

Project 4

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Chapter 1

Class Index

1.1 Class List

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

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Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

Bubble.cpp	Implementation file for the Bubble sorting class	7
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Chapter 3

Class Documentation

3.1 Bubble Class Reference

Public Member Functions

- **Bubble** (int toSort[], int count)
- void **sort** ()

Public Attributes

- int **count**
- int * **data**
- double **elapsedTime**
- int **comparisonCount**
- int **swapCount**

Friends

- ostream & **operator**<< (ostream &out, const [Bubble](#) &bubble)

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

- [Bubble.h](#)
- [Bubble.cpp](#)

3.2 Counting Class Reference

Public Member Functions

- **Counting** (int toSort[], int count)
- void **sort** ()

Public Attributes

- int **count**
- int * **countingArray**
- int * **data**
- double **elapsedTime**
- int **comparisonCount**
- int **swapCount**

Friends

- ostream & **operator**<< (ostream &out, const [Counting](#) &[Counting](#))

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

- [Counting.h](#)
- [Counting.cpp](#)

3.3 Merge Class Reference

Public Member Functions

- **Merge** (int toSort[], long count)
- void **merge** (long first, long mid, long last)
- void **sort** (long first, long last)

Public Attributes

- int **count**
- int * **data**
- double **elapsedTime**
- int **comparisonCount**
- int **swapCount**

Friends

- ostream & **operator**<< (ostream &out, const [Merge](#) &merge)

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

- [Merge.h](#)
- [Merge.cpp](#)

Chapter 4

File Documentation

4.1 Bubble.cpp File Reference

Implementation file for the [Bubble](#) sorting class.

```
#include "Bubble.h"
```

Functions

- ostream & **operator**<< (ostream &out, const [Bubble](#) &bubble)

4.1.1 Detailed Description

Implementation file for the [Bubble](#) sorting class.

Author

Willis Allstead

Specifies the functions of the [Bubble](#) sorting class

Version

1.0

4.2 Bubble.h File Reference

Header file for the [Bubble](#) sorting class.

```
#include <iostream>
#include <ctime>
```

Classes

- class [Bubble](#)

4.2.1 Detailed Description

Header file for the [Bubble](#) sorting class.

Author

Willis Allstead

Specifies the members of the [Bubble](#) sorting class

Version

1.0

4.3 Counting.cpp File Reference

Implementation file for the [Counting](#) sorting class.

```
#include "Counting.h"
```

Functions

- ostream & **operator**<< (ostream &out, const [Counting](#) &[Counting](#))

4.3.1 Detailed Description

Implementation file for the [Counting](#) sorting class.

Author

Willis Allstead

Specifies the functions of the [Counting](#) sorting class

Version

1.0

4.4 Counting.h File Reference

Header file for the [Counting](#) sorting class.

```
#include <iostream>
#include <ctime>
```

Classes

- class [Counting](#)

4.4.1 Detailed Description

Header file for the [Counting](#) sorting class.

Author

Willis Allstead

Specifies the members of the [Counting](#) sorting class

Version

1.0

4.5 Merge.cpp File Reference

Implementation file for the [Merge](#) sorting class.

```
#include "Merge.h"
```

Functions

- ostream & **operator**<< (ostream &out, const [Merge](#) &merge)

4.5.1 Detailed Description

Implementation file for the [Merge](#) sorting class.

Author

Willis Allstead

Specifies the functions of the [Merge](#) sorting class

Version

1.0

4.6 Merge.h File Reference

Header file for the [Merge](#) sorting class.

```
#include <iostream>
#include <ctime>
```

Classes

- class [Merge](#)

4.6.1 Detailed Description

Header file for the [Merge](#) sorting class.

Author

Willis Allstead

Specifies the members of the [Merge](#) sorting class

Version

1.0

4.7 PA04.cpp File Reference

Main driver for project 4.

```
#include <iostream>
#include <string>
#include <fstream>
#include "Bubble.h"
#include "Merge.h"
#include "Counting.h"
```

Functions

- void **populateFile** (int count, std::string const &file)
- int **main** ()

4.7.1 Detailed Description

Main driver for project 4.

Author

Willis Allstead

Runs tests with different sorting algorithms

Version

1.0

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