

## CE103 Algorithms and Programming I HW5

Generated by Doxygen 1.9.2



<b>1 Namespace Index</b>	<b>1</b>
1.1 Namespace List	1
<b>2 Data Structure Index</b>	<b>3</b>
2.1 Data Structures	3
<b>3 File Index</b>	<b>5</b>
3.1 File List	5
<b>4 Namespace Documentation</b>	<b>7</b>
4.1 ce103_hw5_snake_app Namespace Reference	7
4.2 ce103_hw5_snake_dll Namespace Reference	7
4.3 ce103_hw5_snake_test Namespace Reference	7
<b>5 Data Structure Documentation</b>	<b>9</b>
5.1 ce103_hw5_snake_dll.Class1 Class Reference	9
5.1.1 Member Function Documentation	10
5.1.1.1 checkKeysPressed()	10
5.1.1.2 collisionDetection()	11
5.1.1.3 collisionSnake()	11
5.1.1.4 controls()	12
5.1.1.5 eatFood()	12
5.1.1.6 exitYN()	13
5.1.1.7 gameOverScreen()	13
5.1.1.8 generateFood()	14
5.1.1.9 getGameSpeed()	15
5.1.1.10 loadEnviroment()	15
5.1.1.11 loadGame()	15
5.1.1.12 loadSnake()	16
5.1.1.13 main()	17
5.1.1.14 mainMenu()	17
5.1.1.15 menuSelector()	18
5.1.1.16 move()	18
5.1.1.17 MoveSnakeArray()	19
5.1.1.18 pauseMenu()	19
5.1.1.19 prepairSnakeArray()	20
5.1.1.20 refreshInfoBar()	20
5.1.1.21 startGame()	20
5.1.1.22 waitForKey()	21
5.1.1.23 welcomeArt()	22
5.1.1.24 youWinScreen()	22
5.1.2 Field Documentation	23
5.1.2.1 BLANK	23
5.1.2.2 DOWN_ARROW	23

5.1.2.3 ENTER_KEY . . . . .	23
5.1.2.4 EXIT_BUTTON . . . . .	23
5.1.2.5 FOOD . . . . .	23
5.1.2.6 LEFT_ARROW . . . . .	24
5.1.2.7 PAUSE_BUTTON . . . . .	24
5.1.2.8 RIGHT_ARROW . . . . .	24
5.1.2.9 SNAKE_ARRAY_SIZE . . . . .	24
5.1.2.10 SNAKE_BODY . . . . .	24
5.1.2.11 SNAKE_HEAD . . . . .	24
5.1.2.12 UP_ARROW . . . . .	25
5.1.2.13 WALL . . . . .	25
5.2 ce103_hw5_snake_app.Program Class Reference . . . . .	25
5.2.1 Member Function Documentation . . . . .	25
5.2.1.1 Main() . . . . .	25
5.3 ce103_hw5_snake_test.UnitTest1 Class Reference . . . . .	26
5.3.1 Member Function Documentation . . . . .	26
5.3.1.1 collisionDetection_test_1() . . . . .	26
5.3.1.2 collisionDetection_test_2() . . . . .	26
5.3.1.3 collisionDetection_test_3() . . . . .	27
5.3.1.4 collisionSnake_test_1() . . . . .	27
5.3.1.5 collisionSnake_test_2() . . . . .	27
5.3.1.6 collisionSnake_test_3() . . . . .	28
5.3.1.7 Eatfood_test_1() . . . . .	28
5.3.1.8 Eatfood_test_2() . . . . .	28
5.3.1.9 Eatfood_test_3() . . . . .	29
<b>6 File Documentation</b> . . . . .	<b>31</b>
6.1 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs File Reference . . . . .	31
6.2 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs File Reference . . . . .	31
6.3 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs File Reference . . . . .	31
6.4 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/Program.cs File Reference . . . . .	31
6.5 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/Properties/AssemblyInfo.cs File Reference . . . . .	32
6.6 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/↵ Properties/AssemblyInfo.cs File Reference . . . . .	32
6.7 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/Properties/AssemblyInfo.cs File Reference . . . . .	32
6.8 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/↵ Class1.cs File Reference . . . . .	32
6.9 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/UnitTest1.cs File Reference . . . . .	32





# Chapter 1

## Namespace Index

### 1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

<a href="#">ce103_hw5_snake_app</a>	7
<a href="#">ce103_hw5_snake_dll</a>	7
<a href="#">ce103_hw5_snake_test</a>	7





## Chapter 2

# Data Structure Index

### 2.1 Data Structures

Here are the data structures with brief descriptions:

<a href="#">ce103_hw5_snake_dll.Class1</a>	9
<a href="#">ce103_hw5_snake_app.Program</a>	25
<a href="#">ce103_hw5_snake_test.UnitTest1</a>	26



## Chapter 3

# File Index

### 3.1 File List

Here is a list of all files with brief descriptions:

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/ <a href="#">Program.cs</a> . . . . .	31
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs . . . . .	31
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/↔ Properties/ <a href="#">AssemblyInfo.cs</a> . . . . .	32
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/ <a href="#">Class1.cs</a> . . . . .	32
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/obj/↔ Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs . . . . .	31
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/↔ Properties/ <a href="#">AssemblyInfo.cs</a> . . . . .	32
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/ <a href="#">UnitTest1.cs</a> . . . . .	32
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs . . . . .	31
C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/↔ Properties/ <a href="#">AssemblyInfo.cs</a> . . . . .	32



## Chapter 4

# Namespace Documentation

### 4.1 ce103\_hw5\_snake\_app Namespace Reference

#### Data Structures

- class [Program](#)

### 4.2 ce103\_hw5\_snake\_dll Namespace Reference

#### Data Structures

- class [Class1](#)

### 4.3 ce103\_hw5\_snake\_test Namespace Reference

#### Data Structures

- class [UnitTest1](#)



## Chapter 5

# Data Structure Documentation

### 5.1 ce103\_hw5\_snake\_dll.Class1 Class Reference

#### Public Member Functions

- ConsoleKey [waitForAnyKey](#) ()
- int [getGameSpeed](#) ()
- void [pauseMenu](#) ()
- ConsoleKey [checkKeysPressed](#) (ConsoleKey drct)
- bool [collisionSnake](#) (int x, int y, int[,.] snkyx, int snktll, int dcttt)
- void [generateFood](#) (int[,] yummyxy, int wtdh, int hvyy, int[,.] snkyx, int snktll)
- void [MoveSnakeArray](#) (int[,.] snkxy, int snktll, ConsoleKey dcttt)

#### Move Snake Body (move)

*Move snake body*

*Moving snake body*

#### Parameters

<i>in</i>	snakeXY	<i>[int[,]] snake coordinates</i>
<i>in</i>	snakeLength	<i>[int] index of fibonacci number in the serie</i>
<i>in</i>	direction	<i>[ConsoleKey] index of fibonacci number in the serie</i>

- void [move](#) (int[,.] snkyx, int snktll, ConsoleKey dcttt)
- bool [eatFood](#) (int[,.] snkyx, int[,] yummyxy)
- bool [collisionDetection](#) (int[,.] snkyx, int cnswdth, int cnstll, int snkling)
- void [refreshInfoBar](#) (int scr, int spd)
- void [youWinScreen](#) ()
- void [gameOverScreen](#) ()
- void [startGame](#) (int[,.] snkyx, int[,] yummyxy, int cnswdth, int cnstll, int snktall, ConsoleKey dcttt, int scr, int fst)
- void [loadEnviroment](#) (int cnlwdth, int cnstll)
- void [loadSnake](#) (int[,.] snkyx, int snkhvy)
- void [prepairSnakeArray](#) (int[,.] snkyx, int snkhvy)
- void [loadGame](#) ()
- int [menuSelector](#) (int x, int y, int letsgo)
- void [welcomeArt](#) ()

- void [controls](#) ()
- void [exitYN](#) ()
- int [mainMenu](#) ()
- int [main](#) ()

## Static Public Attributes

- const int [SNAKE\\_ARRAY\\_SIZE](#) = 310
- const ConsoleKey [UP\\_ARROW](#) = ConsoleKey.UpArrow
- const ConsoleKey [LEFT\\_ARROW](#) = ConsoleKey.LeftArrow
- const ConsoleKey [RIGHT\\_ARROW](#) = ConsoleKey.RightArrow
- const ConsoleKey [DOWN\\_ARROW](#) = ConsoleKey.DownArrow
- const ConsoleKey [ENTER\\_KEY](#) = ConsoleKey.Enter
- const ConsoleKey [EXIT\\_BUTTON](#) = ConsoleKey.Escape
- const ConsoleKey [PAUSE\\_BUTTON](#) = ConsoleKey.P

## Static Private Attributes

- const char [SNAKE\\_HEAD](#) = (char)177
- const char [SNAKE\\_BODY](#) = (char)178
- const char [WALL](#) = (char)219
- const char [FOOD](#) = (char)254
- const char [BLANK](#) = ''

## 5.1.1 Member Function Documentation

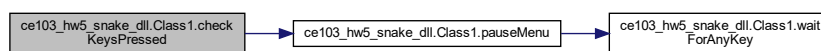
### 5.1.1.1 checkKeysPressed()

```
ConsoleKey ce103_hw5_snake_dll.Class1.checkKeysPressed (
    ConsoleKey drct ) [inline]
```

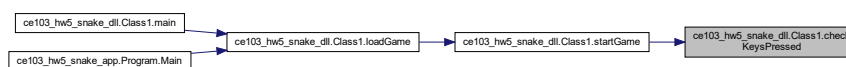
References [ce103\\_hw5\\_snake\\_dll.Class1.DOWN\\_ARROW](#), [ce103\\_hw5\\_snake\\_dll.Class1.EXIT\\_BUTTON](#), [ce103\\_hw5\\_snake\\_dll.Class1.LEFT\\_ARROW](#), [ce103\\_hw5\\_snake\\_dll.Class1.PAUSE\\_BUTTON](#), [ce103\\_hw5\\_snake\\_dll.Class1.pauseMenu](#), [ce103\\_hw5\\_snake\\_dll.Class1.RIGHT\\_ARROW](#), and [ce103\\_hw5\\_snake\\_dll.Class1.UP\\_ARROW](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:





## 5.1.1.2 collisionDetection()

```
bool ce103_hw5_snake_dll.Class1.collisionDetection (
    int snkyx[, ],
    int cnswdth,
    int cnstll,
    int snklng ) [inline]
```

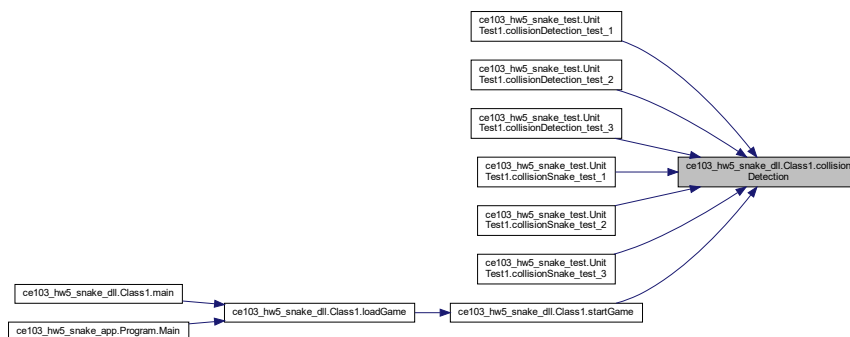
References [ce103\\_hw5\\_snake\\_dll.Class1.collisionSnake\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_test.UnitTest1.collisionDetection\\_test\\_1\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.collisionDetection\\_test\\_2\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.collisionDetection\\_test\\_3\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.collisionSnake\\_test\\_1\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.collisionSnake\\_test\\_2\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.collisionSnake\\_test\\_3\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:

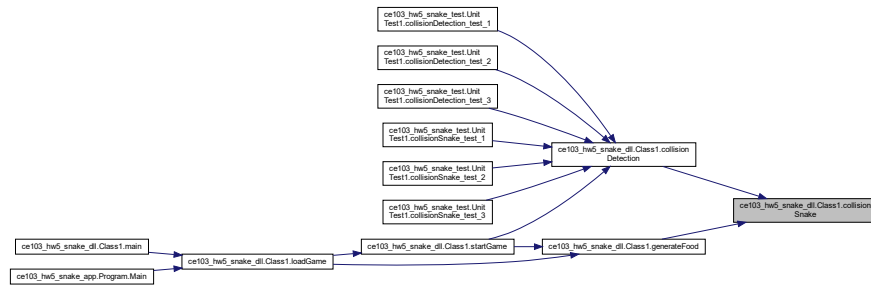


## 5.1.1.3 collisionSnake()

```
bool ce103_hw5_snake_dll.Class1.collisionSnake (
    int x,
    int y,
    int snkyx[, ],
    int snktll,
    int dcttt ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.generateFood\(\)](#).

Here is the caller graph for this function:

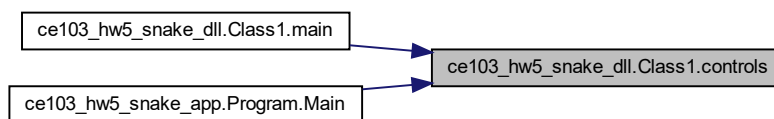


#### 5.1.1.4 controls()

```
void ce103_hw5_snake_dll.Class1.controls ( ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.main\(\)](#), and [ce103\\_hw5\\_snake\\_app.Program.Main\(\)](#).

Here is the caller graph for this function:

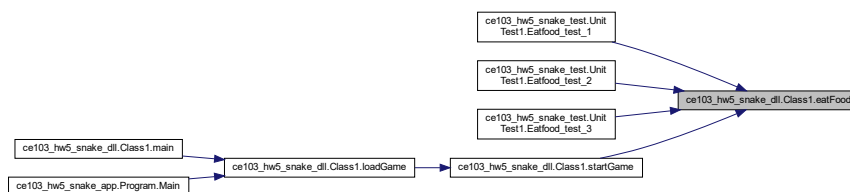


#### 5.1.1.5 eatFood()

```
bool ce103_hw5_snake_dll.Class1.eatFood (
    int snkyx[,],
    int[] yummyxy ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_test.UnitTest1.Eatfood\\_test\\_1\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.Eatfood\\_test\\_2\(\)](#), [ce103\\_hw5\\_snake\\_test.UnitTest1.Eatfood\\_test\\_3\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the caller graph for this function:



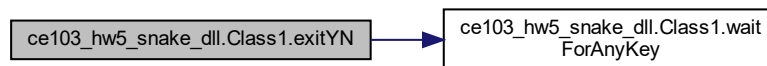
### 5.1.1.6 exitYN()

```
void ce103_hw5_snake_dll.Class1.exitYN ( ) [inline]
```

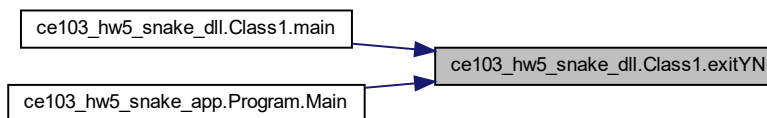
References [ce103\\_hw5\\_snake\\_dll.Class1.waitForAnyKey\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.main\(\)](#), and [ce103\\_hw5\\_snake\\_app.Program.Main\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



### 5.1.1.7 gameOverScreen()

```
void ce103_hw5_snake_dll.Class1.gameOverScreen ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.waitForAnyKey\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



#### 5.1.1.8 generateFood()

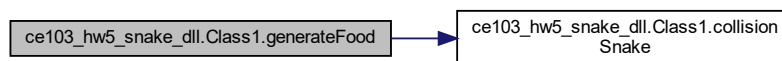
```

void ce103_hw5_snake_dll.Class1.generateFood (
    int[] yummuxyxy,
    int wtdh,
    int hvyy,
    int snkx[,],
    int snktll ) [inline]
  
```

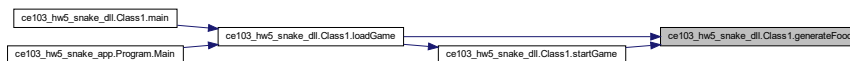
References [ce103\\_hw5\\_snake\\_dll.Class1.collisionSnake\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.FOOD](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:

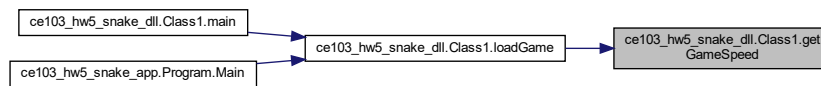


### 5.1.1.9 `getGameSpeed()`

```
int ce103_hw5_snake_dll.Class1.getGameSpeed ( ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#).

Here is the caller graph for this function:



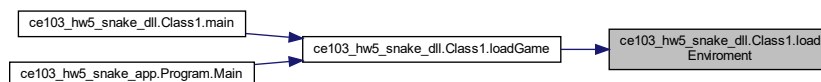
### 5.1.1.10 `loadEnviroment()`

```
void ce103_hw5_snake_dll.Class1.loadEnviroment (
    int cnlwtdh,
    int cnstll ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.WALL](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#).

Here is the caller graph for this function:



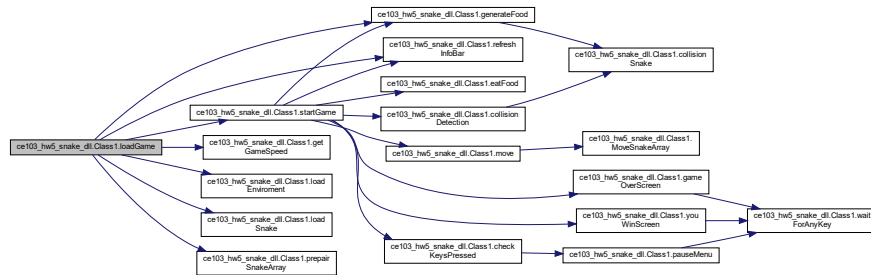
### 5.1.1.11 `loadGame()`

```
void ce103_hw5_snake_dll.Class1.loadGame ( ) [inline]
```

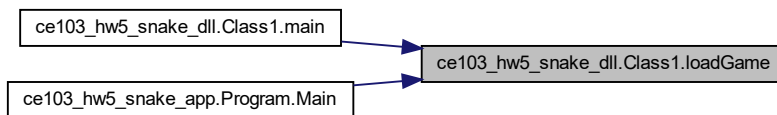
References [ce103\\_hw5\\_snake\\_dll.Class1.generateFood\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.getGameSpeed\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.loadEnviroment\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.loadSnake\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.prepairSnake\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.refreshInfoBar\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.SNAKE\\_ARRAY\\_SIZE](#), and [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.main\(\)](#), and [ce103\\_hw5\\_snake\\_app.Program.Main\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



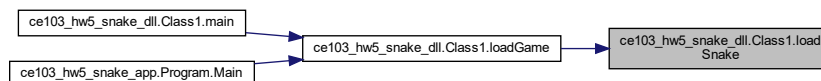
#### 5.1.1.12 loadSnake()

```
void ce103_hw5_snake_dll.Class1.loadSnake (
    int snkyx[],
    int snkhvy ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.SNAKE\\_BODY.](#)

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#).

Here is the caller graph for this function:

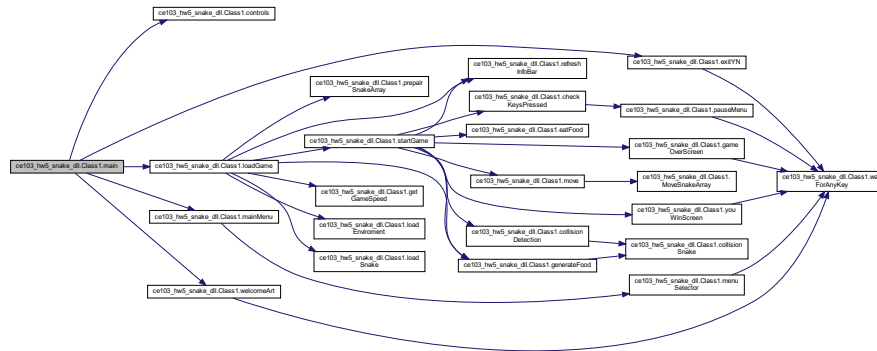


## 5.1.1.13 main()

```
int ce103_hw5_snake_dll.Class1.main ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.controls\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.exitYN\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.mainMenu\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.welcomeArt\(\)](#).

Here is the call graph for this function:



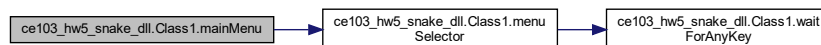
## 5.1.1.14 mainMenu()

```
int ce103_hw5_snake_dll.Class1.mainMenu ( ) [inline]
```

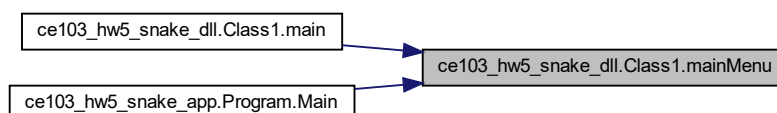
References [ce103\\_hw5\\_snake\\_dll.Class1.menuSelector\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.main\(\)](#), and [ce103\\_hw5\\_snake\\_app.Program.Main\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



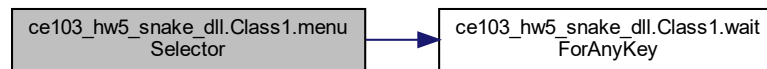
### 5.1.1.15 menuSelector()

```
int ce103_hw5_snake_dll.Class1.menuSelector (
    int x,
    int y,
    int letsgo ) [inline]
```

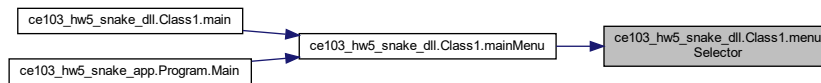
References [ce103\\_hw5\\_snake\\_dll.Class1.DOWN\\_ARROW](#), [ce103\\_hw5\\_snake\\_dll.Class1.ENTER\\_KEY](#), [ce103\\_hw5\\_snake\\_dll.Class1.UP\\_ARROW](#), and [ce103\\_hw5\\_snake\\_dll.Class1.waitForAnyKey\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.mainMenu\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



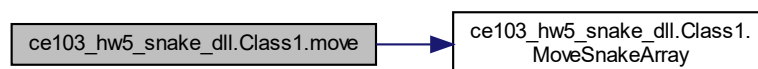
### 5.1.1.16 move()

```
void ce103_hw5_snake_dll.Class1.move (
    int snkyx[,],
    int snktll,
    ConsoleKey dcttt ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.BLANK](#), [ce103\\_hw5\\_snake\\_dll.Class1.MoveSnakeArray\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.SNAKE\\_HEAD](#), and [ce103\\_hw5\\_snake\\_dll.Class1.SNAKE\\_TAIL](#).

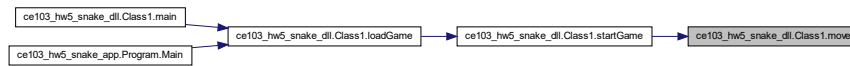
Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the call graph for this function:





Here is the caller graph for this function:



#### 5.1.1.17 MoveSnakeArray()

```

void ce103_hw5_snake_dll.Class1.MoveSnakeArray (
    int snkxy[,],
    int snktll,
    ConsoleKey dcttt ) [inline]
  
```

References [ce103\\_hw5\\_snake\\_dll.Class1.DOWN\\_ARROW](#), [ce103\\_hw5\\_snake\\_dll.Class1.LEFT\\_ARROW](#), [ce103\\_hw5\\_snake\\_dll.Class1.RIGHT\\_ARROW](#), and [ce103\\_hw5\\_snake\\_dll.Class1.UP\\_ARROW](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.move\(\)](#).

Here is the caller graph for this function:



#### 5.1.1.18 pauseMenu()

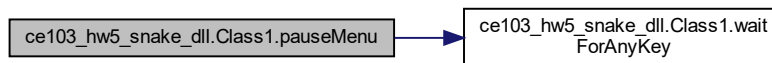
```

void ce103_hw5_snake_dll.Class1.pauseMenu ( ) [inline]
  
```

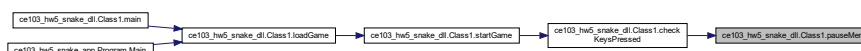
References [ce103\\_hw5\\_snake\\_dll.Class1.waitForAnyKey\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:

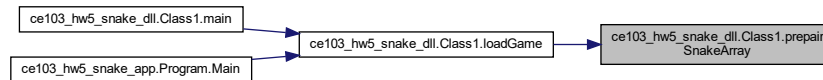


#### 5.1.1.19 prepairSnakeArray()

```
void ce103_hw5_snake_dll.Class1.prepairSnakeArray (
    int snkyx[],
    int snkhvy ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#).

Here is the caller graph for this function:



#### 5.1.1.20 refreshInfoBar()

```
void ce103_hw5_snake_dll.Class1.refreshInfoBar (
    int scr,
    int spd ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the caller graph for this function:



#### 5.1.1.21 startGame()

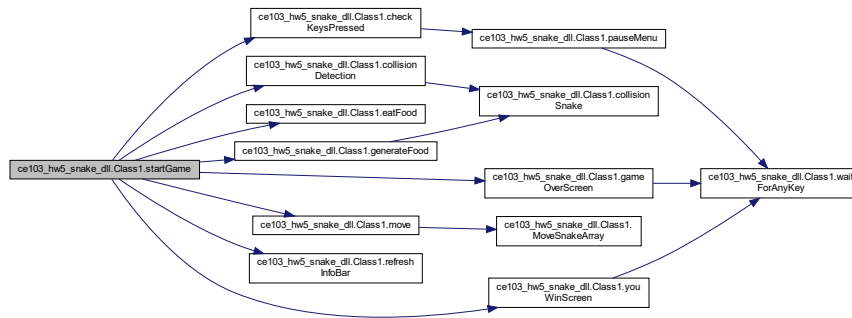
```
void ce103_hw5_snake_dll.Class1.startGame (
    int snkyx[],
    int[] yummyxy,
    int cnswdth,
    int cnsltll,
    int snktall,
    ConsoleKey dcttt,
    int scr,
    int fst ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.eatFood\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.gameOverScreen\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.generateFood\(\)](#)

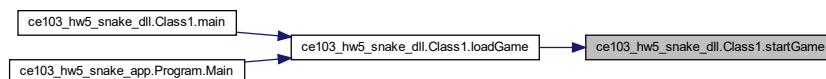
[ce103\\_hw5\\_snake\\_dll.Class1.move\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.refreshInfoBar\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.SNAKE\\_ARRAY](#) and [ce103\\_hw5\\_snake\\_dll.Class1.youWinScreen\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:

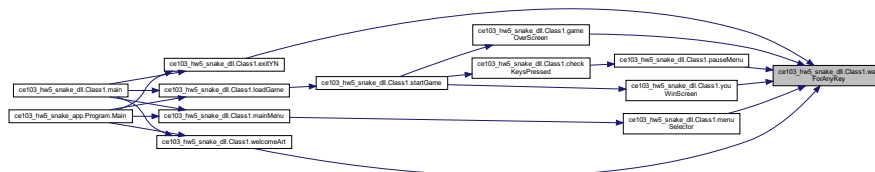


### 5.1.1.22 waitForKey()

```
ConsoleKey ce103_hw5_snake_dll.Class1.waitForAnyKey ( ) [inline]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.exitYN\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.gameOverScreen\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.menuSelector\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.pauseMenu\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.welcomeA](#) and [ce103\\_hw5\\_snake\\_dll.Class1.youWinScreen\(\)](#).

Here is the caller graph for this function:



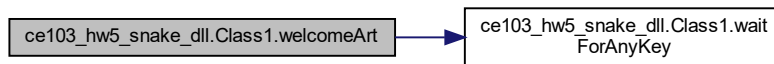
### 5.1.1.23 welcomeArt()

```
void ce103_hw5_snake_dll.Class1.welcomeArt ( ) [inline]
```

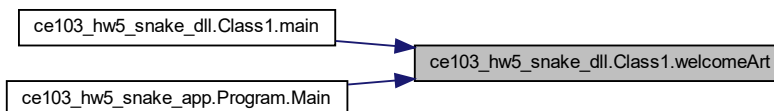
References [ce103\\_hw5\\_snake\\_dll.Class1.waitForAnyKey\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.main\(\)](#), and [ce103\\_hw5\\_snake\\_app.Program.Main\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



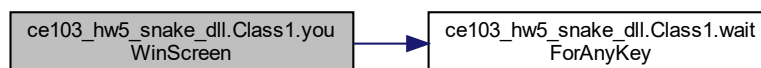
### 5.1.1.24 youWinScreen()

```
void ce103_hw5_snake_dll.Class1.youWinScreen ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.waitForAnyKey\(\)](#).

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

Here is the call graph for this function:



Here is the caller graph for this function:



## 5.1.2 Field Documentation

### 5.1.2.1 BLANK

```
const char ce103_hw5_snake_dll.Class1.BLANK = ' ' [static], [private]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.move\(\)](#).

### 5.1.2.2 DOWN\_ARROW

```
const ConsoleKey ce103_hw5_snake_dll.Class1.DOWN_ARROW = ConsoleKey.DownArrow [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.menuSelector\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.MoveSnakeArray\(\)](#).

### 5.1.2.3 ENTER\_KEY

```
const ConsoleKey ce103_hw5_snake_dll.Class1.ENTER_KEY = ConsoleKey.Enter [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.menuSelector\(\)](#).

### 5.1.2.4 EXIT\_BUTTON

```
const ConsoleKey ce103_hw5_snake_dll.Class1.EXIT_BUTTON = ConsoleKey.Escape [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#).

### 5.1.2.5 FOOD

```
const char ce103_hw5_snake_dll.Class1.FOOD = (char)254 [static], [private]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.generateFood\(\)](#).

#### 5.1.2.6 LEFT\_ARROW

```
const ConsoleKey ce103_hw5_snake_dll.Class1.LEFT_ARROW = ConsoleKey.LeftArrow [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.MoveSnakeArray\(\)](#).

#### 5.1.2.7 PAUSE\_BUTTON

```
const ConsoleKey ce103_hw5_snake_dll.Class1.PAUSE_BUTTON = ConsoleKey.P [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#).

#### 5.1.2.8 RIGHT\_ARROW

```
const ConsoleKey ce103_hw5_snake_dll.Class1.RIGHT_ARROW = ConsoleKey.RightArrow [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.MoveSnakeArray\(\)](#).

#### 5.1.2.9 SNAKE\_ARRAY\_SIZE

```
const int ce103_hw5_snake_dll.Class1.SNAKE_ARRAY_SIZE = 310 [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.startGame\(\)](#).

#### 5.1.2.10 SNAKE\_BODY

```
const char ce103_hw5_snake_dll.Class1.SNAKE_BODY = (char)178 [static], [private]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadSnake\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.move\(\)](#).

#### 5.1.2.11 SNAKE\_HEAD

```
const char ce103_hw5_snake_dll.Class1.SNAKE_HEAD = (char)177 [static], [private]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.move\(\)](#).

### 5.1.2.12 UP\_ARROW

```
const ConsoleKey ce103_hw5_snake_dll.Class1.UP_ARROW = ConsoleKey.UpArrow [static]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.checkKeysPressed\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.menuSelector\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.MoveSnakeArray\(\)](#).

### 5.1.2.13 WALL

```
const char ce103_hw5_snake_dll.Class1.WALL = (char)219 [static], [private]
```

Referenced by [ce103\\_hw5\\_snake\\_dll.Class1.loadEnviroment\(\)](#).

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

- C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/[Class1.cs](#)

## 5.2 ce103\_hw5\_snake\_app.Program Class Reference

### Static Private Member Functions

- static void [Main](#) (string[] args)

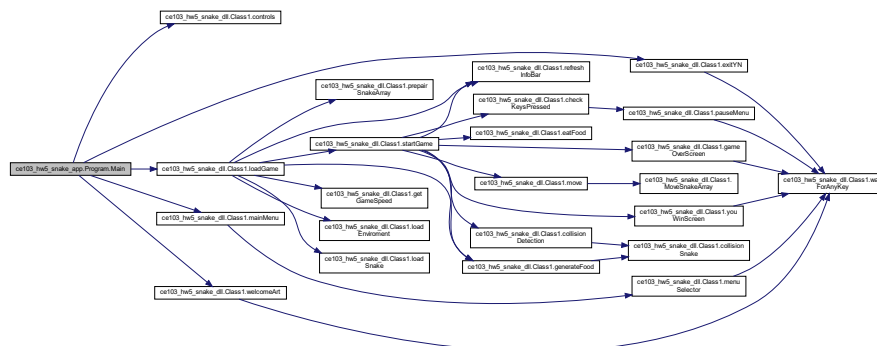
### 5.2.1 Member Function Documentation

#### 5.2.1.1 Main()

```
static void ce103_hw5_snake_app.Program.Main (
    string[] args ) [inline], [static], [private]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.controls\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.exitYN\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.loadGame\(\)](#), [ce103\\_hw5\\_snake\\_dll.Class1.mainMenu\(\)](#), and [ce103\\_hw5\\_snake\\_dll.Class1.welcomeArt\(\)](#).

Here is the call graph for this function:



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

- C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/[Program.cs](#)

## 5.3 ce103\_hw5\_snake\_test.UnitTest1 Class Reference

### Public Member Functions

- void [collisionDetection\\_test\\_1](#) ()
- void [collisionDetection\\_test\\_2](#) ()
- void [collisionDetection\\_test\\_3](#) ()
- void [Eatfood\\_test\\_1](#) ()
- void [Eatfood\\_test\\_2](#) ()
- void [Eatfood\\_test\\_3](#) ()
- void [collisionSnake\\_test\\_1](#) ()
- void [collisionSnake\\_test\\_2](#) ()
- void [collisionSnake\\_test\\_3](#) ()

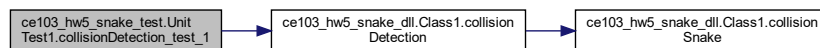
### 5.3.1 Member Function Documentation

#### 5.3.1.1 collisionDetection\_test\_1()

```
void ce103_hw5_snake_test.UnitTest1.collisionDetection_test_1 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#).

Here is the call graph for this function:

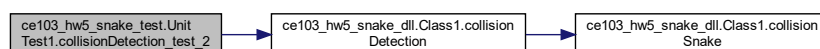


#### 5.3.1.2 collisionDetection\_test\_2()

```
void ce103_hw5_snake_test.UnitTest1.collisionDetection_test_2 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#).

Here is the call graph for this function:



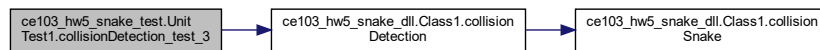


### 5.3.1.3 collisionDetection\_test\_3()

```
void ce103_hw5_snake_test.UnitTest1.collisionDetection_test_3 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#).

Here is the call graph for this function:

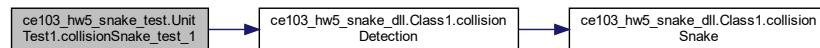


### 5.3.1.4 collisionSnake\_test\_1()

```
void ce103_hw5_snake_test.UnitTest1.collisionSnake_test_1 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#).

Here is the call graph for this function:

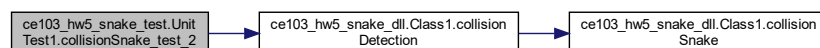


### 5.3.1.5 collisionSnake\_test\_2()

```
void ce103_hw5_snake_test.UnitTest1.collisionSnake_test_2 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#).

Here is the call graph for this function:

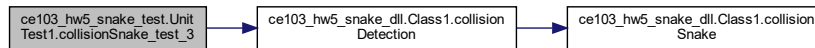


### 5.3.1.6 collisionSnake\_test\_3()

```
void ce103_hw5_snake_test.UnitTest1.collisionSnake_test_3 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.collisionDetection\(\)](#).

Here is the call graph for this function:

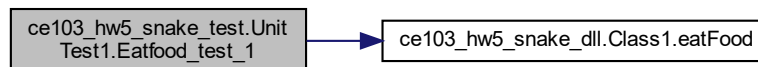


### 5.3.1.7 Eatfood\_test\_1()

```
void ce103_hw5_snake_test.UnitTest1.Eatfood_test_1 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.eatFood\(\)](#).

Here is the call graph for this function:

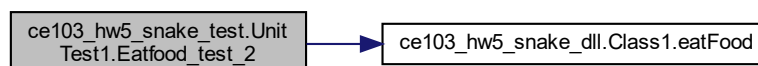


### 5.3.1.8 Eatfood\_test\_2()

```
void ce103_hw5_snake_test.UnitTest1.Eatfood_test_2 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.eatFood\(\)](#).

Here is the call graph for this function:

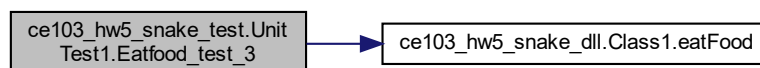


#### 5.3.1.9 Eatfood\_test\_3()

```
void ce103_hw5_snake_test.UnitTest1.Eatfood_test_3 ( ) [inline]
```

References [ce103\\_hw5\\_snake\\_dll.Class1.eatFood\(\)](#).

Here is the call graph for this function:



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

- C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/[UnitTest1.cs](#)



## Chapter 6

# File Documentation

**6.1 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs File Reference**

**6.2 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs File Reference**

**6.3 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs File Reference**

**6.4 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/Program.cs File Reference**

### Data Structures

- class [ce103\\_hw5\\_snake\\_app.Program](#)

### Namespaces

- namespace [ce103\\_hw5\\_snake\\_app](#)

**6.5 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/Properties/AssemblyInfo.cs File Reference**

**6.6 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/Properties/AssemblyInfo.cs File Reference**

**6.7 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/Properties/AssemblyInfo.cs File Reference**

**6.8 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/Class1.cs File Reference**

#### Data Structures

- class [ce103\\_hw5\\_snake\\_dll.Class1](#)

#### Namespaces

- namespace [ce103\\_hw5\\_snake\\_dll](#)

**6.9 C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/UnitTest1.cs File Reference**

#### Data Structures

- class [ce103\\_hw5\\_snake\\_test.UnitTest1](#)

#### Namespaces

- namespace [ce103\\_hw5\\_snake\\_test](#)

# Index

BLANK  
    ce103\_hw5\_snake\_dll.Class1, [23](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs, [31](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/Program.cs, [31](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-app/Properties/AssemblyInfo.cs, [32](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/Class1.cs, [32](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs, [31](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-dll/Properties/AssemblyInfo.cs, [32](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/obj/Debug/.NETFramework,Version=v4.7.2.AssemblyAttributes.cs, [31](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/Properties/AssemblyInfo.cs, [32](#)

C:/Users/Ramazan Serhat UYGUN/Desktop/b/ce103-hw5-Haluk-KURTULUS/ce103-hw5-snake-test/UnitTest1.cs, [32](#)

ce103\_hw5\_snake\_app, [7](#)

ce103\_hw5\_snake\_app.Program, [25](#)

    Main, [25](#)

ce103\_hw5\_snake\_dll, [7](#)

ce103\_hw5\_snake\_dll.Class1, [9](#)

    BLANK, [23](#)

    checkKeysPressed, [10](#)

    collisionDetection, [10](#)

    collisionSnake, [11](#)

    controls, [12](#)

    DOWN\_ARROW, [23](#)

    eatFood, [12](#)

    ENTER\_KEY, [23](#)

    EXIT\_BUTTON, [23](#)

    exitYN, [12](#)

    FOOD, [23](#)

    gameOverScreen, [13](#)

    generateFood, [14](#)

    getGameSpeed, [14](#)

    LEFT\_ARROW, [23](#)

    loadEnviroment, [15](#)

    loadGame, [15](#)

    mainSnake.cs, [16](#)

    main, [16](#)

    mainMenu, [17](#)

    menuSelector, [17](#)

    move, [18](#)

    MoveSnakeArray, [19](#)

    PAUSE\_BUTTON, [24](#)

    pauseMenu, [19](#)

    prepairSnakeArray, [19](#)

    refreshInfoBar, [20](#)

    RIGHT\_ARROW, [24](#)

    SNAKE\_ARRAY\_SIZE, [24](#)

    SNAKE\_BODY, [24](#)

    SNAKE\_HEAD, [24](#)

    startGame, [20](#)

    UP\_ARROW, [24](#)

    waitForAnyKey, [21](#)

    WALL, [25](#)

    welcomeArt, [21](#)

    youWinScreen, [22](#)

ce103\_hw5\_snake\_test, [7](#)

ce103\_hw5\_snake\_test.UnitTest1, [26](#)

    collisionDetection\_test\_1, [26](#)

    collisionDetection\_test\_2, [26](#)

    collisionDetection\_test\_3, [26](#)

    collisionSnake\_test\_1, [27](#)

    collisionSnake\_test\_2, [27](#)

    collisionSnake\_test\_3, [27](#)

    Eatfood\_test\_1, [28](#)

    Eatfood\_test\_2, [28](#)

    Eatfood\_test\_3, [28](#)

checkKeysPressed  
    ce103\_hw5\_snake\_dll.Class1, [10](#)

collisionDetection  
    ce103\_hw5\_snake\_dll.Class1, [10](#)

collisionDetection\_test\_1  
    ce103\_hw5\_snake\_test.UnitTest1, [26](#)

collisionDetection\_test\_2  
    ce103\_hw5\_snake\_test.UnitTest1, [26](#)

collisionDetection\_test\_3  
    ce103\_hw5\_snake\_test.UnitTest1, [26](#)

collisionSnake  
    ce103\_hw5\_snake\_dll.Class1, [11](#)

collisionSnake\_test\_1

- ce103\_hw5\_snake\_test.UnitTest1, [27](#)
- collisionSnake\_test\_2
  - ce103\_hw5\_snake\_test.UnitTest1, [27](#)
- collisionSnake\_test\_3
  - ce103\_hw5\_snake\_test.UnitTest1, [27](#)
- controls
  - ce103\_hw5\_snake\_dll.Class1, [12](#)
- DOWN\_ARROW
  - ce103\_hw5\_snake\_dll.Class1, [23](#)
- eatFood
  - ce103\_hw5\_snake\_dll.Class1, [12](#)
- Eatfood\_test\_1
  - ce103\_hw5\_snake\_test.UnitTest1, [28](#)
- Eatfood\_test\_2
  - ce103\_hw5\_snake\_test.UnitTest1, [28](#)
- Eatfood\_test\_3
  - ce103\_hw5\_snake\_test.UnitTest1, [28](#)
- ENTER\_KEY
  - ce103\_hw5\_snake\_dll.Class1, [23](#)
- EXIT\_BUTTON
  - ce103\_hw5\_snake\_dll.Class1, [23](#)
- exitYN
  - ce103\_hw5\_snake\_dll.Class1, [12](#)
- FOOD
  - ce103\_hw5\_snake\_dll.Class1, [23](#)
- gameOverScreen
  - ce103\_hw5\_snake\_dll.Class1, [13](#)
- generateFood
  - ce103\_hw5\_snake\_dll.Class1, [14](#)
- getGameSpeed
  - ce103\_hw5\_snake\_dll.Class1, [14](#)
- LEFT\_ARROW
  - ce103\_hw5\_snake\_dll.Class1, [23](#)
- loadEnviroment
  - ce103\_hw5\_snake\_dll.Class1, [15](#)
- loadGame
  - ce103\_hw5\_snake\_dll.Class1, [15](#)
- loadSnake
  - ce103\_hw5\_snake\_dll.Class1, [16](#)
- Main
  - ce103\_hw5\_snake\_app.Program, [25](#)
- main
  - ce103\_hw5\_snake\_dll.Class1, [16](#)
- mainMenu
  - ce103\_hw5\_snake\_dll.Class1, [17](#)
- menuSelector
  - ce103\_hw5\_snake\_dll.Class1, [17](#)
- move
  - ce103\_hw5\_snake\_dll.Class1, [18](#)
- MoveSnakeArray
  - ce103\_hw5\_snake\_dll.Class1, [19](#)
- PAUSE\_BUTTON
  - ce103\_hw5\_snake\_dll.Class1, [24](#)
- pauseMenu
  - ce103\_hw5\_snake\_dll.Class1, [19](#)
- prepairSnakeArray
  - ce103\_hw5\_snake\_dll.Class1, [19](#)
- refreshInfoBar
  - ce103\_hw5\_snake\_dll.Class1, [20](#)
- RIGHT\_ARROW
  - ce103\_hw5\_snake\_dll.Class1, [24](#)
- SNAKE\_ARRAY\_SIZE
  - ce103\_hw5\_snake\_dll.Class1, [24](#)
- SNAKE\_BODY
  - ce103\_hw5\_snake\_dll.Class1, [24](#)
- SNAKE\_HEAD
  - ce103\_hw5\_snake\_dll.Class1, [24](#)
- startGame
  - ce103\_hw5\_snake\_dll.Class1, [20](#)
- UP\_ARROW
  - ce103\_hw5\_snake\_dll.Class1, [24](#)
- waitForAnyKey
  - ce103\_hw5\_snake\_dll.Class1, [21](#)
- WALL
  - ce103\_hw5\_snake\_dll.Class1, [25](#)
- welcomeArt
  - ce103\_hw5\_snake\_dll.Class1, [21](#)
- youWinScreen
  - ce103\_hw5\_snake\_dll.Class1, [22](#)