My House Market Analysis
0.2

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# **Class Index**

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

2 Class Index

# File Index

# 2.1 File List

Here is a list of all files with brief descriptions:

HouseFunc.cpp									 							 						9
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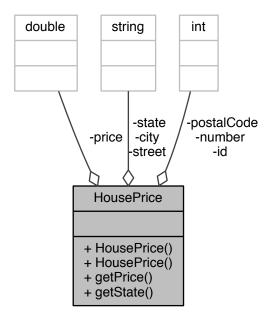
File Index

# **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

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# **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

# $\textbf{3.1.3.1} \quad \text{operator} <<$

# 3.1.4 Member Data Documentation

8 Class 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

# **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:
```

HouseFunc.h

HouseFunc.h

Iostream

#### **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()

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 (  \mbox{const string } fileIn, \\ \mbox{vector} < \mbox{HousePrice} > \& \mbox{hp} \mbox{)}
```

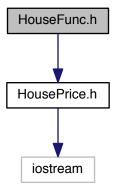
Read CSV Mock Data. Parses each record in the file to an object of HousePrice house. Then, populate a vector of HousePrice objects with all the records. It uses special library to parse CSV file "csv.h"

#### **Parameters**

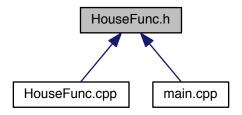
file⊷	File name <string></string>
In	
hp	Reference to Vector of HousePrice Objects

# 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 ( \label{eq:vector} \mbox{vector} < \mbox{ HousePrice } > \mbox{ \& } \mbox{ } \mbox{hp } \mbox{ )}
```

# 4.2.1.2 readCSV()

```
void readCSV (  \mbox{const string } fileIn, \\ \mbox{vector} < \mbox{HousePrice} > \& \mbox{hp} \mbox{)}
```

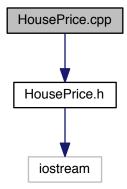
Read CSV Mock Data. Parses each record in the file to an object of HousePrice house. Then, populate a vector of HousePrice objects with all the records. It uses special library to parse CSV file "csv.h"

#### **Parameters**

	file⊷ In	File name <string></string>
Ī	hp	Reference to Vector of HousePrice Objects

# 4.3 HousePrice.cpp File Reference

```
#include "HousePrice.h"
Include dependency graph for HousePrice.cpp:
```



# **Functions**

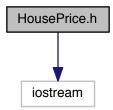
• ostream & operator<< (ostream &os, const HousePrice &price)

# 4.3.1 Function Documentation

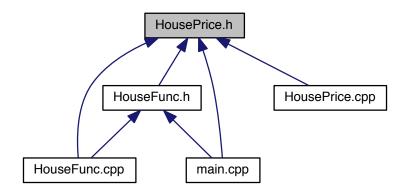
# 4.3.1.1 operator << ()

# 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:



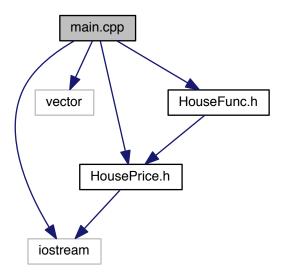
#### **Classes**

• 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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