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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 housing_estate Struct Reference

Public Member Functions

- housing_estate ()
- housing_estate (int numberHouse, int numberApartment, float square, string name)
- bool operator> (housing_estate &h2)
- bool operator>= (housing_estate &h2)
- bool operator< (housing_estate &h2)
- bool operator<= (housing_estate &h2)

Public Attributes

- int numberHouse
- int numberApartment
- int number_of_rooms
- float square
- string name
- int number_of_residents

3.1.1 Constructor & Destructor Documentation

3.1.1.1 housing_estate() [1/2]

```
housing_estate::housing_estate ( )  [inline]
```

3.1.1.2 housing_estate() [2/2]

```
housing_estate::housing_estate (
            int numberHouse,
            int numberApartment,
            float square,
            string name )  [inline]
```

3.1.2 Member Function Documentation

3.1.2.1 operator<()

```
bool housing_estate::operator< (
            housing_estate & h2 )  [inline]
```

3.1.2.2 operator<=()

```
bool housing_estate::operator<= (
            housing_estate & h2 )  [inline]
```

3.1.2.3 operator>()

```
bool housing_estate::operator> (
            housing_estate & h2 )  [inline]
```

3.1.2.4 operator>=()

```
bool housing_estate::operator>= (
            housing_estate & h2 )  [inline]
```

3.1.3 Member Data Documentation

3.1.3.1 name

```
string housing_estate::name
```

3.1.3.2 number_of_residents

```
int housing_estate::number_of_residents
```

3.1.3.3 number_of_rooms

```
int housing_estate::number_of_rooms
```

3.1.3.4 numberApartment

```
int housing_estate::numberApartment
```

3.1.3.5 numberHouse

```
int housing_estate::numberHouse
```

3.1.3.6 square

```
float housing_estate::square
```

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

- D:/23/lab_pr1/main.cpp

Chapter 4

File Documentation

4.1 D:/23/lab_pr1/main.cpp File Reference

```
#include <iostream>
#include <fstream>
#include <string.h>
#include <stdio.h>
#include <vector>
#include <sstream>
#include <chrono>
#include <iterator>
#include <algorithm>
```

Classes

- struct housing_estate

Functions

- std::ostream & operator<< (std::ostream &os, const housing_estate &h)
- template<class T >
  void bubbleSort (vector< T > &arr, int n)
- template<class T >
  void insertSort (vector< T > &a, long size)
- template<class T >
  int partition (vector< T > &nums, int low, int high)
- template<class T >
  void quickSort (vector< T > &nums, int low, int high)
- void File (string file, int sort)
- int main ()

4.1.1 Function Documentation

4.1.1.1 bubbleSort()

```
template<class T >
void bubbleSort (
            vector< T > & arr,
            int n )
```

4.1.1.2 File()

```
void File (
            string file,
            int sort )
```

4.1.1.3 insertSort()

```
template<class T >
void insertSort (
            vector< T > & a,
            long size )
```

4.1.1.4 main()

```
int main ( )
```

4.1.1.5 operator<<()

```
std::ostream & operator<< (
            std::ostream & os,
            const housing_estate & h )
```

4.1.1.6 partition()

```
template<class T >
int partition (
            vector< T > & nums,
            int low,
            int high )
```

4.1.1.7 quickSort()

```
template<class T >
void quickSort (
            vector< T > & nums,
            int low,
            int high )
```

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