My House Market Analysis

0.2

Generated by Doxygen 1.8.13

Contents

Chapter 1

Class Index

1.1 Class List

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

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

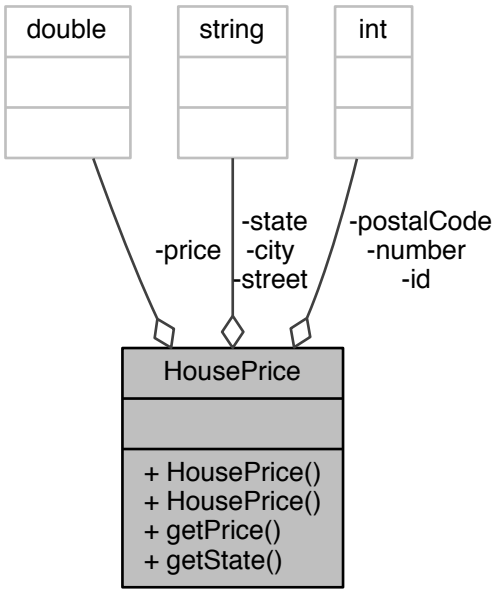
Chapter 3

Class Documentation

3.1 HousePrice Class Reference

`#include <HousePrice.h>`

Collaboration diagram for HousePrice:



Public Member Functions

- HousePrice ()
- HousePrice (int id, int number, const string &street, const string &city, const string &state, int postalCode, double price)
- double getPrice () const
- const string & getState () const

Private Attributes

- int id
- int number
- string street
- string city
- string state
- int postalCode
- double price

Friends

- ostream & operator<< (ostream &os, const HousePrice &price)

3.1.1 Constructor & Destructor Documentation

3.1.1.1 HousePrice() [1/2]

```
HousePrice::HousePrice ( )
```

3.1.1.2 HousePrice() [2/2]

```
HousePrice::HousePrice (
            int id,
            int number,
            const string & street,
            const string & city,
            const string & state,
            int postalCode,
            double price )
```

3.1.2 Member Function Documentation

3.1.2.1 getPrice()

```
double HousePrice::getPrice ( ) const
```

Here is the caller graph for this function:

3.1.2.2 getState()

```
const string & HousePrice::getState ( ) const
```

Here is the caller graph for this function:

3.1.3 Friends And Related Function Documentation

3.1.3.1 operator<<

```
ostream& operator<< (
            ostream & os,
            const HousePrice & price )  [friend]
```

3.1.4 Member Data Documentation

3.1.4.1 city

```
string HousePrice::city  [private]
```

3.1.4.2 id

```
int HousePrice::id  [private]
```

3.1.4.3 number

```
int HousePrice::number  [private]
```

3.1.4.4 postalCode

```
int HousePrice::postalCode  [private]
```

3.1.4.5 price

```
double HousePrice::price  [private]
```

3.1.4.6 state

```
string HousePrice::state  [private]
```

3.1.4.7 street

```
string HousePrice::street  [private]
```

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

- HousePrice.h
- HousePrice.cpp

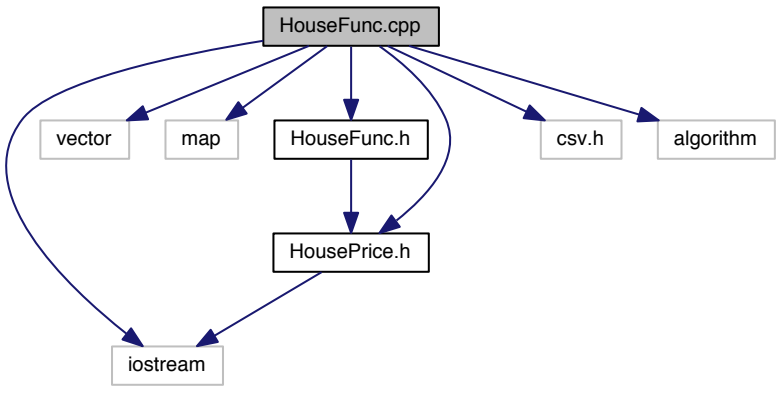
Chapter 4

File Documentation

4.1 HouseFunc.cpp File Reference

```
#include <iostream>
#include <vector>
#include <map>
#include "HouseFunc.h"
#include "HousePrice.h"
#include "csv.h"
#include <algorithm>
```

Include dependency graph for HouseFunc.cpp:



Functions

- void readCSV (const string fileIn, vector< HousePrice > &hp)
- void houseMarketValues (vector< HousePrice > &hp)
- void houseMarketPerState (vector< HousePrice > &hp)

4.1.1 Function Documentation

4.1.1.1 houseMarketPerState()

```
void houseMarketPerState (
            vector< HousePrice > & hp )
```

Sort the Vector of HousePrice Objects by state. Display the number of houses per state. It uses a map to count instances per state.

Parameters

hp	Reference to vector<HousePrice>

Here is the call graph for this function:

4.1.1.2 houseMarketValues()

```
void houseMarketValues (
            vector< HousePrice > & hp )
```

Sort the Vector of HousePrice Objects by price. Display the most affordable and the most expensive house from the vector.

Parameters

hp	Reference to vector<HousePrice>

Here is the call graph for this function:

4.1.1.3 readCSV()

```
void readCSV (
            const string fileIn,
            vector< HousePrice > & hp )
```

Read CSV Mock Data. Parses each record in the file to an object of HousePrice house. Then, populate a vector of HousePrice objects with all the records. It uses special library to parse CSV file "csv.h"

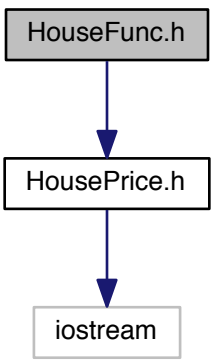
Parameters

fileIn	File name <string>
hp	Reference to Vector of HousePrice Objects

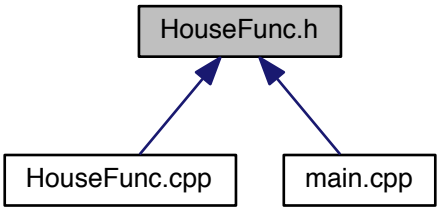
4.2 HouseFunc.h File Reference

```
#include "HousePrice.h"
```

Include dependency graph for HouseFunc.h:



This graph shows which files directly or indirectly include this file:



Functions

- void readCSV (const string fileIn, vector< HousePrice > &hp)
- void houseMarketInfo (vector< HousePrice > &hp)

4.2.1 Function Documentation

4.2.1.1 houseMarketInfo()

```
void houseMarketInfo (
            vector< HousePrice > & hp )
```

4.2.1.2 readCSV()

```
void readCSV (
            const string fileIn,
            vector< HousePrice > & hp )
```

Read CSV Mock Data. Parses each record in the file to an object of HousePrice house. Then, populate a vector of HousePrice objects with all the records. It uses special library to parse CSV file "csv.h"

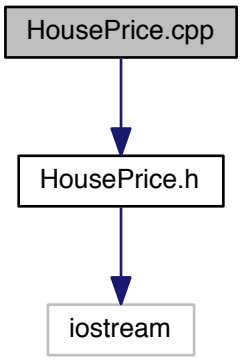
Parameters

fileIn	File name <string>
hp	Reference to Vector of HousePrice Objects

4.3 HousePrice.cpp File Reference

```
#include "HousePrice.h"
```

Include dependency graph for HousePrice.cpp:



Functions

- ostream & operator<< (ostream &os, const HousePrice &price)

4.3.1 Function Documentation

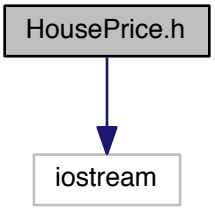
4.3.1.1 operator<<()

```
ostream& operator<< (
            ostream & os,
            const HousePrice & price )
```

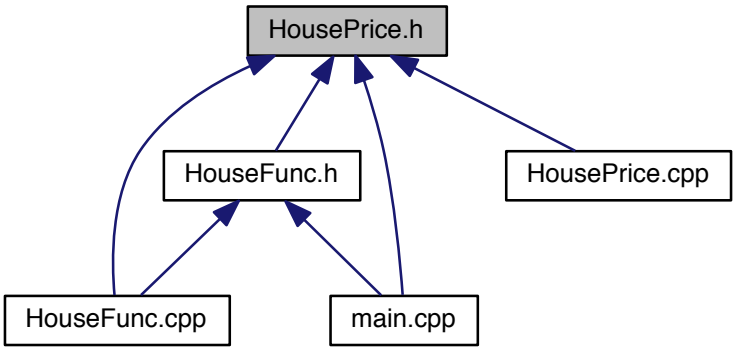
4.4 HousePrice.h File Reference

```
#include <iostream>
```

Include dependency graph for HousePrice.h:



This graph shows which files directly or indirectly include this file:



Classes

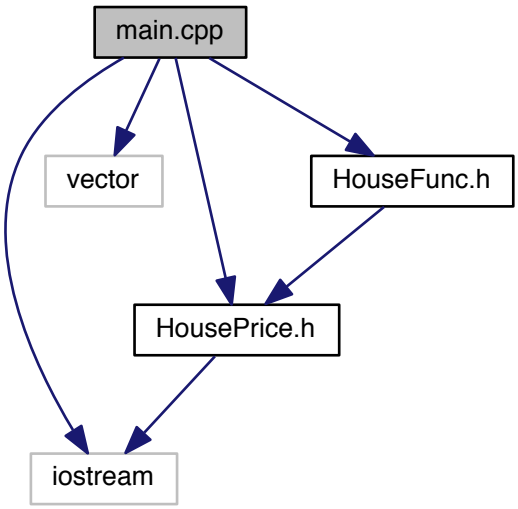
- class HousePrice

4.5 main.cpp File Reference

```
#include <iostream>
#include <vector>
#include "HousePrice.h"
```

```
#include "HouseFunc.h"
```

Include dependency graph for main.cpp:



Functions

- int main (int argc, char ∗argv[ ])

4.5.1 Function Documentation

4.5.1.1 main()

```
int main (
            int argc,
            char * argv[] )
```

Main Function

Returns

0 no error, error otherwise

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