

My Project

Generated by Doxygen 1.9.1

1 Hierarchical Index	1
1.1 Class Hierarchy	1
2 Class Index	3
2.1 Class List	3
3 Class Documentation	5
3.1 DirectedGraph< TV, TE > Class Template Reference	5
3.2 Edge< TV, TE > Struct Template Reference	6
3.3 Graph< TV, TE > Class Template Reference	6
3.4 UnDirectedGraph< TV, TE > Class Template Reference	7
3.5 Vertex< TV, TE > Struct Template Reference	7
Index	9

Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

Edge< TV, TE >	6
Graph< TV, TE >	6
DirectedGraph< TV, TE >	5
UnDirectedGraph< TV, TE >	7
Vertex< TV, TE >	7

Chapter 2

Class Index

2.1 Class List

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

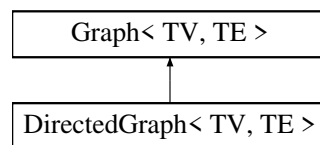
DirectedGraph< TV, TE >	5
Edge< TV, TE >	6
Graph< TV, TE >	6
UnDirectedGraph< TV, TE >	7
Vertex< TV, TE >	7

Chapter 3

Class Documentation

3.1 `DirectedGraph< TV, TE >` Class Template Reference

Inheritance diagram for `DirectedGraph< TV, TE >`:



Public Member Functions

- `bool insertVertex` (string id, TV vertex) override
- `bool createEdge` (string id1, string id2, TE w) override
- `bool deleteVertex` (string id) override
- `bool deleteEdge` (string id, string id2) override
- `TE & operator()` (string start, string end) override
- `float density` () override
- `bool isDense` (float threshold=0.5) override
- `bool isConnected` () override
- `bool isStronglyConnected` () override throw ()
- `bool empty` () override
- `void clear` () override
- `void displayVertex` (string id) override
- `bool findById` (string id) override
- `void display` () override

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

- `/home/beep1560/my/courses/cs2100-algoritmos-y-estructuras-de-datos/cs2100-proyecto/Graph/DirectedGraph.h`

3.2 Edge< TV, TE > Struct Template Reference

Public Member Functions

- **Edge** ([Vertex](#)< TV, TE > *v1, [Vertex](#)< TV, TE > *v2, TE weight_)

Public Attributes

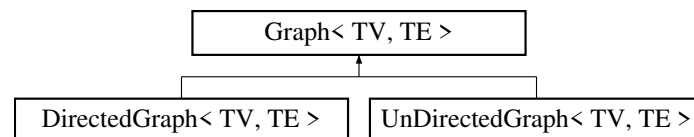
- [Vertex](#)< TV, TE > * **vertexes** [2]
- TE **weight**

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

- /home/beep1560/my/courses/cs2100-algoritmos-y-estructuras-de-datos/cs2100-proyecto/Graph/Structs.h

3.3 Graph< TV, TE > Class Template Reference

Inheritance diagram for Graph< TV, TE >:



Public Member Functions

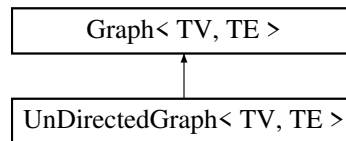
- virtual bool **insertVertex** (string id, TV vertex)=0
- virtual bool **createEdge** (string id1, string id2, TE w)=0
- virtual bool **deleteVertex** (string id)=0
- virtual bool **deleteEdge** (string id, string id2)=0
- virtual TE & **operator()** (string start, string end)=0
- virtual float **density** ()=0
- virtual bool **isDense** (float threshold=0.5)=0
- virtual bool **isConnected** ()=0
- virtual bool **isStronglyConnected** ()=0 throw ()
- virtual bool **empty** ()=0
- virtual void **clear** ()=0
- virtual void **displayVertex** (string id)=0
- virtual bool **findById** (string id)=0
- virtual void **display** ()=0

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

- /home/beep1560/my/courses/cs2100-algoritmos-y-estructuras-de-datos/cs2100-proyecto/Graph/graph.h

3.4 UnDirectedGraph< TV, TE > Class Template Reference

Inheritance diagram for UnDirectedGraph< TV, TE >:



Public Member Functions

- **bool insertVertex** (string id, TV vertex) override
- **int getNumberOfVertices** ()
- **bool createEdge** (string id1, string id2, TE w) override
- **bool deleteVertex** (string id) override
- **bool deleteEdge** (string id, string id2) override
- **TE & operator()** (string start, string end) override
- **float density** () override
- **bool isDense** (float threshold=0.5) override
- **bool isConnected** () override
- **bool isStronglyConnected** () override throw ()
- **bool empty** () override
- **void clear** () override
- **void displayVertex** (string id) override
- **bool findById** (string id) override
- **void display** () override
- **void findbyId** (string id)

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

- /home/beep1560/my/courses/cs2100-algoritmos-y-estructuras-de-datos/cs2100-proyecto/Graph/UndirectedGraph.h

3.5 Vertex< TV, TE > Struct Template Reference

Public Member Functions

- **Vertex** (TV data_, string id_)

Public Attributes

- **TV data**
- **string id**
- **std::list< Edge< TV, TE > * > edges**

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

- /home/beep1560/my/courses/cs2100-algoritmos-y-estructuras-de-datos/cs2100-proyecto/Graph/Structs.h

Index

DirectedGraph< TV, TE >, [5](#)

Edge< TV, TE >, [6](#)

Graph< TV, TE >, [6](#)

UnDirectedGraph< TV, TE >, [7](#)

Vertex< TV, TE >, [7](#)