

Proj5

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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

Class Documentation

2.1 arrayList Class Reference

Public Member Functions

- void [setArrival](#) (int)
- int [getArrival](#) ()
- void [setDuration](#) (int)
- int [getDuration](#) ()
- void [setWaitTime](#) (int)
- int [getWaitTime](#) ()
- void [setDeparture](#) (int)
- int [getDeparture](#) ()

Friends

- class **queue**

2.1.1 Member Function Documentation

2.1.1.1 [getArrival\(\)](#)

```
int arrayList::getArrival ( )
```

Will get the arrival time

Returns

arrival

2.1.1.2 getDeparture()

```
int arrayList::getDeparture ( )
```

Will get the departure time

Returns

departure

2.1.1.3 getDuration()

```
int arrayList::getDuration ( )
```

Will get the duration time

Returns

duration

2.1.1.4 getWaitTime()

```
int arrayList::getWaitTime ( )
```

Will get the wait time

Returns

wait

2.1.1.5 setArrival()

```
void arrayList::setArrival (
    int a )
```

Sets the arrival time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set arrival to the variable

2.1.1.6 setDeparture()

```
void arrayList::setDeparture (
    int d )
```

Sets the departure time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set departure to the variable

2.1.1.7 setDuration()

```
void arrayList::setDuration (
    int d )
```

Sets the duration time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set duration to the variable

2.1.1.8 setWaitTime()

```
void arrayList::setWaitTime (
    int w )
```

Sets the departure time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set wait to the variable

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

- arrayQueue.h
- arrayQueue.cpp

2.2 linkedList Class Reference

Public Member Functions

- void [setArrival](#) (int)
- int [getArrival](#) ()
- void [setDuration](#) (int)
- int [getDuration](#) ()
- void [setWaitTime](#) (int)
- int [getWaitTime](#) ()
- void [setDeparture](#) (int)
- int [getDeparture](#) ()

2.2.1 Member Function Documentation

2.2.1.1 getArrival()

```
int linkedList::getArrival ( )
```

Will get the arrival time

Returns

arrival

2.2.1.2 getDeparture()

```
int linkedList::getDeparture ( )
```

Will get the departure time

Returns

departure

2.2.1.3 getDuration()

```
int linkedList::getDuration ( )
```

Will get the duration time

Returns

duration

2.2.1.4 getWaitTime()

```
int linkedList::getWaitTime ( )
```

Will get the wait time

Returns

wait

2.2.1.5 setArrival()

```
void linkedList::setArrival (
    int a )
```

Sets the arrival time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set arrival to the variable

2.2.1.6 setDeparture()

```
void linkedList::setDeparture (
    int d )
```

Sets the departure time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set departure to the variable

2.2.1.7 setDuration()

```
void linkedList::setDuration (
    int d )
```

Sets the duration time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set duration to the variable

2.2.1.8 setWaitTime()

```
void linkedList::setWaitTime (
    int w )
```

Sets the departure time

Parameters

<i>a</i>	
----------	--

Precondition

Will take the variable and set arrival to it

Postcondition

Will set wait to the variable

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

- linkedList.h
- linkedList.cpp

2.3 queue Class Reference

Public Member Functions

- [queue](#) ()
Default C-tor.
- void [setLine](#) (int, int, int)
Will give the values of the arrival times and duration times.
- void [processArrival](#) (int, int)
Will procces the arrival time for that index.
- void [processDeparture](#) (int index)
Will proccess the departure time and all the other data.
- void [setAvail](#) (bool)
Will set the teller to true or false.
- bool [getAvail](#) ()
- bool [isEmpty](#) (int)
Will check if it is empty.
- void [setArrival](#) (int)
- int [getArrival](#) (int)
- void [reset](#) ()
- int [getDuration](#) (int)
- int [getDepart](#) (int i)
- int [getWait](#) (int)

Friends

- class **arrayList**

2.3.1 Constructor & Destructor Documentation

2.3.1.1 queue()

```
queue::queue ( )
```

Default C-tor.

Precondition

When a class object is called it gives it default values

Postcondition

Will give all the values 0

2.3.2 Member Function Documentation

2.3.2.1 isEmpty()

```
bool queue::isEmpty (
    int index )
```

Will check if it is empty.

Parameters

<i>index</i>	
--------------	--

Returns

bool

Precondition

Will check that index position

Postcondition

If the index goes over the set amount it is at the end

2.3.2.2 processArrival()

```
void queue::processArrival (
    int index,
    int time )
```

Will process the arrival time for that index.

Parameters

<i>index</i>	
<i>time</i>	

Precondition

Will take in current time to set the wait time

Postcondition

Will set the wait time for that index, and set the tller to false

2.3.2.3 processDeparture()

```
void queue::processDeparture (
    int index )
```

Will process the departure time and all the other data.

Parameters

<i>index</i>	
--------------	--

Precondition

Will take in the index to get and set data for that index

Postcondition

Will calculate the departure time for the customer

2.3.2.4 reset()

```
void queue::reset ( )
```

Will reset the values for the next question

Postcondition

Will set all the values back to zero and all bool values to their postions

2.3.2.5 setAvail()

```
void queue::setAvail (
    bool a )
```

Will set the teller to true or false.

Parameters

<i>a</i>	
----------	--

Precondition

Takes in a bool value to set

Postcondition

sets the availability to a

2.3.2.6 setLine()

```
void queue::setLine (
    int index,
    int arrival,
    int duration )
```

Will give the values of the arrival times and duration times.

Parameters

<i>index</i>	
<i>arrival</i>	
<i>duration</i>	

Precondition

Will take in the index, arrival and duration time to give to the class

Postcondition

Will set the arrival and duration time for that index in the class

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

- queue.h
- queue.cpp

2.4 queueLinked Class Reference

Public Member Functions

- [queueLinked](#) ()
Default C-tor.
- void [setLine](#) (int, int, int)
Will give the values of the arrival times and duration times.
- void [processArrival](#) (int, int)
Will procces the arrival time for that index.
- void [processDeparture](#) (int index)
Will proccess the departure time and all the other data.
- void [setAvail](#) (bool)
Will set the teller to true or false.
- bool [getAvail](#) ()
Will check if it is empty.
- bool **isEmpty** (int)
- void **setArrival** (int)
- int **getArrival** (int)
- void **remove** ()
- int **getDepart** (int i)
- int **getWait** (int)

Friends

- class **linkedList**

2.4.1 Constructor & Destructor Documentation

2.4.1.1 queueLinked()

```
queueLinked::queueLinked ( )
```

Default C-tor.

Precondition

When a class object is called it gives it default values

Postcondition

Will give all the values 0

2.4.2 Member Function Documentation

2.4.2.1 getAvail()

```
bool queueLinked::getAvail ( )
```

Will check if it is empty.

Parameters

<i>index</i>	
--------------	--

Returns

bool

Precondition

Will check that index position

Postcondition

If the index goes over the set amount it is at the end

2.4.2.2 processArrival()

```
void queueLinked::processArrival (
    int index,
    int time )
```

Will proceses the arrival time for that index.

Parameters

<i>index</i>	
<i>time</i>	

Precondition

Will take in current time to set the wait time

Postcondition

Will set the wait time for that index, and set the tller to false

2.4.2.3 processDeparture()

```
void queueLinked::processDeparture (
    int index )
```

Will process the departure time and all the other data.

Parameters

<i>index</i>	
--------------	--

Precondition

Will take in the index to get and set data for that index

Postcondition

Will calculate the departure time for the customer

2.4.2.4 setAvail()

```
void queueLinked::setAvail (
    bool a )
```

Will set the teller to true or false.

Parameters

<i>a</i>	
----------	--

Precondition

Takes in a bool value to set

Postcondition

sets the availability to a

2.4.2.5 setLine()

```
void queueLinked::setLine (
    int index,
    int arrival,
    int duration )
```

Will give the values of the arrival times and duration times.

Parameters

<i>index</i>	
<i>arrival</i>	
<i>duration</i>	

Precondition

Will take in the index, arrival and duration time to give to the class

Postcondition

Will set the arrival and duration time for that index in the class

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

- queueLinked.h
- queueLinked.cpp

Index

- arrayList, [3](#)
 - getArrival, [3](#)
 - getDeparture, [3](#)
 - getDuration, [4](#)
 - getWaitTime, [4](#)
 - setArrival, [4](#)
 - setDeparture, [5](#)
 - setDuration, [5](#)
 - setWaitTime, [5](#)
- getArrival
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 - queueLinked, [15](#)
- setWaitTime
 - arrayList, [5](#)
 - linkedList, [8](#)