Package Deilvery

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# **Chapter 1**

# CS3528\_Project

Final project for class CS3528

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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**

# **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 &)</li>
 Ostream Operator override.

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### 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

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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

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## 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.

### 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
р	Package priority

3.2.3 N	Member Function Documentation
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Package	priority getter.
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3.2.3.2	Client * Package::getReceiver ( ) const
Receiver	getter.
Returns	
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3.2.3.3	Client * Package::getSender( ) const
Sender g	getter.
Returns	
poi	nter to sender client
3.2.3.4 d	double Package::getWeight( ) const
Weight g	etter.
Package	Weight getter.
Returns	
Pad	ckage weight
3.2.3.5 v	void Package::setPriority ( const Priority p )
Priority s	setter.
Package	Priority setter.

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Parameters	
p Priority enum	
3.2.3.6 void Package::setReceiver ( Client * r )	
Receiver setter.	
Parameters	
r pointer to receiver client	
3.2.3.7 void Package::setSender ( Client * s )	
Sender setter.	
Parameters	
s pointer to sender client	
3.2.3.8 void Package::setWeight ( const double w )	

Weight setter.

Package weight setter.

Throws error on negative weight.

**Parameters** 



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

- Package.h
- Package.cpp

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