Epidemic Simulation

Generated by Doxygen 1.9.3

Chapter 1

epidemic-simulation

1.1 Detailed description

The application is C# object-oritented implementation of the epidemic simulation employing make building system. WinForms and XNA (FNA) frameworks were used to created graphical user interface. The user can set up different initial parameters of simulation including disease lethality, communicability, duration and simulated population. There are three different scenarios enriching the user experience: 1) single community simulation, 2) shopping community simulation and 3) multigroup community simulation. The user is able to observe the spread of the germ in real time as well as follow graphs depicting progress of the disease. At the very end of simulation, the file containg detalied statistics is being generated. The project has been created and developed as university project for the 'Object-Oriented Programming' course. It contains unit tests and automatically generated documentation thanks to doxygen.

1.2 Available commands

- `make` - builds the entire project (application, tests and documentation)
- `make run` - runs the application
- `make test` - compiles and runs unit tests
- `make compile_tests` - compiles only unit tests
- `make documentation` - updates the project documentation
- `make clean` - cleans the project's auxiliary and temporary files

1.3 Requirements:

- C# implementation - dotnet or mono
- XNA or FNA framework
- make command
- doxygen command

Chapter 2

Namespace Index

2.1 Namespace List

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

Chapter 3

Hierarchical Index

3.1 Class Hierarchy

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

Chapter 4

Class Index

4.1 Class List

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

Chapter 5

Namespace Documentation

5.1 Charting Namespace Reference

Classes

- class Graph

5.2 EpidemicSimulation Namespace Reference

Classes

- class ChartManager
- class Dead
- class Disease
- class Infectious
- interface ISimulation
- class MultigroupCommunitySimulation
- class Person
- class Recovered
- class Removed
- class ShoppingCommunitySimulation
- class **Simulation**
- class SingleCommunitySimulation
- class StatisticsPrinter
- class Susceptible

5.2.1 Detailed Description

Class manages the Graph class providing basic setup and letting easily update displayed statistics.

5.3 TestSuite Namespace Reference

Classes

- class PersonTest
- class SimulationTest
- class TestRunner

Chapter 6

Class Documentation

6.1 EpidemicSimulation.ChartManager Class Reference

Public Member Functions

- ChartManager (Vector2 position, Point size, Simulation simulation, GraphicsDevice graphicsDevice)
- void Update ()
- void Draw ()
- void LoadContent ()

6.1.1 Constructor & Destructor Documentation

6.1.1.1 ChartManager()

```
EpidemicSimulation.ChartManager.ChartManager (
            Vector2 position,
            Point size,
            Simulation simulation,
            GraphicsDevice graphicsDevice )  [inline]
```

Constructor sets position of the the graph inside a window, size of the graph, instance of Simulation providing data for plotting and a graphics card object.

Parameters

position	Position of the graph inside window
size	Size of the graph in pixels
simulation	Instance of Simulation to dervive data from
graphicsDevice	A graphics card object

6.1.2 Member Function Documentation

6.1.2.1 Draw()

```
void EpidemicSimulation.ChartManager.Draw ( )  [inline]
```

Plots all data: infected in red, susceptible in blue, recovered in green and dead in gray.

6.1.2.2 LoadContent()

```
void EpidemicSimulation.ChartManager.LoadContent ( )  [inline]
```

Initializes instance of Graph and configures it.

6.1.2.3 Update()

```
void EpidemicSimulation.ChartManager.Update ( )  [inline]
```

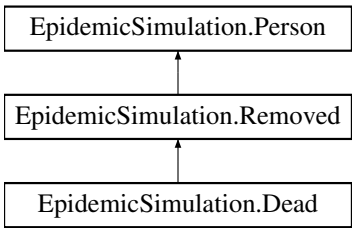
Updates the statistics culling them from provided instance of Simulation.

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

- src/ui/ChartManager.cs

6.2 EpidemicSimulation.Dead Class Reference

Inheritance diagram for EpidemicSimulation.Dead:



Public Member Functions

- Dead (Rectangle simulationRect, Point startPosition, Vector2 MovementVector, float? immunity=null, int? repulsionRate=null)
- override string Type ()

Additional Inherited Members

6.2.1 Detailed Description

Class representing a person that have died due to the simulated epidemic.

6.2.2 Constructor & Destructor Documentation

6.2.2.1 Dead()

```
EpidemicSimulation.Dead.Dead (
            Rectangle simulationRect,
            Point startPosition,
            Vector2 MovementVector,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor invoked during creation an instance of a concrete class representing a dead person.

Parameters

simulationRect	Rectangle determining an area where this person can move
startPosition	Position where the person is located at the very beginning of the simulation or after being added to the simulation
MovementVector	Vector defining movement of this person
immunity	Number representing personal immunity
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected.

6.2.3 Member Function Documentation

6.2.3.1 Type()

```
override string EpidemicSimulation.Dead.Type ( )  [inline], [virtual]
```

Returns a type of person as a text label.

Implements EpidemicSimulation.Person.

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

- src/backend/Dead.cs

6.3 EpidemicSimulation.Disease Class Reference

Static Public Member Functions

- static void **s_SetUpParams** (float? lethality=null, float? duration=null, float? Communicability=null, float? requiredFieldIntersetion=null)

Static Public Attributes

- static float **Lethality** = 0.1f
- static float **Duration** = 2000f
- static float **Communicability** = 0.03f
- static float **RequiredFieldIntersetion** = 0.3f

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

- src/backend/Disease.cs

6.4 Charting.Graph Class Reference

Public Types

- enum **GraphType** { **Line** , **Fill** }

Public Member Functions

- **Graph** (GraphicsDevice graphicsDevice, Point size)
- void Draw (List< Tuple< float, Color > > values)

  Draws the values in given order, with specific color for each value
- void Draw (List< float > values, Color color)

  Draws the values in given order, in specified color

Properties

- GraphType **Type** `[get, set]`

  Determines whether the drawn graph will be line only, or filled
- Vector2 **Position** `[get, set]`

  The bottom left position of the graph
- Point **Size** `[get, set]`

  The size of the graph. The graph values will be scaled horizontally to fill width (Size.X) Vertically, the values will be scaled based on MaxValue property, where the position of the value that is equal to MaxValue will be Size.Y
- float **MaxValue** `[get, set]`

  Determines the vertical scaling of the graph. The value that is equal to MaxValue will be displayed at the top of the graph (at point Size.Y)

6.4.1 Member Function Documentation

6.4.1.1 Draw() [1/2]

```
void Charting.Graph.Draw (
            List< float > values,
            Color color )  [inline]
```

Draws the values in given order, in specified color

Parameters

values	Values to draw, in order from left to right
color	Color of the entire graph

6.4.1.2 Draw() [2/2]

```
void Charting.Graph.Draw (
            List< Tuple< float, Color > > values )  [inline]
```

Draws the values in given order, with specific color for each value

Parameters

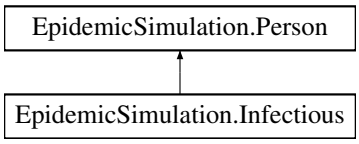
values	Value/color pairs to draw, in order from left to right

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

- vendor/Graph.cs

6.5 EpidemicSimulation.Infectious Class Reference

Inheritance diagram for EpidemicSimulation.Infectious:



Public Member Functions

- Infectious (Rectangle simulationRect, float? immunity=null, int? repulsionRate=null)
- Infectious (Rectangle simulationRect, Point startPosition, Vector2 MovementVector, float? immunity=null, int? repulsionRate=null)
- override string Type ()

Public Attributes

- new float **InfectionDuration** = 0

Additional Inherited Members

6.5.1 Detailed Description

Class representing a person that got infected and spreads the germs.

6.5.2 Constructor & Destructor Documentation

6.5.2.1 Infectious() [1/2]

```
EpidemicSimulation.Infectious.Infectious (
            Rectangle simulationRect,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor creating a concrete instance of a infectious person.

Parameters

simulationRect	Rectangle determining an area where this person can move
immunity	Number representing personal immunity
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected.

6.5.2.2 Infectious() [2/2]

```
EpidemicSimulation.Infectious.Infectious (
            Rectangle simulationRect,
            Point startPosition,
            Vector2 MovementVector,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor creating a concrete instance of a infectious person.

Parameters

simulationRect	Rectangle determining an area where this person can move
startPosition	Position where the person is located at the very beginning of the simulation or after being added to the simulation
MovementVector	Vector defining movement of this person
immunity	Number representing personal immunity
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected.

6.5.3 Member Function Documentation

6.5.3.1 Type()

```
override string EpidemicSimulation.Infectious.Type ( )  [inline], [virtual]
```

Returns a type of person as a text label.

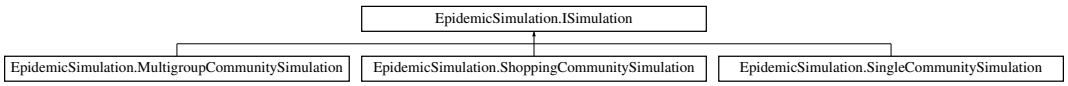
Implements EpidemicSimulation.Person.

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

- src/backend/Infectious.cs

6.6 EpidemicSimulation.ISimulation Interface Reference

Inheritance diagram for EpidemicSimulation.ISimulation:



Public Member Functions

- void Start ()
- void Close ()
- void Pause ()
- Dictionary< string, int > GetSimulationData ()

6.6.1 Detailed Description

Interface constituting abstraction of epidemic scenario.

6.6.2 Member Function Documentation

6.6.2.1 Close()

```
void EpidemicSimulation.ISimulation.Close ( )
```

Implemented in EpidemicSimulation.ShoppingCommunitySimulation, and EpidemicSimulation.SingleCommunitySimulation.

6.6.2.2 GetSimulationData()

```
Dictionary< string, int > EpidemicSimulation.ISimulation.GetSimulationData ( )
```

Implemented in EpidemicSimulation.ShoppingCommunitySimulation, and EpidemicSimulation.SingleCommunitySimulation.

6.6.2.3 Pause()

```
void EpidemicSimulation.ISimulation.Pause ( )
```

Implemented in EpidemicSimulation.ShoppingCommunitySimulation, and EpidemicSimulation.SingleCommunitySimulation.

6.6.2.4 Start()

```
void EpidemicSimulation.ISimulation.Start ( )
```

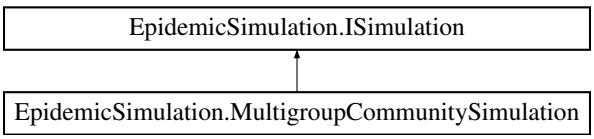
Implemented in EpidemicSimulation.ShoppingCommunitySimulation, and EpidemicSimulation.SingleCommunitySimulation.

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

- src/backend/ISimulation.cs

6.7 EpidemicSimulation.MultigroupCommunitySimulation Class Reference

Inheritance diagram for EpidemicSimulation.MultigroupCommunitySimulation:



Public Member Functions

- **MultigroupCommunitySimulation** (uint population, uint infected)
- Dictionary< string, int > GetSimulationData ()
- void Start ()
- void Close ()

Protected Member Functions

- override void **Update** (GameTime gameTime)
- override void **Draw** (GameTime gameTime)

6.7.1 Detailed Description

This class constitues the multigroup community scenario, handling high-level events of simulation such as pausing, closing, starting a simulation, providing data and providing a simplified constructor.

6.7.2 Member Function Documentation

6.7.2.1 Close()

```
void EpidemicSimulation.MultigroupCommunitySimulation.Close ( )  [inline]
```

Implements EpidemicSimulation.ISimulation.

6.7.2.2 GetSimulationData()

```
Dictionary< string, int > EpidemicSimulation.MultigroupCommunitySimulation.GetSimulationData (
)  [inline]
```

Implements EpidemicSimulation.ISimulation.

6.7.2.3 Start()

```
void EpidemicSimulation.MultigroupCommunitySimulation.Start ( )  [inline]
```

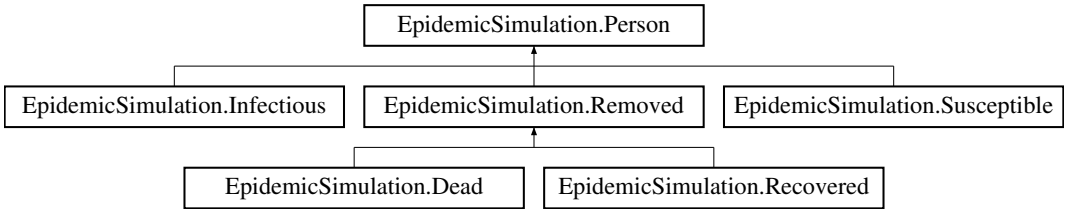
Implements EpidemicSimulation.ISimulation.

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

- src/backend/MultigroupCommunitySimulation.cs

6.8 EpidemicSimulation.Person Class Reference

Inheritance diagram for EpidemicSimulation.Person:



Public Member Functions

- abstract string Type ()
- **Person** (Rectangle SimulationRect, float? immunity=null, int? repulsionRate=null)
- **Person** (Rectangle SimulationRect, Point startPosition, Vector2 MovementVector, float? immunity=null, int? repulsionRate=null)
- virtual void **UpdateSelf** ()
- void **GoToPoint** (Point? centerPoint=null, float probability=0)
- float **FieldIntersectionPrecentege** (Rectangle obj1, Rectangle obj2)

Static Public Member Functions

- static bool **s_CheckCollision** (Rectangle obj1, Rectangle obj2)
- static float **s_FieldIntersectionPrecentege** (Rectangle obj1, Rectangle obj2)

Public Attributes

- Vector2 **MovementVector**
- bool **IsColliding** = false
- Rectangle **AnticipadedPositon**
- float **InfectionDuration**
- bool **IgnoreColision** = false

Static Public Attributes

- static List< Rectangle > **Obsticles** = new List<Rectangle>()

Protected Member Functions

- virtual void **Move** ()
- void **MoveRadiusField** ()
- int **DrawDirection** ()

Static Protected Member Functions

- static float **RectSurface** (Rectangle obj)

Properties

- Point **Position** `[get]`
- static int **_size** `[get]`
- static float **s_MovementSpeed** `[get, set]`
- Rectangle **Rect** `[get, set]`
- float **ImmunityRate** `[get]`
- int **RepulsionRate** `[get]`
- bool **RepulsionExpand** `[get]`
- Rectangle **RadiusRect** `[get]`

6.8.1 Member Function Documentation

6.8.1.1 Type()

```
abstract string EpidemicSimulation.Person.Type ( )  [pure virtual]
```

Implemented in EpidemicSimulation.Dead, EpidemicSimulation.Infectious, EpidemicSimulation.Recovered, and EpidemicSimulation.Susceptible.

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

- src/backend/Person.cs

6.9 TestSuite.PersonTest Class Reference

Static Public Member Functions

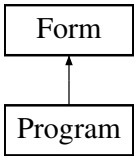
- static void **TestCheckCollisionWhileTheyAreIntersectingWithOnePoint** ()
- static void **TestCheckCollisionWhileIntersectingWithSomeArea** ()
- static void **TestCheckCollisionWhileOneContainsTheOther** ()
- static void **TestCheckCollisionWhileTheyNotShareAnyArea** ()
- static void **TestFieldIntersectionPrecentegeWith1Percent** ()
- static void **TestFieldIntersectionPrecentegeWith0Percent** ()
- static void **TestFieldIntersectionPrecentegeWith100Percent** ()

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

- test/PersonTest.cs

6.10 Program Class Reference

Inheritance diagram for Program:



Public Member Functions

- Program ()

Static Public Member Functions

- static void **Main** ()

6.10.1 Constructor & Destructor Documentation

6.10.1.1 Program()

```
Program.Program ( )  [inline]
```

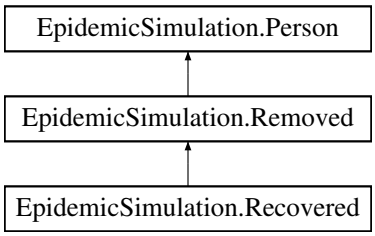
Constructor setting up the postions of all user interface components such as buttons, radio boxes, sliders, and the size of the main window.

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

- src/ui/Program.cs

6.11 EpidemicSimulation.Recovered Class Reference

Inheritance diagram for EpidemicSimulation.Recovered:



Public Member Functions

- Recovered (Rectangle simulationRect, Point startPosition, Vector2 MovementVector, float? immunity=null, int? repulsionRate=null)
- override string Type ()

Additional Inherited Members

6.11.1 Detailed Description

Class representing a person that had been ill due to the simulated epidemic but has managed to recover.

6.11.2 Constructor & Destructor Documentation

6.11.2.1 Recovered()

```
EpidemicSimulation.Recovered.Recovered (
            Rectangle simulationRect,
            Point startPosition,
            Vector2 MovementVector,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor creating a concrete instance of a recovered person.

Parameters

simulationRect	Rectangle determining an area where this person can move
startPosition	Position where the person is located at the very beginning of the simulation or after being added to the simulation
MovementVector	Vector defining movement of this person
immunity	Number representing personal immunity
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected.

6.11.3 Member Function Documentation

6.11.3.1 Type()

```
override string EpidemicSimulation.Recovered.Type ( )  [inline], [virtual]
```

Returns a type of person as a text label.

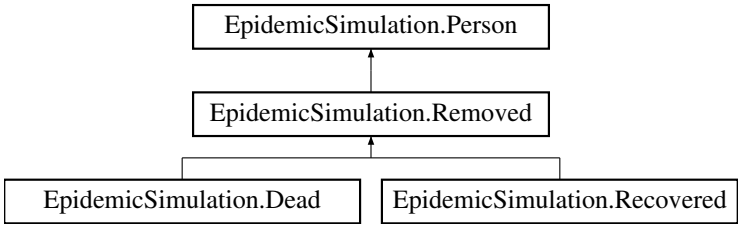
Implements EpidemicSimulation.Person.

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

- src/backend/Recovered.cs

6.12 EpidemicSimulation.Removed Class Reference

Inheritance diagram for EpidemicSimulation.Removed:



Public Member Functions

- Removed (Rectangle simulationRect, Point startPosition, Vector2 MovementVector, float? immunity=null, int? repulsionRate=null)

Additional Inherited Members

6.12.1 Detailed Description

Abstract class representing a person that have either died or recovered.

6.12.2 Constructor & Destructor Documentation

6.12.2.1 Removed()

```
EpidemicSimulation.Removed.Removed (
            Rectangle simulationRect,
            Point startPosition,
            Vector2 MovementVector,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor delegating assigning parameters to higher-level abstract constructor (Person).

Parameters

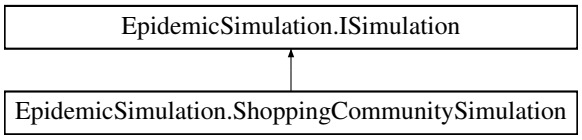
simulationRect	Rectangle determining an area where this person can move
startPosition	Position where the person is located at the very beginning of the simulation or after being added to the simulation
MovementVector	Vector defining movement of this person
immunity	Number representing personal immunity
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected.

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

- src/backend/Removed.cs

6.13 EpidemicSimulation.ShoppingCommunitySimulation Class Reference

Inheritance diagram for EpidemicSimulation.ShoppingCommunitySimulation:



Public Member Functions

- ShoppingCommunitySimulation (uint population, Point? centerPoint=null)
- Dictionary< string, int > GetSimulationData ()
- void Start ()
- void Pause ()
- void Close ()

6.13.1 Detailed Description

This class constitues the shopping community scenario, handling high-level events of simulation such as pausing, closing, starting a simulation, providing data and providing a simplified constructor.

6.13.2 Constructor & Destructor Documentation

6.13.2.1 ShoppingCommunitySimulation()

```
EpidemicSimulation.ShoppingCommunitySimulation.ShoppingCommunitySimulation (
            uint population,
            Point?  centerPoint = null )  [inline]
```

Constructor sets the population and center point.

Parameters

population	Number of people to be simulated
centerPoint	Location of the central point (like shopping mal). It can be null

6.13.3 Member Function Documentation

6.13.3.1 Close()

```
void EpidemicSimulation.ShoppingCommunitySimulation.Close ( )  [inline]
```

Closes the simulation.

Implements EpidemicSimulation.ISimulation.

6.13.3.2 GetSimulationData()

```
Dictionary< string, int > EpidemicSimulation.ShoppingCommunitySimulation.GetSimulationData ( )
[inline]
```

Returns numbers of infected, susceptible, recovered and dead people.

Implements EpidemicSimulation.ISimulation.

6.13.3.3 Pause()

```
void EpidemicSimulation.ShoppingCommunitySimulation.Pause ( )  [inline]
```

Pauses and unpauses the simulation.

Implements EpidemicSimulation.ISimulation.

6.13.3.4 Start()

```
void EpidemicSimulation.ShoppingCommunitySimulation.Start ( )  [inline]
```

Starts the simulation.

Implements EpidemicSimulation.ISimulation.

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

- src/backend/ShoppingCommunitySimulation.cs

6.14 TestSuite.SimulationTest Class Reference

Static Public Member Functions

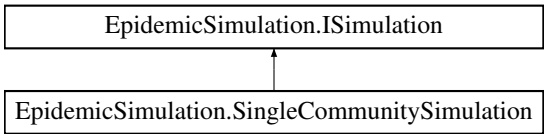
- static void **TestGenerateOutputLists** ()

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

- test/SimulationTest.cs

6.15 EpidemicSimulation.SingleCommunitySimulation Class Reference

Inheritance diagram for EpidemicSimulation.SingleCommunitySimulation:



Public Member Functions

- SingleCommunitySimulation (uint population)
- Dictionary< string, int > GetSimulationData ()
- void Start ()
- void Pause ()
- void Close ()

6.15.1 Detailed Description

This class constitues the single community scenario, handling high-level events of simulation such as pausing, closing, starting a simulation, providing data and providing a simplified constructor.

6.15.2 Constructor & Destructor Documentation

6.15.2.1 SingleCommunitySimulation()

```
EpidemicSimulation.SingleCommunitySimulation.SingleCommunitySimulation (
            uint population ) [inline]
```

Constructor creating an instance of Simulation class taking as a parameter the desired population size.

Parameters

population	The desired population size expressed in the number of people.

6.15.3 Member Function Documentation

6.15.3.1 Close()

```
void EpidemicSimulation.SingleCommunitySimulation.Close ( ) [inline]
```

Closes the simulation.

Implements EpidemicSimulation.ISimulation.

6.15.3.2 GetSimulationData()

```
Dictionary< string, int > EpidemicSimulation.SingleCommunitySimulation.GetSimulationData ( )
[inline]
```

Returns numbers of infected, susceptible, recovered and dead people.

Implements EpidemicSimulation.ISimulation.

6.15.3.3 Pause()

```
void EpidemicSimulation.SingleCommunitySimulation.Pause ( )  [inline]
```

Pauses and unpauses the simulation.

Implements EpidemicSimulation.ISimulation.

6.15.3.4 Start()

```
void EpidemicSimulation.SingleCommunitySimulation.Start ( )  [inline]
```

Starts the simulation.

Implements EpidemicSimulation.ISimulation.

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

- src/backend/SingleCommunitySimulation.cs

6.16 EpidemicSimulation.StatisticsPrinter Class Reference

Public Member Functions

- StatisticsPrinter (ISimulation simulation)
- void Print ()

6.16.1 Detailed Description

Class saves statistics to an external text file.

6.16.2 Constructor & Destructor Documentation

6.16.2.1 StatisticsPrinter()

```
EpidemicSimulation.StatisticsPrinter.StatisticsPrinter (
            ISimulation simulation )  [inline]
```

Constructor takes an instance of ISimulation and assigns its reference to class's private property.

Parameters

simulation	An instance of ISimulation where the data will be culled from.

6.16.3 Member Function Documentation

6.16.3.1 Print()

```
void EpidemicSimulation.StatisticsPrinter.Print ( )  [inline]
```

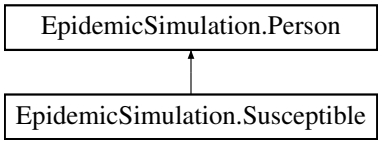
Creates a new file if none exists, otherwise, doesn't create or override anything. Saves information including date, time, chosen lethality, disease duration, communicability, overall population and the final number of infected, uninfected, recovered and dead people to the file. Closes that file.

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

- src/backend/StatisticsPrinter.cs

6.17 EpidemicSimulation.Susceptible Class Reference

Inheritance diagram for EpidemicSimulation.Susceptible:



Public Member Functions

- Susceptible (Rectangle simulationRect, float? immunity=null, int? repulsionRate=null)
- Susceptible (Rectangle simulationRect, Point startPosition, Vector2 MovementVector, float? immunity=null, int? repulsionRate=null)
- override string Type ()

Additional Inherited Members

6.17.1 Detailed Description

Class representing a person that is still healthy but prone to get infected.

6.17.2 Constructor & Destructor Documentation

6.17.2.1 Susceptible() [1/2]

```
EpidemicSimulation.Susceptible.Susceptible (
            Rectangle simulationRect,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor invoked during creation an instance of a concrete class representing a healthy but suscetible person.

Parameters

simulationRect	Rectangle determining an area where this person can move
startPosition	Position where the person is located at the very beginning of the simulation or after being added to the simulation
MovementVector	Vector defining movement of this person
immunity	Number representing personal immunity
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected.

6.17.2.2 Susceptible() [2/2]

```
EpidemicSimulation.Susceptible.Susceptible (
            Rectangle simulationRect,
            Point startPosition,
            Vector2 MovementVector,
            float?  immunity = null,
            int?  repulsionRate = null )  [inline]
```

Constructor invoked during creation an instance of a concrete class representing a healthy but suscetible person.

Parameters

simulationRect	Rectangle determining an area where this person can move
immunity	Number representing personal immunity. If it's null, a random value will be assigned
repulsionRate	Rate at which a person is repulsed from other. It hinders a risk of getting infected. If it's null, a random value will be assigned

6.17.3 Member Function Documentation

6.17.3.1 Type()

```
override string EpidemicSimulation.Susceptible.Type ( )  [inline], [virtual]
```

Returns a type of person as a text label.

Implements EpidemicSimulation.Person.

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

- src/backend/Susceptible.cs

6.18 TestSuite.TestRunner Class Reference

Static Public Member Functions

- static void **Main** (string[ ] args)
- static void **AssertTrue** (bool value)
- static void **AssertFalse** (bool value)
- static void **AssertEquals** (dynamic expected, dynamic actual)
- static void **PrintSummary** ()

Static Public Attributes

- static int **failedTests** = 0
- static int **numberOfTests** = 0

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

- test/TestRunner.cs

Index