

# Axiom Enterprises - Route Logistics

## 0.2

Generated by Doxygen 1.8.6

Wed Mar 26 2014 22:13:20



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# Chapter 1

## Namespace Index

### 1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

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<a href="#">hello</a>	9
<a href="#">python_client_test</a>	9
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## Chapter 2

# Hierarchical Index

### 2.1 Class Hierarchy

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

account	11
Connection< Type >	11
LinkedList< Type >	12
LinkedList< Location >	12
LinkedList< PyFunc >	12
location	13
Location	13
Node< Location >	15
Matrix	15
PyFunc< Type >	16
Node< PyFunc >	15
ReturnList< Type >	18
Pyl	17
Salesman	19
Type	
Node< Type >	15



## Chapter 3

# Class Index

### 3.1 Class List

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

<a href="#">account</a>	11
<a href="#">Connection&lt; Type &gt;</a>	11
<a href="#">LinkedList&lt; Type &gt;</a>	12
<a href="#">location</a>	13
<a href="#">Location</a>	13
<a href="#">Matrix</a>	15
<a href="#">Node&lt; Type &gt;</a>	15
<a href="#">PyFunc&lt; Type &gt;</a>	16
<a href="#">Pyl</a>	17
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<a href="#">Salesman</a>	19





## Chapter 4

# File Index

### 4.1 File List

Here is a list of all files with brief descriptions:

<a href="#">main.cpp</a>	23
Backend/Salesman/ <a href="#">Location.cpp</a>	21
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tools/Socket/ <a href="#">server.h</a>	29
tools/Socket/ <a href="#">server_utils.c</a>	29
tools/Socket/ <a href="#">server_utils.h</a>	30
tools/Socket/ <a href="#">test.cpp</a>	22



## Chapter 5

# Namespace Documentation

### 5.1 basic\_window Namespace Reference

#### Functions

- def `main`

#### 5.1.1 Function Documentation

5.1.1.1 `def basic_window.main ( )`

### 5.2 hello Namespace Reference

#### Functions

- def `hello`
- def `multiply`

#### 5.2.1 Function Documentation

5.2.1.1 `def hello.hello ( )`

5.2.1.2 `def hello.multiply ( a, b )`

### 5.3 python\_client\_test Namespace Reference

#### Variables

- string `HOST` = '127.0.0.1'
- int `PORT` = 3490
- tuple `s` = `socket.socket(socket.AF_INET, socket.SOCK_STREAM)`
- tuple `data` = `s.recv(4)`

#### 5.3.1 Variable Documentation

5.3.1.1 `tuple python_client_test.data = s.recv(4)`

5.3.1.2 string `python_client_test.HOST` = '127.0.0.1'

5.3.1.3 int `python_client_test.PORT` = 3490

5.3.1.4 tuple `python_client_test.s` = `socket.socket(socket.AF_INET, socket.SOCK_STREAM)`

## 5.4 `python_server_test` Namespace Reference

### Variables

- string `HOST` = '127.0.0.1'
- int `PORT` = 50007
- tuple `s` = `socket.socket(socket.AF_INET, socket.SOCK_STREAM)`
- tuple `data` = `conn.recv(1024)`

### 5.4.1 Variable Documentation

5.4.1.1 tuple `python_server_test.data` = `conn.recv(1024)`

5.4.1.2 string `python_server_test.HOST` = '127.0.0.1'

5.4.1.3 int `python_server_test.PORT` = 50007

5.4.1.4 tuple `python_server_test.s` = `socket.socket(socket.AF_INET, socket.SOCK_STREAM)`

## Chapter 6

# Class Documentation

### 6.1 account Struct Reference

```
#include "python_ui.h"
```

#### Public Attributes

- char \* [username](#)
- char \* [password](#)

#### 6.1.1 Member Data Documentation

6.1.1.1 char\* account::password

6.1.1.2 char\* account::username

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

- tools/Sockets/[python\\_ui.h](#)

### 6.2 Connection< Type > Class Template Reference

```
#include "Graph.h"
```

#### Public Member Functions

- [Connection](#) ()

#### 6.2.1 Constructor & Destructor Documentation

6.2.1.1 template<class Type > Connection< Type >::Connection ( )

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

- tools/[Graph.h](#)

## 6.3 LinkedList< Type > Class Template Reference

```
#include "LinkedList.h"
```

### Public Member Functions

- [LinkedList](#) ()
- [~LinkedList](#) ()
- void [appendNode](#) (double latitude, double longitude)
- void [appendNode](#) (Node< Type > \*n)
- Type \* [getNextNode](#) ()
- Type \* [getNodeAt](#) (int NodeIndex)
- int [getListLength](#) ()
- void [loopThroughFrom](#) (int NodeIndex)
- void [fromStart](#) ()
- void [displayNodes](#) ()
- void [displayNodesR](#) ()
- void [emptyList](#) ()

### Private Attributes

- Node< Type > \* [front](#)
- Node< Type > \* [back](#)
- Node< Type > \* [currentNode](#)
- int [list\\_length](#)

### 6.3.1 Constructor & Destructor Documentation

6.3.1.1 `template<class Type > LinkedList< Type >::LinkedList ( )`

6.3.1.2 `template<class Type > LinkedList< Type >::~~LinkedList ( )`

### 6.3.2 Member Function Documentation

6.3.2.1 `template<class Type > void LinkedList< Type >::appendNode ( double latitude, double longitude )`

6.3.2.2 `template<class Type> void LinkedList< Type >::appendNode ( Node< Type > * n )`

6.3.2.3 `template<class Type > void LinkedList< Type >::displayNodes ( )`

6.3.2.4 `template<class Type > void LinkedList< Type >::displayNodesR ( )`

6.3.2.5 `template<class Type > void LinkedList< Type >::emptyList ( )`

6.3.2.6 `template<class Type> void LinkedList< Type >::fromStart ( )` `[inline]`

6.3.2.7 `template<class Type> int LinkedList< Type >::getListLength ( )` `[inline]`

6.3.2.8 `template<class Type > Type * LinkedList< Type >::getNextNode ( )`

6.3.2.9 `template<class Type > Type * LinkedList< Type >::getNodeAt ( int NodeIndex )`

6.3.2.10 `template<class Type > void LinkedList< Type >::loopThroughFrom ( int NodeIndex )`

### 6.3.3 Member Data Documentation

6.3.3.1 `template<class Type> Node<Type>* LinkedList< Type >::back` [private]

6.3.3.2 `template<class Type> Node<Type>* LinkedList< Type >::currentNode` [private]

6.3.3.3 `template<class Type> Node<Type>* LinkedList< Type >::front` [private]

6.3.3.4 `template<class Type> int LinkedList< Type >::list_length` [private]

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

- [tools/LinkedList.h](#)

## 6.4 location Struct Reference

```
#include "server_utils.h"
```

### Public Attributes

- double [id](#)
- double [latitude](#)
- double [longitude](#)

### 6.4.1 Member Data Documentation

6.4.1.1 `double location::id`

6.4.1.2 `double location::latitude`

6.4.1.3 `double location::longitude`

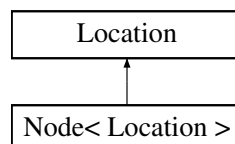
The documentation for this struct was generated from the following file:

- [tools/Sockets/server\\_utils.h](#)

## 6.5 Location Class Reference

```
#include "Location.h"
```

Inheritance diagram for Location:



### Public Member Functions

- [Location](#) (double latitude=0, double longitude=0)

- [~Location](#) ()
- void [setStart](#) ()
- bool [startLocation](#) ()
- void [notStart](#) ()
- double [getLong](#) ()
- double [getLat](#) ()
- void [printCoords](#) ()
- double [getDistanceTo](#) ([Location](#) &loc)

## Public Attributes

- bool [isStart](#)
- int [locationID](#)
- double [y](#)
- double [x](#)

## 6.5.1 Constructor & Destructor Documentation

6.5.1.1 [Location::Location](#) ( double *latitude* = 0, double *longitude* = 0 )

6.5.1.2 [Location::~~Location](#) ( )

## 6.5.2 Member Function Documentation

6.5.2.1 double [Location::getDistanceTo](#) ( [Location](#) & *loc* )

6.5.2.2 double [Location::getLat](#) ( ) [inline]

6.5.2.3 double [Location::getLong](#) ( ) [inline]

6.5.2.4 void [Location::notStart](#) ( ) [inline]

6.5.2.5 void [Location::printCoords](#) ( ) [inline]

6.5.2.6 void [Location::setStart](#) ( ) [inline]

6.5.2.7 bool [Location::startLocation](#) ( ) [inline]

## 6.5.3 Member Data Documentation

6.5.3.1 bool [Location::isStart](#)

6.5.3.2 int [Location::locationID](#)

6.5.3.3 double [Location::x](#)

6.5.3.4 double [Location::y](#)

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

- Backend/Salesman/[Location.h](#)
- Backend/Salesman/[Location.cpp](#)



## 6.6 Matrix Class Reference

```
#include "Matrices.h"
```

### Public Member Functions

- [Matrix](#) (int elements)
- [~Matrix](#) ()
- bool [setElement](#) (int row, int column, double value)
- double [getElement](#) (int row, int column)
- void [showMatrix](#) ()
- int [numberOfColumns](#) ()

### Private Attributes

- double \* [values](#)
- int [number\\_of\\_columns](#)
- int [number\\_of\\_elements](#)

### 6.6.1 Constructor & Destructor Documentation

6.6.1.1 `Matrix::Matrix ( int elements )`

6.6.1.2 `Matrix::~~Matrix ( )`

### 6.6.2 Member Function Documentation

6.6.2.1 `double Matrix::getElement ( int row, int column )`

6.6.2.2 `int Matrix::numberOfColumns ( )` `[inline]`

6.6.2.3 `bool Matrix::setElement ( int row, int column, double value )`

6.6.2.4 `void Matrix::showMatrix ( )`

### 6.6.3 Member Data Documentation

6.6.3.1 `int Matrix::number_of_columns` `[private]`

6.6.3.2 `int Matrix::number_of_elements` `[private]`

6.6.3.3 `double* Matrix::values` `[private]`

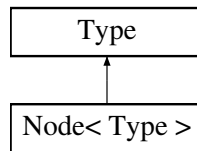
The documentation for this class was generated from the following files:

- [tools/Matrices.h](#)
- [tools/Matrices.cpp](#)

## 6.7 Node< Type > Class Template Reference

```
#include "LinkedList.h"
```

Inheritance diagram for Node< Type >:



## Public Member Functions

- [Node](#) (double latitude, double longitude)

## Public Attributes

- [Node](#)< Type > \* [next](#)
- [Node](#)< Type > \* [previous](#)

### 6.7.1 Constructor & Destructor Documentation

6.7.1.1 `template<class Type> Node< Type >::Node ( double latitude, double longitude )` `[inline]`

### 6.7.2 Member Data Documentation

6.7.2.1 `template<class Type> Node<Type>* Node< Type >::next`

6.7.2.2 `template<class Type> Node<Type>* Node< Type >::previous`

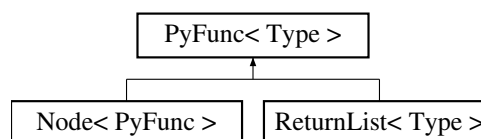
The documentation for this class was generated from the following file:

- [tools/LinkedList.h](#)

## 6.8 PyFunc< Type > Class Template Reference

```
#include "PyFunc.h"
```

Inheritance diagram for PyFunc< Type >:



## Public Member Functions

- [PyFunc](#) (const char \*Module, const char \*FuncName, char \*FileName)
- [~PyFunc](#) ()
- bool [validFunc](#) ()

## Protected Attributes

- PyObject \* [pModule](#)
- PyObject \* [pName](#)

- PyObject \* [pFunc](#)
- PyObject \* [pList](#)
- PyObject \* [pValue](#)
- PyObject \* [pListLength](#)
- PyObject [pListItem](#)
- bool [isValid](#)

### 6.8.1 Constructor & Destructor Documentation

6.8.1.1 `template<class Type > PyFunc< Type >::PyFunc ( const char * Module, const char * FuncName, char * FileName )`

6.8.1.2 `template<class Type > PyFunc< Type >::~~PyFunc ( )`

### 6.8.2 Member Function Documentation

6.8.2.1 `template<class Type > bool PyFunc< Type >::validFunc ( )` [inline]

### 6.8.3 Member Data Documentation

6.8.3.1 `template<class Type > bool PyFunc< Type >::isValid` [protected]

6.8.3.2 `template<class Type > PyObject * PyFunc< Type >::pFunc` [protected]

6.8.3.3 `template<class Type > PyObject * PyFunc< Type >::pList` [protected]

6.8.3.4 `template<class Type > PyObject PyFunc< Type >::pListItem` [protected]

6.8.3.5 `template<class Type > PyObject* PyFunc< Type >::pListLength` [protected]

6.8.3.6 `template<class Type > PyObject* PyFunc< Type >::pModule` [protected]

6.8.3.7 `template<class Type > PyObject * PyFunc< Type >::pName` [protected]

6.8.3.8 `template<class Type > PyObject * PyFunc< Type >::pValue` [protected]

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

- tools/Python/[PyFunc.h](#)
- tools/Python/[.PyFunc.cpp](#)

## 6.9 Pyl Class Reference

```
#include ".PyI.h"
```

### Public Member Functions

- [Pyl](#) ()
- [~Pyl](#) ()
- void [addFunction](#) ([PyFunc](#) \*pFunc)

## Private Attributes

- [LinkedList< PyFunc > \\* funcList](#)

### 6.9.1 Constructor & Destructor Documentation

6.9.1.1 `Pyl::Pyl ( )`

6.9.1.2 `Pyl::~~Pyl ( )`

### 6.9.2 Member Function Documentation

6.9.2.1 `void Pyl::addFunction ( PyFunc * pFunc )`

### 6.9.3 Member Data Documentation

6.9.3.1 `LinkedList<PyFunc>* Pyl::funcList` [private]

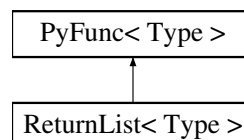
The documentation for this class was generated from the following files:

- [tools/Python/.Pyl.h](#)
- [tools/Python/.Pyl.cpp](#)

## 6.10 ReturnList< Type > Class Template Reference

```
#include "Functions.h"
```

Inheritance diagram for ReturnList< Type >:



## Public Member Functions

- [ReturnList](#) (const char \*ModuleName, const char \*FuncName, char \*FileName)
- Type \* [callFunction](#) ()

## Additional Inherited Members

### 6.10.1 Constructor & Destructor Documentation

6.10.1.1 `template<class Type > ReturnList< Type >::ReturnList ( const char * ModuleName, const char * FuncName, char * FileName )` [inline]

### 6.10.2 Member Function Documentation

6.10.2.1 `template<class Type > Type * ReturnList< Type >::callFunction ( )`

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

- [tools/Python/Functions.h](#)
- [tools/Python/.Functions.cpp](#)

## 6.11 Salesman Class Reference

```
#include "Salesman.h"
```

### Public Member Functions

- [Salesman](#) ()
- [~Salesman](#) ()
- void [addLocation](#) (double longitude, double latitude)
- void [showLocations](#) ()
- void [showRoute](#) ()
- bool [populateMatrix](#) ()
- void [calculateRoute](#) ()

### Private Attributes

- [LinkedList](#)< [Location](#) > \* [locations](#)
- [LinkedList](#)< [Location](#) > \* [route](#)
- [Matrix](#) \* [distanceMatrix](#)
- bool [hasMatrix](#)

### 6.11.1 Constructor & Destructor Documentation

6.11.1.1 [Salesman::Salesman](#) ( )

6.11.1.2 [Salesman::~~Salesman](#) ( )

### 6.11.2 Member Function Documentation

6.11.2.1 void [Salesman::addLocation](#) ( double *longitude*, double *latitude* )

6.11.2.2 void [Salesman::calculateRoute](#) ( )

6.11.2.3 bool [Salesman::populateMatrix](#) ( )

6.11.2.4 void [Salesman::showLocations](#) ( )

6.11.2.5 void [Salesman::showRoute](#) ( )

### 6.11.3 Member Data Documentation

6.11.3.1 [Matrix](#)\* [Salesman::distanceMatrix](#) [private]

6.11.3.2 bool [Salesman::hasMatrix](#) [private]

6.11.3.3 [LinkedList](#)<[Location](#)>\* [Salesman::locations](#) [private]

6.11.3.4 [LinkedList](#)<[Location](#)>\* [Salesman::route](#) [private]

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

- Backend/Salesman/[Salesman.h](#)
- Backend/Salesman/[Salesman.cpp](#)

## Chapter 7

# File Documentation

### 7.1 Backend/Salesman/Location.cpp File Reference

```
#include "Location.h"
```

### 7.2 Backend/Salesman/Location.h File Reference

```
#include <iostream>
#include <cmath>
#include "../tools/LinkedList.h"
```

#### Classes

- class [Location](#)

### 7.3 Backend/Salesman/Salesman.cpp File Reference

```
#include "Salesman.h"
```

### 7.4 Backend/Salesman/Salesman.h File Reference

```
#include "Location.h"
#include "../tools/LinkedList.h"
#include "../tools/Matrices.h"
```

#### Classes

- class [Salesman](#)

## 7.5 Backend/Salesman/test.cpp File Reference

```
#include "Location.h"  
#include "Salesman.h"
```

### Functions

- int [main](#) ()

#### 7.5.1 Function Documentation

##### 7.5.1.1 int main ( )

## 7.6 tests/test.cpp File Reference

```
#include <python2.7/Python.h>  
#include <iostream>
```

### Functions

- int [main](#) ()

#### 7.6.1 Function Documentation

##### 7.6.1.1 int main ( )

## 7.7 tools/Sockets/test.cpp File Reference

```
#include "server_utils.h"
```

### Functions

- int [main](#) ()

#### 7.7.1 Function Documentation

##### 7.7.1.1 int main ( )

## 7.8 tools/test.cpp File Reference

```
#include "LinkedList.h"
```

### Functions

- int [main](#) ()



### 7.8.1 Function Documentation

7.8.1.1 `int main ( )`

## 7.9 Backend/Salesman/test2.cpp File Reference

```
#include "Location.h"
```

### Functions

- `int main ()`

### 7.9.1 Function Documentation

7.9.1.1 `int main ( )`

## 7.10 main.cpp File Reference

```
#include <iostream>
#include <thread>
#include "tools/Sockets/server.h"
```

### Functions

- `int main ()`

### 7.10.1 Function Documentation

7.10.1.1 `int main ( )`

## 7.11 tests/basic\_window.py File Reference

### Namespaces

- `basic\_window`

### Functions

- `def basic\_window.main`

## 7.12 tests/example.cpp File Reference

```
#include <python2.7/Python.h>
#include <iostream>
```

## Functions

- int [main](#) (int argc, char \*argv[])

### 7.12.1 Function Documentation

7.12.1.1 int main ( int *argc*, char \* *argv*[] )

## 7.13 tests/hello.py File Reference

### Namespaces

- [hello](#)

### Functions

- def [hello.hello](#)
- def [hello.multiply](#)

## 7.14 tools/Graph.h File Reference

```
#include <iostream>
```

### Classes

- class [Connection](#)< [Type](#) >

### Functions

- template<class [Type](#) >  
class [Connection](#)< [Type](#) > [Node](#) ()
- [Connection](#) ()
- [~Node](#) ()

### 7.14.1 Function Documentation

7.14.1.1 [Node::Connection](#) ( )

7.14.1.2 template<class [Type](#) > class [Connection](#)< [Type](#) > [Node](#) ( )

7.14.1.3 [~Node](#) ( )

## 7.15 tools/LinkedList.h File Reference

```
#include <iostream>
#include <stdexcept>
```

## Classes

- class [Node< Type >](#)
- class [LinkedList< Type >](#)

## Variables

- [Node Node](#)

### 7.15.1 Variable Documentation

#### 7.15.1.1 Node Node

## 7.16 tools/Matrices.cpp File Reference

```
#include "Matrices.h"
```

## 7.17 tools/Matrices.h File Reference

```
#include <iostream>
#include <cmath>
```

## Classes

- class [Matrix](#)

## 7.18 tools/Python/.Functions.cpp File Reference

```
#include "Functions.h"
```

## 7.19 tools/Python/.PyFunc.cpp File Reference

```
#include "PyFunc.h"
```

## 7.20 tools/Python/.Pyl.cpp File Reference

```
#include "PyI.h"
#include "PyFunc.h"
```

## 7.21 tools/Python/.Pyl.h File Reference

```
#include <python2.7/Python.h>
#include "PyFunc.h"
#include "../tools/LinkedList.h"
```

### Classes

- class [Pyl](#)

## 7.22 tools/Python/Functions.h File Reference

```
#include "PyFunc.h"
```

### Classes

- class [ReturnList< Type >](#)

## 7.23 tools/Python/PyFunc.h File Reference

```
#include <python2.7/Python.h>
#include <iostream>
```

### Classes

- class [PyFunc< Type >](#)

## 7.24 tools/Socket/client.c File Reference

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>
#include <string.h>
#include <netdb.h>
#include <sys/types.h>
#include <netinet/in.h>
#include <sys/socket.h>
#include <arpa/inet.h>
```

### Macros

- [#define PORT](#) "3490"
- [#define MAXDATASIZE](#) 100

## Functions

- void \* [get\\_in\\_addr](#) (struct sockaddr \*sa)
- int [main](#) (int argc, char \*argv[])

## 7.24.1 Macro Definition Documentation

7.24.1.1 `#define MAXDATASIZE 100`

7.24.1.2 `#define PORT "3490"`

## 7.24.2 Function Documentation

7.24.2.1 void\* [get\\_in\\_addr](#) ( struct sockaddr \* sa )

7.24.2.2 int [main](#) ( int *argc*, char \* *argv*[] )

## 7.25 tools/SocketS/python\_client\_test.py File Reference

### Namespaces

- [python\\_client\\_test](#)

### Variables

- string [python\\_client\\_test.HOST](#) = '127.0.0.1'
- int [python\\_client\\_test.PORT](#) = 3490
- tuple [python\\_client\\_test.s](#) = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)
- tuple [python\\_client\\_test.data](#) = s.recv(4)

## 7.26 tools/SocketS/python\_server\_test.py File Reference

### Namespaces

- [python\\_server\\_test](#)

### Variables

- string [python\\_server\\_test.HOST](#) = '127.0.0.1'
- int [python\\_server\\_test.PORT](#) = 50007
- tuple [python\\_server\\_test.s](#) = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)
- tuple [python\\_server\\_test.data](#) = conn.recv(1024)

## 7.27 tools/SocketS/python\_ui.c File Reference

```
#include "python_ui.h"
```

## Functions

- int [handleUI](#) (int their\_socket)
- int [getNumLines](#) (FILE \*file)
- int [loadAccounts](#) (FILE \*file, struct [account](#) \*accounts, int num)
- int [loginSuccessful](#) ()

### 7.27.1 Function Documentation

7.27.1.1 int [getNumLines](#) ( FILE \* *file* )

7.27.1.2 int [handleUI](#) ( int *their\_socket* )

7.27.1.3 int [loadAccounts](#) ( FILE \* *file*, struct [account](#) \* *accounts*, int *num* )

7.27.1.4 int [loginSuccessful](#) ( )

## 7.28 tools/SocketS/python\_ui.h File Reference

```
#include <string.h>
#include "server_utils.h"
```

## Classes

- struct [account](#)

## Functions

- int [handleUI](#) (int their\_socket)
- int [loginSuccessful](#) ()
- int [getNumLines](#) (FILE \*file)
- int [loadAccounts](#) (FILE \*file, struct [account](#) \*accounts, int num)

### 7.28.1 Function Documentation

7.28.1.1 int [getNumLines](#) ( FILE \* *file* )

7.28.1.2 int [handleUI](#) ( int *their\_socket* )

7.28.1.3 int [loadAccounts](#) ( FILE \* *file*, struct [account](#) \* *accounts*, int *num* )

7.28.1.4 int [loginSuccessful](#) ( )

## 7.29 tools/SocketS/server.c File Reference

```
#include "server_utils.h"
```

## Functions

- int [run\\_server](#) (int sock)

### 7.29.1 Function Documentation

7.29.1.1 `int run_server ( int sock )`

## 7.30 tools/Sockets/server.h File Reference

```
#include "server_utils.h"
#include "python_ui.h"
```

### Functions

- `int run_server` (int sock)

### 7.30.1 Function Documentation

7.30.1.1 `int run_server ( int sock )`

## 7.31 tools/Sockets/server\_utils.c File Reference

```
#include "server_utils.h"
```

### Functions

- `void sigchld_handler` (int s)
- `void * get_in_addr` (struct sockaddr \*sa)
- `int new_socket` (int portNum)
- `int receiveData` (int their\_socket, char \*data, int data\_size)

### 7.31.1 Function Documentation

7.31.1.1 `void* get_in_addr ( struct sockaddr * sa )`

7.31.1.2 `int new_socket ( int portNum )`

7.31.1.3 `int receiveData ( int their_socket, char * data, int data_size )`

7.31.1.4 `void sigchld_handler ( int s )`

## 7.32 tools/Sockets/server\_utils.h File Reference

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>
#include <string.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>
#include <arpa/inet.h>
#include <sys/wait.h>
#include <signal.h>
```

### Classes

- struct [location](#)

### Macros

- #define [PORT](#) "3490"
- #define [BACKLOG](#) 10
- #define [UI](#) 1
- #define [APP](#) 2

### Functions

- int [receiveData](#) (int *their\_socket*, char \**data*, int *data\_size*)
- void [sigchld\\_handler](#) (int *s*)
- int [new\\_socket](#) (int *portNum*)
- void \* [get\\_in\\_addr](#) (struct sockaddr \**sa*)

#### 7.32.1 Macro Definition Documentation

7.32.1.1 #define [APP](#) 2

7.32.1.2 #define [BACKLOG](#) 10

7.32.1.3 #define [PORT](#) "3490"

7.32.1.4 #define [UI](#) 1

#### 7.32.2 Function Documentation

7.32.2.1 void\* [get\\_in\\_addr](#) ( struct sockaddr \* *sa* )

7.32.2.2 int [new\\_socket](#) ( int *portNum* )

7.32.2.3 int [receiveData](#) ( int *their\_socket*, char \* *data*, int *data\_size* )

7.32.2.4 void [sigchld\\_handler](#) ( int *s* )



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