presentState

Property presentState

#### 4.2.2.5 Right

Property Right

#### 4.2.2.6 sizeTab

Property sizeTab

#### 4.2.2.7 Up

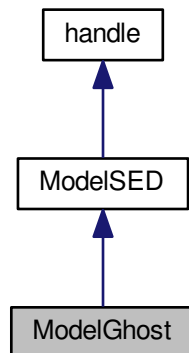
Property Up

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

- [ModelCommand.m](#)

## 4.3 ModelGhost Class Reference

Inheritance diagram for ModelGhost:



### Public Member Functions

- [function ModelGhost](#) (in initialValue)
- [function f](#) (in obj, in in, in in\_view, in wallsV, in wallsH, in ghost\_position)
- [function m](#) (in obj, in nextState, in init)
- [function g](#) (in obj)
- virtual [f](#) (in obj, in in)
- virtual [g](#) (in obj, in in)

### Public Attributes

- Property [presentState](#)
- Property [initialState](#)

### 4.3.1 Constructor & Destructor Documentation

#### 4.3.1.1 ModelGhost()

```
function ModelGhost (  
    in initialValue )
```

### 4.3.2 Member Function Documentation

#### 4.3.2.1 `f()` [1/2]

```
virtual f (  
    in obj,  
    in in ) [virtual], [inherited]
```

Reimplemented in [ModelLaby](#), and [ModelPacman](#).

#### 4.3.2.2 `f()` [2/2]

```
function f (  
    in obj,  
    in in,  
    in in_view,  
    in wallsV,  
    in wallsH,  
    in ghost_position )
```

#### 4.3.2.3 `g()` [1/2]

```
virtual g (  
    in obj,  
    in in ) [virtual], [inherited]
```

#### 4.3.2.4 `g()` [2/2]

```
function g (  
    in obj )
```

#### 4.3.2.5 `m()`

```
function m (  
    in obj,  
    in nextState,  
    in init ) [virtual]
```

Reimplemented from [ModelSED](#).

### 4.3.3 Member Data Documentation

#### 4.3.3.1 initialState

Property initialState

#### 4.3.3.2 presentState

Property presentState

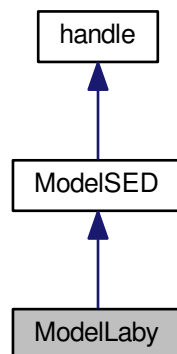
The documentation for this class was generated from the following file:

- [ModelGhost.m](#)

## 4.4 ModelLaby Class Reference

Class which contains the "fmg" structure of the labyrinth for 2 players

Inheritance diagram for ModelLaby:



### Public Member Functions

- [function ModelLaby](#) (in wallsV\_init, in wallsH\_init, in pacman\_init, in ghost\_init, in escape\_init, in caught\_init)  
*Class constructor of.*
- [function f](#) (in obj, in in)
- [function m](#) (in obj, in nextState, in init)
- [function g](#) (in obj)
- [function sameX\\_position](#) (in obj)
- [function sameY\\_position](#) (in obj)
- [function wallsVBetween](#) (in obj, in obj1, in obj2)
- [function wallsHBetween](#) (in obj, in obj1, in obj2)
- [function wallsVBetweenOne](#) (in obj, in obj1, in obj2)
- [function wallsHBetweenOne](#) (in obj, in obj1, in obj2)
- virtual [g](#) (in obj, in in)

## Public Attributes

- Property [presentState](#)  
*Data Structure of the current state of Labyrinth.*
- Property [initialState](#)

### 4.4.1 Detailed Description

Class which contains the "fmg" structure of the labyrinth for 2 players

Input : necessary information for compute the next state of the model

Output : output's action of the model State : minimal information necessary who evolve

### 4.4.2 Constructor & Destructor Documentation

#### 4.4.2.1 Modellaby()

```
function Modellaby (
    in wallsV_init,
    in wallsH_init,
    in pacman_init,
    in ghost_init,
    in escape_init,
    in caught_init )
```

Class constructor of.

#### Parameters

<i>wallsV_init</i>	Contain a matrix (N, N-1) of Initial Vertical Walls.
<i>wallsH_init</i>	Contain a matrix (N-1, N) of Initial Horizontal Walls.
<i>pacman_init</i>	Contain a vector (x, y) of Initial Position of Pacman.
<i>pacman_init</i>	Contain a vector (x, y) of Initial Position of Ghost.
<i>escape_init</i>	Contain a vector (x, y) of Escape's Position.
<i>caught_init</i>	Contain a integer of the number of times the Pacman was caught by the ghost.

#### Returns

instance of the [Modellaby](#) class.

### 4.4.3 Member Function Documentation

**4.4.3.1 f()**

```
function f (  
    in obj,  
    in in ) [virtual]
```

Reimplemented from [ModelSED](#).

**4.4.3.2 g() [1/2]**

```
virtual g (  
    in obj,  
    in in ) [virtual], [inherited]
```

**4.4.3.3 g() [2/2]**

```
function g (  
    in obj )
```

**4.4.3.4 m()**

```
function m (  
    in obj,  
    in nextState,  
    in init ) [virtual]
```

Reimplemented from [ModelSED](#).

**4.4.3.5 sameX\_position()**

```
function sameX_position (  
    in obj )
```

**4.4.3.6 sameY\_position()**

```
function sameY_position (  
    in obj )
```



#### 4.4.3.7 wallsHBetween()

```
function wallsHBetween (
    in obj,
    in obj1,
    in obj2 )
```

#### 4.4.3.8 wallsHBetweenOne()

```
function wallsHBetweenOne (
    in obj,
    in obj1,
    in obj2 )
```

#### 4.4.3.9 wallsVBetween()

```
function wallsVBetween (
    in obj,
    in obj1,
    in obj2 )
```

#### 4.4.3.10 wallsVBetweenOne()

```
function wallsVBetweenOne (
    in obj,
    in obj1,
    in obj2 )
```

### 4.4.4 Member Data Documentation

#### 4.4.4.1 initialState

Property initialState

#### 4.4.4.2 presentState

Property `presentState`

Data Structure of the current state of Labyrinth.

It contains "wallsV", "wallsH" (2 matrix for the walls), "ghost", "pacman" and "escape" , a Cartesian position of current position of ghost, pacman and escape.

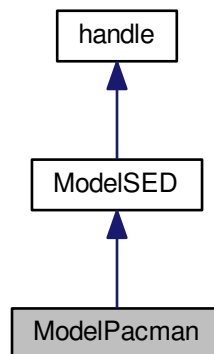
There is also 3 vectors : 'wallsAroundPacman', 'wallsAroundGhost' and 'ghostSeesPacman' A vector indicating the presence of a wall around the Pacman and ghost for the 4 directions Up Down Left Right

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

- [ModelLaby.m](#)

## 4.5 ModelPacman Class Reference

Inheritance diagram for ModelPacman:



### Public Member Functions

- [function ModelPacman](#) (in initialValue)
- [function f](#) (in obj, in in)
- [function m](#) (in obj, in nextState, in init)
- [function g](#) (in obj)
- virtual [g](#) (in obj, in in)

### Public Attributes

- Property [presentState](#)
- Property [initialState](#)
- Property [memory](#)
- Property [i](#)

## 4.5.1 Constructor & Destructor Documentation

### 4.5.1.1 ModelPacman()

```
function ModelPacman (  
    in initialValue )
```

## 4.5.2 Member Function Documentation

### 4.5.2.1 f()

```
function f (  
    in obj,  
    in in ) [virtual]
```

Reimplemented from [ModelSED](#).

### 4.5.2.2 g() [1/2]

```
virtual g (  
    in obj,  
    in in ) [virtual], [inherited]
```

### 4.5.2.3 g() [2/2]

```
function g (  
    in obj )
```

### 4.5.2.4 m()

```
function m (  
    in obj,  
    in nextState,  
    in init ) [virtual]
```

Reimplemented from [ModelSED](#).

### 4.5.3 Member Data Documentation

#### 4.5.3.1 i

Property i

#### 4.5.3.2 initialState

Property initialState

#### 4.5.3.3 memory

Property memory

#### 4.5.3.4 presentState

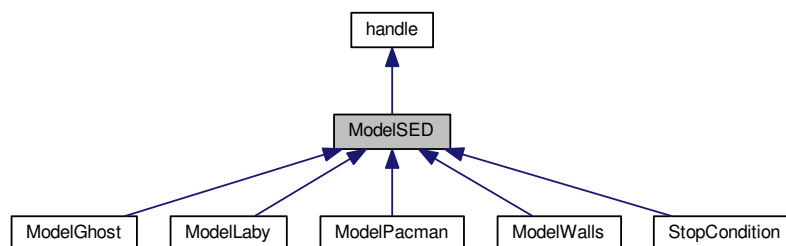
Property presentState

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

- [ModelPacman.m](#)

## 4.6 ModelSED Class Reference

Inheritance diagram for ModelSED:



## Public Member Functions

- virtual [f](#) (in obj, in in)
- virtual [m](#) (in obj, in nextState, in init)
- virtual [g](#) (in obj, in in)

## Public Attributes

- Property [presentState](#)
- Property [initialState](#)

### 4.6.1 Member Function Documentation

#### 4.6.1.1 [f\(\)](#)

```
virtual f (  
    in obj,  
    in in ) [virtual]
```

Reimplemented in [ModelLaby](#), and [ModelPacman](#).

#### 4.6.1.2 [g\(\)](#)

```
virtual g (  
    in obj,  
    in in ) [virtual]
```

#### 4.6.1.3 [m\(\)](#)

```
virtual m (  
    in obj,  
    in nextState,  
    in init ) [virtual]
```

Reimplemented in [ModelGhost](#), [ModelLaby](#), [ModelPacman](#), [ModelWalls](#), and [StopCondition](#).

### 4.6.2 Member Data Documentation

#### 4.6.2.1 initialState

Property `initialState`

#### 4.6.2.2 presentState

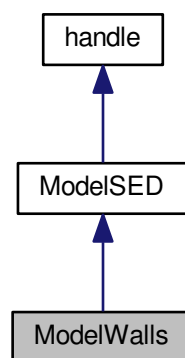
Property `presentState`

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

- [ModelSED.m](#)

## 4.7 ModelWalls Class Reference

Inheritance diagram for ModelWalls:



### Public Member Functions

- [function ModelWalls](#) (in `initValue`)
- [function f](#) (in `obj`)
- [function m](#) (in `obj`, in `nextState`, in `init`)
- [function g](#) (in `obj`)
- virtual [f](#) (in `obj`, in `in`)
- virtual [g](#) (in `obj`, in `in`)

### Public Attributes

- Property [presentState](#)
- Property [initialState](#)
- Property [i](#)
- Property [val](#)

## 4.7.1 Constructor & Destructor Documentation

### 4.7.1.1 ModelWalls()

```
function ModelWalls (
    in initValue )
```

## 4.7.2 Member Function Documentation

### 4.7.2.1 f() [1/2]

```
virtual f (
    in obj,
    in in ) [virtual], [inherited]
```

Reimplemented in [ModelLaby](#), and [ModelPacman](#).

### 4.7.2.2 f() [2/2]

```
function f (
    in obj )
```

### 4.7.2.3 g() [1/2]

```
virtual g (
    in obj,
    in in ) [virtual], [inherited]
```

### 4.7.2.4 g() [2/2]

```
function g (
    in obj )
```

#### 4.7.2.5 m()

```
function m (
    in obj,
    in nextState,
    in init ) [virtual]
```

Reimplemented from [ModelSED](#).

### 4.7.3 Member Data Documentation

#### 4.7.3.1 i

Property i

#### 4.7.3.2 initialState

Property initialState

#### 4.7.3.3 presentState

Property presentState

#### 4.7.3.4 val

Property val

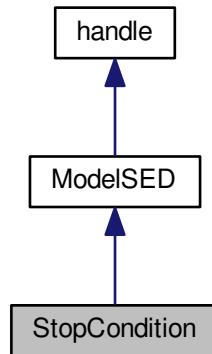
The documentation for this class was generated from the following file:

- [ModelWalls.m](#)



## 4.8 StopCondition Class Reference

Inheritance diagram for StopCondition:



### Public Member Functions

- [function StopCondition](#) (in `initCondition`)
- [function f](#) (in `obj`, in `noEscape`, in `caught`, in `pacmanWallsBreak`, in `ghostWallsBreak`)
- [function m](#) (in `obj`, in `nextState`, in `init`)
- [function g](#) (in `obj`)
- virtual [f](#) (in `obj`, in `in`)
- virtual [g](#) (in `obj`, in `in`)

### Public Attributes

- Property [presentState](#)
- Property [initialState](#)

### 4.8.1 Constructor & Destructor Documentation

#### 4.8.1.1 StopCondition()

```
function StopCondition (  
    in initCondition )
```

### 4.8.2 Member Function Documentation

#### 4.8.2.1 `f()` [1/2]

```
virtual f (  
    in obj,  
    in in ) [virtual], [inherited]
```

Reimplemented in [ModelLaby](#), and [ModelPacman](#).

#### 4.8.2.2 `f()` [2/2]

```
function f (  
    in obj,  
    in noEscape,  
    in caught,  
    in pacmanWallsBreak,  
    in ghostWallsBreak )
```

#### 4.8.2.3 `g()` [1/2]

```
virtual g (  
    in obj,  
    in in ) [virtual], [inherited]
```

#### 4.8.2.4 `g()` [2/2]

```
function g (  
    in obj )
```

#### 4.8.2.5 `m()`

```
function m (  
    in obj,  
    in nextState,  
    in init ) [virtual]
```

Reimplemented from [ModelSED](#).

### 4.8.3 Member Data Documentation

#### 4.8.3.1 initialState

Property `initialState`

#### 4.8.3.2 presentState

Property `presentState`

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

- [StopCondition.m](#)

## 4.9 Wrapper Class Reference

### Public Member Functions

- [function Wrapper](#) ([in](#) inSize, [in](#) outSize, [in](#) initLaby, [in](#) initWalls, [in](#) initPac, [in](#) initGhost, [in](#) initStop)
- [function updateConnexion](#) ([in](#) obj, [in](#) indBit, [in](#) value)
- [function init](#) ([in](#) obj)
- [function orderer](#) ([in](#) obj, [in](#) vectIn)
- [function get\\_stop](#) ([in](#) obj)
- [function get\\_out](#) ([in](#) obj)

### Public Attributes

- Property [wallsBit](#)
- Property [pacmanBit](#)
- Property [ghostBit](#)
- Property [modelLaby](#)
- Property [commandWalls](#)
- Property [commandGhost](#)
- Property [commandPacman](#)
- Property [stopCondition](#)
- Property [in](#)
- Property [out](#)
- Property [stop](#)
- Property [whoPlay](#)

#### 4.9.1 Constructor & Destructor Documentation

#### 4.9.1.1 Wrapper()

```
function Wrapper (
    in inSize,
    in outSize,
    in initLaby,
    in initWalls,
    in initPac,
    in initGhost,
    in initStop )
```

### 4.9.2 Member Function Documentation

#### 4.9.2.1 get\_out()

```
function get_out (
    in obj )
```

#### 4.9.2.2 get\_stop()

```
function get_stop (
    in obj )
```

#### 4.9.2.3 init()

```
function init (
    in obj )
```

#### 4.9.2.4 orderer()

```
function orderer (
    in obj,
    in vectIn )
```

#### 4.9.2.5 updateConnexion()

```
function updateConnexion (
    in obj,
    in indBit,
    in value )
```

### 4.9.3 Member Data Documentation

#### 4.9.3.1 commandGhost

Property commandGhost

#### 4.9.3.2 commandPacman

Property commandPacman

#### 4.9.3.3 commandWalls

Property commandWalls

#### 4.9.3.4 ghostBit

Property ghostBit

#### 4.9.3.5 in

Property in

#### 4.9.3.6 modelLaby

Property modelLaby

#### 4.9.3.7 out

Property out

#### 4.9.3.8 pacmanBit

Property pacmanBit

#### 4.9.3.9 stop

Property stop

#### 4.9.3.10 stopCondition

Property stopCondition

#### 4.9.3.11 wallsBit

Property wallsBit

#### 4.9.3.12 whoPlay

Property whoPlay

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

- [Wrapper.m](#)

## Chapter 5

# File Documentation

### 5.1 CreatePituresAndVideo.m File Reference

#### Functions

- [function CreatePituresAndVideo](#) (in *n*, in *escape\_i*, in *labyState*)

#### 5.1.1 Function Documentation

##### 5.1.1.1 CreatePituresAndVideo()

```
function CreatePituresAndVideo (
    in n,
    in escape_i,
    in labyState )
```

### 5.2 CreatePituresAndVideo\_textured.m File Reference

#### Functions

- [function CreatePituresAndVideo\\_textured](#) (in *n*, in *escape\_i*, in *labyState*)

#### 5.2.1 Function Documentation

### 5.2.1.1 CreatePituresAndVideo\_textured()

```
function CreatePituresAndVideo_textured (
    in n,
    in escape_i,
    in labyState )
```

## 5.3 figure\_Laby.m File Reference

### Functions

- [function figure\\_Laby](#) (in varargin)
- [function figure\\_Laby\\_OpeningFcn](#) (in hObject, in eventdata, in handles, in varargin)
- [function figure\\_Laby\\_OutputFcn](#) (in hObject, in eventdata, in handles)
- [function ui\\_Callback](#) (in hObject, in eventdata, in handles)
- [function connect\\_Callback](#) (in hObject, in eventdata, in handles)
- [function createUIPacman](#) (in handles)
- [function createUIGhost](#) (in handles)
- [function createUIWalls](#) (in handles)
- [function createUIEscape](#) (in handles)
- [function updateUI](#) (in handles, in out)
- [function updateUIActiveCammand](#) (in handles)
- [function updateUIButton](#) (in handles)
- [function updateUIPlayer](#) (in handles, in strPlayer, in position)
- [function updateUICaught](#) (in elementToSet, in caughtInt, in stp)
- [function updateUIEscape](#) (in elementToSet, in boolState)
- [function updateUIWallsAround](#) (in handles, in strElement, in wallsAround)
- [function updateUIWalls](#) (in wallsUI, in vertWalls, in horizWalls)
- [function isOne](#) (in boolCond)
- [function updatePresenceDetectorDisplay](#) (in elementToSet, in boolCondition)
- [function resetUIConnection](#) (in handles)

### 5.3.1 Function Documentation

#### 5.3.1.1 connect\_Callback()

```
function connect_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.3.1.2 createUIEscape()

```
function createUIEscape (
    in handles )
```



#### 5.3.1.3 createUIGhost()

```
function createUIGhost (  
    in handles )
```

#### 5.3.1.4 createUIPacman()

```
function createUIPacman (  
    in handles )
```

#### 5.3.1.5 createUIWalls()

```
function createUIWalls (  
    in handles )
```

#### 5.3.1.6 figure\_Laby()

```
function figure_Laby (  
    in varargin )
```

#### 5.3.1.7 figure\_Laby\_OpeningFcn()

```
function figure_Laby_OpeningFcn (  
    in hObject,  
    in eventdata,  
    in handles,  
    in varargin )
```

#### 5.3.1.8 figure\_Laby\_OutputFcn()

```
function figure_Laby_OutputFcn (  
    in hObject,  
    in eventdata,  
    in handles )
```

#### 5.3.1.9 isOne()

```
function isOne (
    in boolCond )
```

#### 5.3.1.10 resetUIConnection()

```
function resetUIConnection (
    in handles )
```

#### 5.3.1.11 ui\_Callback()

```
function ui_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.3.1.12 updatePresenceDetectorDisplay()

```
function updatePresenceDetectorDisplay (
    in elementToSet,
    in boolCondition )
```

#### 5.3.1.13 updateUI()

```
function updateUI (
    in handles,
    in out )
```

#### 5.3.1.14 updateUIActiveCammand()

```
function updateUIActiveCammand (
    in handles )
```

#### 5.3.1.15 updateUIButton()

```
function updateUIButton (
    in handles )
```

#### 5.3.1.16 updateUICaught()

```
function updateUICaught (
    in elementToSet,
    in caughtInt,
    in stp )
```

#### 5.3.1.17 updateUIEscape()

```
function updateUIEscape (
    in elementToSet,
    in boolState )
```

#### 5.3.1.18 updateUIPlayer()

```
function updateUIPlayer (
    in handles,
    in strPlayer,
    in position )
```

#### 5.3.1.19 updateUIWalls()

```
function updateUIWalls (
    in wallsUI,
    in vertWalls,
    in horizWalls )
```

#### 5.3.1.20 updateUIWallsAround()

```
function updateUIWallsAround (
    in handles,
    in strElement,
    in wallsAround )
```

## 5.4 LabyMenu.m File Reference

### Functions

- [function LabyMenu](#) (in varargin)
- [function LabyMenu\\_OpeningFcn](#) (in hObject, in eventdata, in handles, in varargin)
- [function LabyMenu\\_OutputFcn](#) (in hObject, in eventdata, in handles)
- [function OneEasy\\_Callback](#) (in hObject, in eventdata, in handles)
- [function TwoHard\\_Callback](#) (in hObject, in eventdata, in handles)
- [function TwoMedium\\_Callback](#) (in hObject, in eventdata, in handles)
- [function TwoEasy\\_Callback](#) (in hObject, in eventdata, in handles)
- [function OneMedium\\_Callback](#) (in hObject, in eventdata, in handles)
- [function OneHard\\_Callback](#) (in hObject, in eventdata, in handles)
- [function slider1\\_Callback](#) (in hObject, in eventdata, in handles)
- [function slider1\\_CreateFcn](#) (in hObject, in eventdata, in handles)

### 5.4.1 Function Documentation

#### 5.4.1.1 LabyMenu()

```
function LabyMenu (  
    in varargin )
```

#### 5.4.1.2 LabyMenu\_OpeningFcn()

```
function LabyMenu_OpeningFcn (  
    in hObject,  
    in eventdata,  
    in handles,  
    in varargin )
```

#### 5.4.1.3 LabyMenu\_OutputFcn()

```
function LabyMenu_OutputFcn (  
    in hObject,  
    in eventdata,  
    in handles )
```

#### 5.4.1.4 OneEasy\_Callback()

```
function OneEasy_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.5 OneHard\_Callback()

```
function OneHard_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.6 OneMedium\_Callback()

```
function OneMedium_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.7 slider1\_Callback()

```
function slider1_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.8 slider1\_CreateFcn()

```
function slider1_CreateFcn (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.9 TwoEasy\_Callback()

```
function TwoEasy_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.10 TwoHard\_Callback()

```
function TwoHard_Callback (
    in hObject,
    in eventdata,
    in handles )
```

#### 5.4.1.11 TwoMedium\_Callback()

```
function TwoMedium_Callback (
    in hObject,
    in eventdata,
    in handles )
```

### 5.5 main.m File Reference

### 5.6 matrixAllPossible.m File Reference

### 5.7 ModelCommand.m File Reference

#### Classes

- class [ModelCommand](#)

### 5.8 ModelGenerator/AutomatonSchedulingCreation.m File Reference

#### Functions

- [function](#) ()

#### 5.8.1 Function Documentation

##### 5.8.1.1 function()

```
function ( )
```

## 5.9 ModelGenerator/AutomatonStrutureLabyCreation.m File Reference

### Functions

- [function AutomatonStrutureLabyCreation](#) (in labySize, in playerPosition, in escapePosition, in playerName)

#### 5.9.1 Function Documentation

##### 5.9.1.1 AutomatonStrutureLabyCreation()

```
function AutomatonStrutureLabyCreation (
    in labySize,
    in playerPosition,
    in escapePosition,
    in playerName )
```

## 5.10 ModelGenerator/AutomatonWallsConstraintsCreation.m File Reference

### Functions

- [function AutomatonWallsConstraintsCreation](#) (in verticalsWalls, in horizontalsWalls, in FirstWallsMove)

#### 5.10.1 Function Documentation

##### 5.10.1.1 AutomatonWallsConstraintsCreation()

```
function AutomatonWallsConstraintsCreation (
    in verticalsWalls,
    in horizontalsWalls,
    in FirstWallsMove )
```

## 5.11 ModelGenerator/generer\_lab.m File Reference

### Functions

- [function generer\\_lab](#) (in Matrice\_Horizontale, in Matrice\_Verticale)

### 5.11.1 Function Documentation

#### 5.11.1.1 generer\_lab()

```
function generer_lab (
    in Matrice_Horizontale,
    in Matrice_Verticale )
```

## 5.12 ModelGenerator/modelGenerator.m File Reference

## 5.13 ModelGenerator/Plan\_desumaFunctions\_2Players.m File Reference

### Functions

- [function writeStates](#) (in prefix, in nbrOfStates, in initialIndices, in markedStatesIndices)
- [function writeTransitions](#) (in prefix, in datas)
- [function SaveDESUMAFile](#) (in transitionsString, in statesString, in fileName)
- [function AutomatonStrutureLabyCreation](#) (in labySize, in playerPosition, in escapePosition, in playerName)
- [function](#) ()

### 5.13.1 Function Documentation

#### 5.13.1.1 AutomatonStrutureLabyCreation()

```
function AutomatonStrutureLabyCreation (
    in labySize,
    in playerPosition,
    in escapePosition,
    in playerName )
```

#### 5.13.1.2 function()

```
function ( )
```



#### 5.13.1.3 SaveDESUMAFFile()

```
function SaveDESUMAFFile (
    in transitionsString,
    in statesString,
    in fileName )
```

#### 5.13.1.4 writeStates()

```
function writeStates (
    in prefix,
    in nbrOfStates,
    in initialIndice,
    in markedStatesIndices )
```

#### 5.13.1.5 writeTransitions()

```
function writeTransitions (
    in prefix,
    in datas )
```

## 5.14 ModelGenerator/SaveDESUMAFFile.m File Reference

### Functions

- [function SaveDESUMAFFile](#) (in transitionsString, in statesString, in fileName)

#### 5.14.1 Function Documentation

##### 5.14.1.1 SaveDESUMAFFile()

```
function SaveDESUMAFFile (
    in transitionsString,
    in statesString,
    in fileName )
```

## 5.15 ModelGenerator/writeStates.m File Reference

### Functions

- [function writeStates](#) (in prefix, in nbrOfStates, in initialIndice, in markedStatesIndices)

### 5.15.1 Function Documentation

#### 5.15.1.1 writeStates()

```
function writeStates (
    in prefix,
    in nbrOfStates,
    in initialIndice,
    in markedStatesIndices )
```

## 5.16 ModelGenerator/writeTransitions.m File Reference

### Functions

- [function writeTransitions](#) (in prefix, in datas)

### 5.16.1 Function Documentation

#### 5.16.1.1 writeTransitions()

```
function writeTransitions (
    in prefix,
    in datas )
```

## 5.17 ModelGhost.m File Reference

### Classes

- class [ModelGhost](#)

## 5.18 ModelLaby.m File Reference

### Classes

- class [ModelLaby](#)

*Class which contains the "fmg" structure of the labyrinth for 2 players*

## 5.19 ModelPacman.m File Reference

### Classes

- class [ModelPacman](#)

## 5.20 ModelSED.m File Reference

### Classes

- class [ModelSED](#)

## 5.21 ModelWalls.m File Reference

### Classes

- class [ModelWalls](#)

## 5.22 setColor.m File Reference

### Functions

- [function setColor](#) (in *img*, in *imgRef*, in *colors*, in *indice*)

### 5.22.1 Function Documentation

#### 5.22.1.1 setColor()

```
function setColor (
    in img,
    in imgRef,
    in colors,
    in indice )
```

## 5.23 Simulation.m File Reference

## 5.24 Simulation2\_allpossiblewalls.m File Reference

## 5.25 StopCondition.m File Reference

### Classes

- class [StopCondition](#)

- 5.26 validation/Validation 2/Test1/validation2.m File Reference
- 5.27 validation/Validation 2/Test10/validation2.m File Reference
- 5.28 validation/Validation 2/Test11/validation2.m File Reference
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## 5.46 validation/Validation 4/Test1/test.m File Reference

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## 5.50 validation/Validation 8/Test1/validation8.m File Reference

## 5.51 visupacman.m File Reference

## 5.52 visupacman2.m File Reference

## 5.53 wallsBorder.m File Reference

### Functions

- [function wallsBorder](#) (in walls)

#### 5.53.1 Function Documentation

##### 5.53.1.1 wallsBorder()

```
function wallsBorder (  
    in walls )
```

## 5.54 Wrapper.m File Reference

### Classes

- class [Wrapper](#)



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