Package Deilvery

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Chapter 1

CS3528_Project

Final project for class CS3528

Chapter 2

Class Index

2.1 Class List

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

Client

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Chapter 3

Class Documentation

3.1 Client Class Reference

Client class.

`#include <Client.h>`

Public Member Functions

- Client (const string &, const string &)
  Client basic constructor.
- void setName (const string &)
  Setter for name.
- string getName () const
  Getter for name.
- void setAddress (const string &)
  Setter for address.
- string getAddress () const
  Getter for address.
- void sendPackage (Package *pack)
  Add a sent package.
- vector< Package * > getSentPackages () const
  Get sent packages.
- void receivePackage (Package *pack)
  Add a received package.
- vector< Package * > getReceivedPackages () const
  Get received packages.

Friends

- std::ostream & operator<< (std::ostream &, const Client &)
  Insertion Operator override.

3.1.1 Detailed Description

Client class.

This client class defines a citizen of the town who can send and receive packages. Each person has a name, address, and vectors representing records of all packages sent and received.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 Client::Client (const string & *name,* const string & *address*)

Client basic constructor.

Constructor.

Basic constructor takes strings for name and address.

Parameters

&name	reference to client's name
&address	reference to client's address

3.1.3 Member Function Documentation

3.1.3.1 string Client::getAddress ( ) const

Getter for address.

Returns

Street Address

3.1.3.2 string Client::getName ( ) const

Getter for name.

Returns

name

3.1.3.3 vector< Package * > Client::getReceivedPackages ( ) const

Get received packages.

Returns

Vector of received packages

3.1.3.4 vector< Package * > Client::getSentPackages ( ) const

Get sent packages.

Returns

Vector of sent packages

3.1.3.5 void Client::receivePackage (Package * *pack*)

Add a received package.

Parameters

pack	pointer to package

3.1.3.6 void Client::sendPackage (Package * *pack*)

Add a sent package.

Parameters

pack	pointer to package

3.1.3.7 void Client::setAddress (const string & *a*)

Setter for address.

Parameters

a	reference to address string

3.1.3.8 void Client::setName (const string & *n*)

Setter for name.

Parameters

n	reference to name string

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

- Client.h
- Client.cpp

3.2 Package Class Reference

Package class.

`#include <Package.h>`

Public Types

- enum **Priority** { **REGULAR**, **TWO_DAY**, **OVERNIGHT** }

Public Member Functions

- Package (Client *, Client *, const double, const Priority)
  Constructor.
- void setSender (Client *)
  Sender setter.
- Client * getSender () const
  Sender getter.
- void setReceiver (Client *)
  Receiver setter.
- Client * getReceiver () const
  Receiver getter.
- void setWeight (const double)
  Weight setter.
- double getWeight () const
  Weight getter.
- void setPriority (const Priority)
  Priority setter.
- Priority getPriority () const
  Priority getter.
- string priorityToString () const
  Priority to string.

Friends

- std::ostream & operator<< (std::ostream &, const Package &)
  Insertion Operator Override.

3.2.1 Detailed Description

Package class.

This Package class defines a package which was sent by a Client and received by a Client. Each package has a priority, a weight, and two clients (a sender and receiver).

3.2.2 Constructor & Destructor Documentation

3.2.2.1 Package::Package (Client * *s*, Client * *r*, const double *w*, const Priority *p*)

Constructor.

Parameters

s	Sender Client
r	Receiver Client
w	Package weight
p	Package priority

3.2.3 Member Function Documentation

3.2.3.1 Package::Priority Package::getPriority ( ) const

Priority getter.

Package priority getter.

Returns

Package priority

3.2.3.2 Client * Package::getReceiver ( ) const

Receiver getter.

Returns

pointer to receiver client

3.2.3.3 Client * Package::getSender ( ) const

Sender getter.

Returns

pointer to sender client

3.2.3.4 double Package::getWeight ( ) const

Weight getter.

Package Weight getter.

Returns

Package weight

3.2.3.5 string Package::priorityToString ( ) const

Priority to string.

Priority to String.

Priority is an enum and hence is actually an int. Here's a nice way to print the string value.

Returns

string of priority

3.2.3.6 void Package::setPriority (const Priority *p*)

Priority setter.

Package Priority setter.

Parameters

p	Priority enum

3.2.3.7 void Package::setReceiver (Client * *r*)

Receiver setter.

Parameters

r	pointer to receiver client

3.2.3.8 void Package::setSender (Client * *s*)

Sender setter.

Parameters

s	pointer to sender client

3.2.3.9 void Package::setWeight (const double *w*)

Weight setter.

Package weight setter.

Throws error on negative weight.

Parameters

w	Package weight

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

- Package.h
- Package.cpp

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