

## 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:

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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.*

#### 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

<i>&amp;name</i>	reference to client's name
<i>&amp;address</i>	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

<i>pointer</i>	to package
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3.1.3.6 void Client::sendPackage ( Package \* *pack* )

Add a sent package.

## Parameters

<i>pointer</i>	to package
----------------	------------

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

Setter for address.

## Parameters

<i>a</i>	reference to address string
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3.1.3.8 void Client::setName ( const string & *n* )

Setter for name.

## Parameters

<i>n</i>	reference to name string
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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.*

- [~Package](#) ()

*Destructor.*

- 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

<i>s</i>	Sender <a href="#">Client</a>
<i>r</i>	Receiver <a href="#">Client</a>
<i>w</i>	<a href="#">Package</a> weight
<i>p</i>	<a href="#">Package</a> 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 **void Package::setPriority ( const Priority *p* )**

Priority setter.

[Package](#) Priority setter.

Parameters

<i>p</i>	Priority enum
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**3.2.3.6 void Package::setReceiver ( Client \* r )**

Receiver setter.

**Parameters**

<i>r</i>	pointer to receiver client
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**3.2.3.7 void Package::setSender ( Client \* s )**

Sender setter.

**Parameters**

<i>s</i>	pointer to sender client
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**3.2.3.8 void Package::setWeight ( const double w )**

Weight setter.

[Package](#) weight setter.

Throws error on negative weight.

**Parameters**

<i>w</i>	<a href="#">Package</a> weight
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The documentation for this class was generated from the following files:

- Package.h
- Package.cpp

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