

Project 1: Event Planner

Team 3

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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:

events.h	??
events.hpp	21
interface.h	??
interface.hpp	21
io.h	??
io.hpp	22
log.h	??
log.hpp	22
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Chapter 3

Class Documentation

3.1 Events Class Reference

Static Public Member Functions

- static void [userMode](#) ()
- static void [adminMode](#) ()

3.1.1 Member Function Documentation

3.1.1.1 adminMode()

```
void Events::adminMode ( ) [static]
```

Precondition

None

Postcondition

Start Admin Mode

Returns

None

3.1.1.2 userMode()

```
void Events::userMode ( ) [static]
```

Precondition

None

Postcondition

Start User Mode

Returns

None

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

- events.h
- [events.hpp](#)

3.2 Interface Class Reference

Classes

- class [Menu](#)

Public Member Functions

- [Interface](#) ()
- [~Interface](#) ()

Static Public Member Functions

- static void [clearScreen](#) ()
- static std::string [getInput](#) (const char *message)
- static void [Wait](#) (std::string wait_string)
- static void [toggleTimeFormat](#) ()

3.2.1 Constructor & Destructor Documentation

3.2.1.1 Interface()

```
Interface::Interface ( )
```

Precondition

None

Postcondition

Constructor

3.2.1.2 ~Interface()

```
Interface::~~Interface ( )
```

Precondition

None

Postcondition

Destructor

3.2.2 Member Function Documentation

3.2.2.1 clearScreen()

```
void Interface::clearScreen ( ) [static]
```

Precondition

None

Postcondition

Clears terminal

Returns

None

3.2.2.2 getInput()

```
std::string Interface::getInput (
    const char * message ) [static]
```

Precondition

message is the input request message string presented to the user

Postcondition

requests user input

Returns

Returns the user's given input

3.2.2.3 toggleTimeFormat()

```
void Interface::toggleTimeFormat ( ) [static]
```

Precondition

None

Postcondition

Toggles the time format between 12-hour and 24-hour formats

Returns

None

3.2.2.4 Wait()

```
void Interface::Wait (
    std::string wait_string ) [static]
```

Precondition

wait_string is a message shown to the user while waiting

Postcondition

Waits for the user to press enter

Returns

None

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

- interface.h
- [interface.hpp](#)

3.3 IO Class Reference

A header file for Input/Output (IO) class.

```
#include <io.h>
```

Public Member Functions

- [IO](#) (const std::string fileName)
- [~IO](#) ()
- void [addEntry](#) (std::string store)
- std::string [retrieveElement](#) (int ID, std::string elementName)
- void [updateElement](#) (int ID, std::string elementName, void *value)
- void [displayEntries](#) ()
- std::string [timeFormatter](#) (std::string slot)

Public Attributes

- int **size**

Static Public Attributes

- static bool **timeFormat** = false

3.3.1 Detailed Description

A header file for Input/Output (IO) class.

Author

Team 3

Date

3.3.2 Constructor & Destructor Documentation

3.3.2.1 IO()

```
IO::IO (
    const std::string fileName )
```

Precondition

None

Postcondition

A file is opened with given name. It is created if it does not exist yet

3.3.2.2 ~IO()

```
IO::~~IO ( )
```

Precondition

None

Postcondition

A file is closed with given name

3.3.3 Member Function Documentation

3.3.3.1 addEntry()

```
void IO::addEntry (
    std::string store )
```

Precondition

None

Postcondition

Adds new event to file

Returns

None

3.3.3.2 displayEntries()

```
void IO::displayEntries ( )
```

Precondition

None

Postcondition

Displays all elements in file, one at a time

Returns

None

3.3.3.3 retrieveElement()

```
std::string IO::retrieveElement (
    int ID,
    std::string elementName )
```

Precondition

ID is the event's unique identifier. elementName is the name of the element to retrieve

Postcondition

Retrieves some event's specific element value from the events file

Returns

Returns event's specific element (string or int)

3.3.3.4 timeFormatter()

```
std::string IO::timeFormatter (
    std::string slot )
```

Precondition

slot has the time value that needs to be formatted

Postcondition

Formats time between 12-hour format and 24-hour format

Returns

String with slot in new time format

3.3.3.5 updateElement()

```
void IO::updateElement (
    int ID,
    std::string elementName,
    void * value )
```

Precondition

ID is the event's unique identifier. elementName is the name of the element to update, value is the element's new value

Postcondition

Updates some event's specific element

Returns

None

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

- io.h
- [io.hpp](#)

3.4 Log Class Reference

A header file [Log](#) class.

```
#include <log.h>
```

Public Member Functions

- [Log](#) ()
- [~Log](#) ()
- void [addEntry](#) (std::string error_type, std::string function_responsible)

3.4.1 Detailed Description

A header file [Log](#) class.

Author

Team 3

Date

3.4.2 Constructor & Destructor Documentation

3.4.2.1 Log()

```
Log::Log ( )
```

Precondition

None

Postcondition

A file is opened with given name. It is created if it does not exist yet

3.4.2.2 ~Log()

```
Log::~Log ( )
```

Precondition

None

Postcondition

A file is closed with given name

3.4.3 Member Function Documentation

3.4.3.1 addEntry()

```
void Log::addEntry (
    std::string error_type,
    std::string function_responsible )
```

Precondition

timeNdate refers to the specific time and date the error occurred, error_type specifies the type of error encountered, function_responsible specifies where the error occurred in the code

Postcondition

Keeps log file of encountered errors in the running program. Shows error message to user

Returns

None

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

- log.h
- [log.hpp](#)

3.5 Interface::Menu Class Reference

Public Member Functions

- [Menu](#) (const std::vector< std::pair< std::string, void(*)()>> &options)
- void [Loop](#) ()
- void [Header](#) ()

3.5.1 Constructor & Destructor Documentation

3.5.1.1 Menu()

```
Interface::Menu::Menu (
    const std::vector< std::pair< std::string, void(*)()>> & options
)
```

Precondition

options is a vector of pairs, where each pair is composed of a string (referring to a menu option, and a pointer to the corresponding callback function

Postcondition

Constructor for [Menu](#) class object

3.5.2 Member Function Documentation

3.5.2.1 Header()

```
void Interface::Menu::Header ( )
```

Precondition

None

Postcondition

Draws a header for a menu

Returns

None

3.5.2.2 Loop()

```
void Interface::Menu::Loop ( )
```

Precondition

None

Postcondition

A menu loop

Returns

None

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

- interface.h
- [interface.hpp](#)

Chapter 4

File Documentation

4.1 events.hpp File Reference

4.1.1 Detailed Description

Author

Team 3

Date

4.2 interface.hpp File Reference

4.2.1 Detailed Description

Author

Team 3

Date

4.3 io.hpp File Reference

4.3.1 Detailed Description

Author

Team 3

Date

4.4 log.hpp File Reference

4.4.1 Detailed Description

Author

Team 3

Date

4.5 main.cpp File Reference

driver for project

```
#include <iostream>
#include "interface.h"
#include "io.h"
#include "log.h"
#include "events.h"
```

Functions

- int **main** (int argc, char **argv)

4.5.1 Detailed Description

driver for project

Author

Team 3

Date

