Objektinio programavimo projektas

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Chapter 2

Class Index

2.1 Class List

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

Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

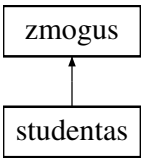
Chapter 4

Class Documentation

4.1 studentas Class Reference

`#include <studentas.h>`

Inheritance diagram for studentas:



Public Member Functions

- studentas ()
- studentas (const string &v, const string &p, const vector< int > &nd, int e, double g)
- ~studentas ()
- studentas (const studentas &kit)
- studentas & operator= (const studentas &kit)
- studentas (studentas &&kit) noexcept
- studentas & operator= (studentas &&kit) noexcept
- string getVardas () const
- string getPavarde () const
- vector< int > getNdrez () const
- int getErez () const
- double getGbalas () const
- void setVardas (const string &v)
- void setPavarde (const string &p)
- void setNdrez (const vector< int > &nd)
- void setErez (int e)
- void setGbalas (double g)
- void sortNdrez ()

Public Member Functions inherited from zmogus

- virtual ~zmogus ()=default

Public Attributes

- string line
- char budas

Private Attributes

- string vardas
- string pavarde
- vector< int > ndrez
- int erez
- double gbalas

Friends

- std::istream & operator>> (std::istream &in, studentas &kit)
- std::ostream & operator<< (std::ostream &out, const studentas &kit)

Additional Inherited Members

Protected Member Functions inherited from zmogus

- zmogus ()

4.1.1 Constructor & Destructor Documentation

4.1.1.1 studentas() [1/4]

```
studentas::studentas ( )
```

4.1.1.2 studentas() [2/4]

```
studentas::studentas (
            const string & v,
            const string & p,
            const vector< int > & nd,
            int e,
            double g )
```

4.1.1.3 ~studentas()

```
studentas::~studentas ( )
```

4.1.1.4 studentas() [3/4]

```
studentas::studentas (
            const studentas & kit )
```

4.1.1.5 studentas() [4/4]

```
studentas::studentas (
            studentas && kit )  [noexcept]
```

4.1.2 Member Function Documentation

4.1.2.1 getErez()

```
int studentas::getErez ( ) const  [inline]
```

4.1.2.2 getGbalas()

```
double studentas::getGbalas ( ) const  [inline]
```

4.1.2.3 getNdrez()

```
vector< int > studentas::getNdrez ( ) const  [inline]
```

4.1.2.4 getPavarde()

```
string studentas::getPavarde ( ) const  [inline]
```

4.1.2.5 getVardas()

```
string studentas::getVardas ( ) const  [inline]
```

4.1.2.6 operator=() [1/2]

```
studentas & studentas::operator= (
            const studentas & kit )
```

4.1.2.7 operator=() [2/2]

```
studentas & studentas::operator= (
            studentas && kit )  [noexcept]
```

4.1.2.8 setErez()

```
void studentas::setErez (
            int e )  [inline]
```

4.1.2.9 setGbalas()

```
void studentas::setGbalas (
            double g )  [inline]
```

4.1.2.10 setNdrez()

```
void studentas::setNdrez (
            const vector< int > & nd )  [inline]
```

4.1.2.11 setPavarde()

```
void studentas::setPavarde (
            const string & p )  [inline]
```

4.1.2.12 setVardas()

```
void studentas::setVardas (
            const string & v )  [inline]
```

4.1.2.13 sortNdrez()

```
void studentas::sortNdrez ( )  [inline]
```

4.1.3 Friends And Related Symbol Documentation

4.1.3.1 operator<<

```
std::ostream & operator<< (
            std::ostream & out,
            const studentas & kit )  [friend]
```

4.1.3.2 operator>>

```
std::istream & operator>> (
            std::istream & in,
            studentas & kit )  [friend]
```

4.1.4 Member Data Documentation

4.1.4.1 budas

```
char studentas::budas
```

4.1.4.2 erez

```
int studentas::erez  [private]
```

4.1.4.3 gbalas

```
double studentas::gbalas  [private]
```

4.1.4.4 line

```
string studentas::line
```

4.1.4.5 ndrez

```
vector<int> studentas::ndrez  [private]
```

4.1.4.6 pavarde

```
string studentas::pavarde  [private]
```

4.1.4.7 vardas

```
string studentas::vardas  [private]
```

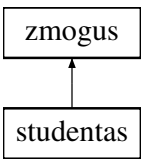
The documentation for this class was generated from the following files:

- studentas.h
- studentas.cpp

4.2 zmogus Class Reference

```
#include <zmogus.h>
```

Inheritance diagram for zmogus:



Public Member Functions

- virtual ~zmogus ()=default

Protected Member Functions

- zmogus ()

4.2.1 Constructor & Destructor Documentation

4.2.1.1 ~zmogus()

```
virtual zmogus::~zmogus ( )  [virtual], [default]
```

4.2.1.2 zmogus()

```
zmogus::zmogus ( )  [inline], [protected]
```

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

- zmogus.h

Chapter 5

File Documentation

5.1 build/CMakeFiles/3.29.2/CompilerIdC/CMakeCCompilerId.c File Reference

Macros

- #define __has_include(x) 0
- #define COMPILER_ID ""
- #define STRINGIFY_HELPER(X) #X
- #define STRINGIFY(X) STRINGIFY_HELPER(X)
- #define PLATFORM_ID
- #define ARCHITECTURE_ID
- #define DEC(n)
- #define HEX(n)
- #define C_VERSION

Functions

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

Variables

- char const * info_compiler = "INFO" ":" "compiler[" COMPILER_ID "]"
- char const * info_platform = "INFO" ":" "platform[" PLATFORM_ID "]"
- char const * info_arch = "INFO" ":" "arch[" ARCHITECTURE_ID "]"
- const char * info_language_standard_default
- const char * info_language_extensions_default

5.1.1 Macro Definition Documentation

5.1.1.1 __has_include

```
#define __has_include(
              x ) 0
```

5.1.1.2 ARCHITECTURE_ID

```
#define ARCHITECTURE_ID
```

5.1.1.3 C_VERSION

```
#define C_VERSION
```

5.1.1.4 COMPILER_ID

```
#define COMPILER_ID ""
```

5.1.1.5 DEC

```
#define DEC(
              n )
```

Value:

```
  ('0' + (((n) / 10000000)%10)), \
  ('0' + (((n) / 1000000)%10)),  \
  ('0' + (((n) / 100000)%10)),   \
  ('0' + (((n) / 10000)%10)),    \
  ('0' + (((n) / 1000)%10)),     \
  ('0' + (((n) / 100)%10)),      \
  ('0' + (((n) / 10)%10)),       \
  ('0' +  ((n) % 10))
```

5.1.1.6 HEX

```
#define HEX(
              n )
```

Value:

```
  ('0' + ((n)»28 & 0xF)), \
  ('0' + ((n)»24 & 0xF)), \
  ('0' + ((n)»20 & 0xF)), \
  ('0' + ((n)»16 & 0xF)), \
  ('0' + ((n)»12 & 0xF)), \
  ('0' + ((n)»8  & 0xF)), \
  ('0' + ((n)»4  & 0xF)), \
  ('0' + ((n)     & 0xF))
```

5.1.1.7 PLATFORM_ID

```
#define PLATFORM_ID
```

5.1.1.8 STRINGIFY

```
#define STRINGIFY(
              X ) STRINGIFY_HELPER(X)
```

5.1.1.9 STRINGIFY_HELPER

```
#define STRINGIFY_HELPER(
              X ) #X
```

5.1.2 Function Documentation

5.1.2.1 main()

```
int main (
             int argc,
             char * argv[] )
```

5.1.3 Variable Documentation

5.1.3.1 info_arch

```
char const* info_arch = "INFO" ":" "arch[" ARCHITECTURE_ID "]"
```

5.1.3.2 info_compiler

```
char const* info_compiler = "INFO" ":" "compiler[" COMPILER_ID "]"
```

5.1.3.3 info_language_extensions_default

```
const char* info_language_extensions_default
```

Initial value:

```
= "INFO" ":" "extensions_default["



  "OFF"

"]"
```

5.1.3.4 info_language_standard_default

```
const char* info_language_standard_default
```

Initial value:

```
=
  "INFO" ":" "standard_default[" C_VERSION "]"
```

5.1.3.5 info_platform

```
char const* info_platform = "INFO" ":" "platform[" PLATFORM_ID "]"
```

5.2 build/CMakeFiles/3.29.2/CompilerIdCXX/CMakeCXXCompilerId.cpp File Reference

Macros

- #define __has_include(x) 0
- #define COMPILER_ID ""
- #define STRINGIFY_HELPER(X) #X
- #define STRINGIFY(X) STRINGIFY_HELPER(X)
- #define PLATFORM_ID
- #define ARCHITECTURE_ID
- #define DEC(n)
- #define HEX(n)
- #define CXX_STD __cplusplus

Functions

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

Variables

- char const * info_compiler = "INFO" ":" "compiler[" COMPILER_ID "]"
- char const * info_platform = "INFO" ":" "platform[" PLATFORM_ID "]"
- char const * info_arch = "INFO" ":" "arch[" ARCHITECTURE_ID "]"
- const char * info_language_standard_default
- const char * info_language_extensions_default

5.2.1 Macro Definition Documentation

5.2.1.1 __has_include

```
#define __has_include(
              x ) 0
```

5.2.1.2 ARCHITECTURE_ID

```
#define ARCHITECTURE_ID
```

5.2.1.3 COMPILER_ID

```
#define COMPILER_ID ""
```

5.2.1.4 CXX_STD

```
#define CXX_STD __cplusplus
```

5.2.1.5 DEC

```
#define DEC(
              n )
```

Value:

```
  ('0' + (((n) / 10000000)%10)), \
  ('0' + (((n) / 1000000)%10)),  \
  ('0' + (((n) / 100000)%10)),   \
  ('0' + (((n) / 10000)%10)),    \
  ('0' + (((n) / 1000)%10)),     \
  ('0' + (((n) / 100)%10)),      \
  ('0' + (((n) / 10)%10)),       \
  ('0' +  ((n) % 10))
```

5.2.1.6 HEX

```
#define HEX(
              n )
```

Value:

```
  ('0' + ((n)»28 & 0xF)), \
  ('0' + ((n)»24 & 0xF)), \
  ('0' + ((n)»20 & 0xF)), \
  ('0' + ((n)»16 & 0xF)), \
  ('0' + ((n)»12 & 0xF)), \
  ('0' + ((n)»8  & 0xF)), \
  ('0' + ((n)»4  & 0xF)), \
  ('0' + ((n)     & 0xF))
```

5.2.1.7 PLATFORM_ID

```
#define PLATFORM_ID
```

5.2.1.8 STRINGIFY

```
#define STRINGIFY(
              X ) STRINGIFY_HELPER(X)
```

5.2.1.9 STRINGIFY_HELPER

```
#define STRINGIFY_HELPER(
              X ) #X
```

5.2.2 Function Documentation

5.2.2.1 main()

```
int main (
             int argc,
             char * argv[] )
```

5.2.3 Variable Documentation

5.2.3.1 info_arch

```
char const* info_arch = "INFO" ":" "arch[" ARCHITECTURE_ID "]"
```

5.2.3.2 info_compiler

```
char const* info_compiler = "INFO" ":" "compiler[" COMPILER_ID "]"
```

5.2.3.3 info_language_extensions_default

```
const char* info_language_extensions_default
```

Initial value:

```
= "INFO" ":" "extensions_default["


  "OFF"

"]"
```

5.2.3.4 info_language_standard_default

```
const char* info_language_standard_default
```

Initial value:

```
= "INFO" ":" "standard_default["


  "98"

"]"
```

5.2.3.5 info_platform

```
char const* info_platform = "INFO" ":" "platform[" PLATFORM_ID "]"
```

5.3 build/CMakeFiles/mytests.dir/mytests.cpp.o.d File Reference

5.4 build/CMakeFiles/mytests.dir/studentas.cpp.o.d File Reference

5.5 build/googletest/googlemock/CMakeFiles/gmock.dir/src/gmock-all.cc.o.d File Reference

5.6 build/googletest/googlemock/CMakeFiles/gmock_main.dir/src/gmock_main.cc.o.d File Reference

5.7 build/googletest/googletest/CMakeFiles/gtest.dir/src/gtest-all.cc.o.d File Reference

5.8 build/googletest/googletest/CMakeFiles/gtest_main.dir/src/gtest_main.cc.o.d File Reference

5.9 errorfinder.cpp File Reference

```
#include "errorfinder.h"
#include "studentas.h"
```

Functions

- int ivedbudpatikra ()
- char budaspatikra ()
- char dskaitpatikra ()
- int studskpatikra ()
- char isvedbudpatikra ()
- int erezpatikra ()
- char rikbudpatikra ()
- int pazymiopatikra ()
- char skirstymopatikra ()
- char fgeneravimopatikra ()
- int skirststratpat ()

5.9.1 Function Documentation

5.9.1.1 budaspatikra()

```
char budaspatikra ( )
```

5.9.1.2 dskaitpatikra()

```
char dskaitpatikra ( )
```

5.9.1.3 erezpatikra()

```
int erezpatikra ( )
```

5.9.1.4 fgeneravimopatikra()

```
char fgeneravimopatikra ( )
```

5.9.1.5 isvedbudpatikra()

```
char isvedbudpatikra ( )
```

5.9.1.6 ivedbudpatikra()

```
int ivedbudpatikra ( )
```

5.9.1.7 pazymiopatikra()

```
int pazymiopatikra ( )
```

5.9.1.8 rikbudpatikra()

```
char rikbudpatikra ( )
```

5.9.1.9 skirststratpat()

```
int skirststratpat ( )
```

5.9.1.10 skirstymopatikra()

```
char skirstymopatikra ( )
```

5.9.1.11 studskpatikra()

```
int studskpatikra ( )
```

5.10 errorfinder.h File Reference

```
#include <iostream>
#include <limits>
```

Functions

- int ivedbudpatikra ()
- char budaspatikra ()
- char dskaitpatikra ()
- int studskpatikra ()
- char isvedbudpatikra ()
- int erezpatikra ()
- char rikbudpatikra ()
- int pazymiopatikra ()
- char skirstymopatikra ()
- int skirststratpat ()
- char fgeneravimopatikra ()

5.10.1 Function Documentation

5.10.1.1 budaspatikra()

```
char budaspatikra ( )
```

5.10.1.2 dskaitpatikra()

```
char dskaitpatikra ( )
```

5.10.1.3 erezpatikra()

```
int erezpatikra ( )
```

5.10.1.4 fgeneravimopatikra()

```
char fgeneravimopatikra ( )
```

5.10.1.5 isvedbudpatikra()

```
char isvedbudpatikra ( )
```

5.10.1.6 ivedbudpatikra()

```
int ivedbudpatikra ( )
```

5.10.1.7 pazymiopatikra()

```
int pazymiopatikra ( )
```

5.10.1.8 rikbudpatikra()

```
char rikbudpatikra ( )
```

5.10.1.9 skirststratpat()

```
int skirststratpat ( )
```

5.10.1.10 skirstymopatikra()

```
char skirstymopatikra ( )
```

5.10.1.11 studskpatikra()

```
int studskpatikra ( )
```

5.11 errorfinder.h

Go to the documentation of this file.

```
00001 #include <iostream>
00002 #include <limits>
00003
00004 using namespace std;
00005
00006 int ivedbudpatikra();
00007 char budaspatikra();
00008 char dskaitpatikra();
00009 int studskpatikra();
00010 char isvedbudpatikra();
00011 int erezpatikra();
00012 char rikbudpatikra();
00013 int pazymiopatikra();
00014 char skirstymopatikra();
00015 int skirststratpat();
00016 char fgeneravimopatikra();
```

5.12 filegenerator.cpp File Reference

```
#include "filegenerator.h"
#include "errorfinder.h"
#include "functions.h"
#include "studentas.h"
```

Functions

- int failugeneravimas ()

5.12.1 Function Documentation

5.12.1.1 failugeneravimas()

```
int failugeneravimas ( )
```

5.13 filegenerator.h File Reference

```
#include <iostream>
#include <iomanip>
#include <fstream>
#include <sstream>
#include <chrono>
```

Functions

- int failugeneravimas ()

5.13.1 Function Documentation

5.13.1.1 failugeneravimas()

```
int failugeneravimas ( )
```

5.14 filegenerator.h

Go to the documentation of this file.

```
00001 #include<iostream>
00002 #include<iomanip>
00003 #include<fstream>
00004 #include <sstream>
00005 #include <chrono>
00006
00007
00008 using namespace std;
00009 using namespace std::chrono;
00010
00011 int failugeneravimas();
```

5.15 functions.cpp File Reference

```
#include "functions.h"
#include "errorfinder.h"
#include "studentas.h"
```

Functions

- void skaitymasisfailo (vector< studentas > &A, char budas, char ivedbudas)
- void irasymasifaila (vector< studentas > &A, char budas)
- void isvedimas (vector< studentas > &A, char budas)
- void pazymiuived (studentas &new_studentas, char budas, int ivedbudas)
- void skaiciavimas (studentas &new_studentas, char budas)
- bool rikiavimasgbalas (const studentas &a, const studentas &b)
- bool rikiavimasvardas (const studentas &a, const studentas &b)
- bool rikiavimaspavarde (const studentas &a, const studentas &b)
- void rikiavimas (vector< studentas > &A)
- void skirstymas1 (vector< studentas > &A, vector< studentas > &K, vector< studentas > &V)
- void skirstymas2 (vector< studentas > &A, vector< studentas > &V)
- void skirstymas3 (vector< studentas > &A, vector< studentas > &K, vector< studentas > &V)
- void irasymasifailaK (vector< studentas > &A, vector< studentas > &K, vector< studentas > &V, char budas, int skistr)

Variables

- int tlaikas = 0

5.15.1 Function Documentation

5.15.1.1 irasymasifaila()

```
void irasymasifaila (
            vector< studentas > & A,
            char budas )
```

5.15.1.2 irasymasifailaK()

```
void irasymasifailaK (
            vector< studentas > & A,
            vector< studentas > & K,
            vector< studentas > & V,
            char budas,
            int skistr )
```

5.15.1.3 isvedimas()

```
void isvedimas (
            vector< studentas > & A,
            char budas )
```

5.15.1.4 pazymiuived()

```
void pazymiuived (
            studentas & new_studentas,
            char budas,
            int ivedbudas )
```

5.15.1.5 rikiavimas()

```
void rikiavimas (
            vector< studentas > & A )
```

5.15.1.6 rikiavimasgbalas()

```
bool rikiavimasgbalas (
            const studentas & a,
            const studentas & b )
```

5.15.1.7 rikiavimaspavarde()

```
bool rikiavimaspavarde (
            const studentas & a,
            const studentas & b )
```

5.15.1.8 rikiavimasvardas()

```
bool rikiavimasvardas (
            const studentas & a,
            const studentas & b )
```

5.15.1.9 skaiciavimas()

```
void skaiciavimas (
            studentas & new_studentas,
            char budas )
```

5.15.1.10 skaitymasisfailo()

```
void skaitymasisfailo (
            vector< studentas > & A,
            char budas,
            char ivedbudas )
```

5.15.1.11 skirstymas1()

```
void skirstymas1 (
            vector< studentas > & A,
            vector< studentas > & K,
            vector< studentas > & V )
```

5.15.1.12 skirstymas2()

```
void skirstymas2 (
            vector< studentas > & A,
            vector< studentas > & V )
```

5.15.1.13 skirstymas3()

```
void skirstymas3 (
            vector< studentas > & A,
            vector< studentas > & K,
            vector< studentas > & V )
```

5.15.2 Variable Documentation

5.15.2.1 tlaikas

```
int tlaikas = 0
```

5.16 functions.h File Reference

```
#include <iostream>
#include <iomanip>
#include <limits>
#include <algorithm>
#include <vector>
#include <cstdlib>
#include <ctime>
#include <string>
#include <fstream>
#include <sstream>
#include <chrono>
#include "studentas.h"
```

Functions

- void skaitymasisfailo (vector< studentas > &A, char budas, char ivedbudas)
- void isvedimas (vector< studentas > &A, char budas)
- void pazymiuived (studentas &new_studentas, char budas, int ivedbudas)
- void skaiciavimas (studentas &new_studentas, char budas)
- void irasymasifaila (vector< studentas > &A, char budas)
- bool rikiavimasgbalas (const studentas &a, const studentas &b)
- bool rikiavimasvardas (const studentas &a, const studentas &b)
- bool rikiavimaspavarde (const studentas &a, const studentas &b)
- void rikiavimas (vector< studentas > &A)
- void skirstymas1 (vector< studentas > &A, vector< studentas > &K, vector< studentas > &V)
- void skirstymas2 (vector< studentas > &A, vector< studentas > &V)
- void skirstymas3 (vector< studentas > &A, vector< studentas > &K, vector< studentas > &V)
- void irasymasifailaK (vector< studentas > &A, vector< studentas > &K, vector< studentas > &V, char budas, int skistr)

Variables

- int tlaikas

5.16.1 Function Documentation

5.16.1.1 irasymasifaila()

```
void irasymasifaila (
            vector< studentas > & A,
            char budas )
```

5.16.1.2 irasymasifailaK()

```
void irasymasifailaK (
            vector< studentas > & A,
            vector< studentas > & K,
            vector< studentas > & V,
            char budas,
            int skistr )
```

5.16.1.3 isvedimas()

```
void isvedimas (
            vector< studentas > & A,
            char budas )
```

5.16.1.4 pazymiuived()

```
void pazymiuived (
            studentas & new_studentas,
            char budas,
            int ivedbudas )
```

5.16.1.5 rikiavimas()

```
void rikiavimas (
            vector< studentas > & A )
```

5.16.1.6 rikiavimasgbalas()

```
bool rikiavimasgbalas (
            const studentas & a,
            const studentas & b )
```

5.16.1.7 rikiavimaspavarde()

```
bool rikiavimaspavarde (
            const studentas & a,
            const studentas & b )
```

5.16.1.8 rikiavimasvardas()

```
bool rikiavimasvardas (
            const studentas & a,
            const studentas & b )
```

5.16.1.9 skaiciavimas()

```
void skaiciavimas (
            studentas & new_studentas,
            char budas )
```

5.16.1.10 skaitymasisfailo()

```
void skaitymasisfailo (
            vector< studentas > & A,
            char budas,
            char ivedbudas )
```

5.16.1.11 skirstymas1()

```
void skirstymas1 (
            vector< studentas > & A,
            vector< studentas > & K,
            vector< studentas > & V )
```

5.16.1.12 skirstymas2()

```
void skirstymas2 (
            vector< studentas > & A,
            vector< studentas > & V )
```

5.16.1.13 skirstymas3()

```
void skirstymas3 (
            vector< studentas > & A,
            vector< studentas > & K,
            vector< studentas > & V )
```

5.16.2 Variable Documentation

5.16.2.1 tlaikas

```
int tlaikas  [extern]
```

5.17 functions.h

Go to the documentation of this file.

```
00001 #ifndef FUNCTIONS_H
00002 #define FUNCTIONS_H
00003
00004 #include <iostream>
00005 #include <iomanip>
00006 #include <limits>
00007 #include <algorithm>
00008 #include <vector>
00009 #include <cstdlib>
00010 #include <ctime>
00011 #include <string>
00012 #include <fstream>
00013 #include <sstream>
00014 #include <chrono>
00015 #include "studentas.h"
00016
00017 using namespace std;
00018 using namespace std::chrono;
00019
00020 // struct studentas
00021 // {
00022 //     string vardas;
00023 //     string pavarde;
00024 //     vector<int> ndrez; //sudaromas vektorius
00025 //     int erez;
00026 //     double gbalas;
00027 // };
00028
00029 extern int tlaikas;
00030
00031 void skaitymasisfailo(vector<studentas> &A, char budas, char ivedbudas);
00032 void isvedimas(vector<studentas> &A, char budas);
00033 void pazymiuived(studentas &new_studentas, char budas, int ivedbudas);
00034 void skaiciavimas(studentas &new_studentas, char budas);
00035 void irasymasifaila(vector<studentas> &A, char budas);
00036 bool rikiavimasgbalas(const studentas &a, const studentas &b);
00037 bool rikiavimasvardas(const studentas &a, const studentas &b);
00038 bool rikiavimaspavarde(const studentas &a, const studentas &b);
00039 void rikiavimas(vector<studentas> &A);
00040 void skirstymas1(vector<studentas> &A, vector<studentas> &K, vector<studentas> &V);
00041 void skirstymas2(vector<studentas> &A, vector<studentas> &V);
00042 void skirstymas3(vector<studentas> &A, vector<studentas> &K, vector<studentas> &V);
00043 void irasymasifailaK(vector<studentas> &A, vector<studentas> &K, vector<studentas> &V, char budas, int
      skistr);
00044
00045 #endif // FUNCTIONS_H
```

5.18 main.cpp File Reference

```
#include "functions.h"
#include "errorfinder.h"
#include "filegenerator.h"
#include "studentas.h"
```

Functions

- void testCopyConstruction ()
- void testMoveConstruction ()
- void testCopyAssignment ()
- void testMoveAssignment ()
- int main ()

5.18.1 Function Documentation

5.18.1.1 main()

```
int main ( )
```

5.18.1.2 testCopyAssignment()

```
void testCopyAssignment ( )
```

5.18.1.3 testCopyConstruction()

```
void testCopyConstruction ( )
```

5.18.1.4 testMoveAssignment()

```
void testMoveAssignment ( )
```

5.18.1.5 testMoveConstruction()

```
void testMoveConstruction ( )
```

5.19 mytests.cpp File Reference

```
#include "studentas.h"
#include "gtest/gtest.h"
```

Functions

- TEST (StudentasTest, ConstructorAndGetters)
- TEST (StudentasTest, Setters)
- TEST (StudentasTest, SortNdrez)
- int main (int argc, char **argv)

5.19.1 Function Documentation

5.19.1.1 main()

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

5.19.1.2 TEST() [1/3]

```
TEST (
            StudentasTest ,
            ConstructorAndGetters  )
```

5.19.1.3 TEST() [2/3]

```
TEST (
            StudentasTest ,
            Setters  )
```

5.19.1.4 TEST() [3/3]

```
TEST (
            StudentasTest ,
            SortNdrez  )
```

5.20 studentas.cpp File Reference

```
#include "studentas.h"
#include <utility>
```

5.21 studentas.h File Reference

```
#include "zmogus.h"
#include "errorfinder.h"
#include <iostream>
#include <iomanip>
#include <vector>
#include <string>
#include <algorithm>
#include <sstream>
```

Classes

- class studentas

5.22 studentas.h

Go to the documentation of this file.

```
00001 #ifndef STUDENTAS_H
00002 #define STUDENTAS_H
00003
00004 #include "zmogus.h"
00005 #include "errorfinder.h"
00006 #include <iostream>
00007 #include <iomanip>
00008 #include <vector>
00009 #include <string>
00010 #include <algorithm>
00011 #include <sstream>
00012
00013 using namespace std;
00014
00015 class studentas : public zmogus {
00016 private:
00017   string vardas;
00018   string pavarde;
00019   vector<int> ndrez;
00020   int erez;
00021   double gbalas;
00022   // interfeisas
00023   public:
00024     string line;
00025     char budas;
00026     studentas(); // default konstruktorius
00027     studentas(const string &v, const string &p, const vector<int> &nd, int e, double g);
00028
00029     ~studentas(); // destruktorius
00030
00031     studentas(const studentas &kit); // copy konstruktorius
00032
00033     studentas &operator=(const studentas &kit); // priskyrimo operatorius
00034
00035     studentas(studentas &&kit) noexcept; // move konstruktorius
00036
00037     studentas &operator=(studentas &&kit) noexcept;
00038
00039 friend std::istream &operator»(std::istream &in, studentas &kit){
00040   kit.ndrez.clear();
00041   int sum = 0;
00042
00043     if(kit.budas == 'f'){
00044       istringstream my_buffer(kit.line);
00045
00046       my_buffer » kit.vardas » kit.pavarde;
00047       int pazymys;
00048       while (my_buffer » pazymys)
00049       {
00050         kit.ndrez.push_back(pazymys); // prisikiriamas elSementas
00051         sum += pazymys;
00052       }
00053
00054       if (!kit.ndrez.empty()) {
00055         kit.erez = kit.ndrez.back();
00056         kit.ndrez.pop_back();
00057         sum -= kit.erez;
00058     }
00059     kit.gbalas = sum;}
00060     if(kit.budas == 'r')
00061     {
00062       cout « "Iveskite studento varda ir pavarde arba „11“, jeigu norite uzbaigti studentu vedima: ";
00063       in » kit.vardas;
00064       if (kit.vardas != "11")
00065       {
00066         in » kit.pavarde;
00067       }
00068     }
00069     return in;
00070   }
00071
00072     friend std::ostream &operator«(std::ostream &out, const studentas &kit)
00073    {
```

```
00074         out « setw(25) « left « kit.vardas « setw(25) « left « kit.pavarde « setprecision(3) « left « kit.gbalas « '\n';
00075         return out;
00076   }
00077
00078     string getVardas() const { return vardas; }   // get'eriai
00079     string getPavarde() const { return pavarde; } // get'eriai
00080     vector<int> getNdrez() const { return ndrez; }
00081     int getErez() const { return erez; }
00082     double getGbalas() const { return gbalas; } // get'eriai
00083
00084     void setVardas(const string &v) { vardas = v; }
00085     void setPavarde(const string &p) { pavarde = p; }
00086     void setNdrez(const vector<int> &nd) { ndrez = nd; }
00087     void setErez(int e) { erez = e; }
00088     void setGbalas(double g) { gbalas = g; } // set'eriai
00089
00090     void sortNdrez() { sort(ndrez.begin(), ndrez.end()); }
00091
00092
00093 };
00094
00095 #endif // STUDENTAS_H
```

5.23 zmogus.h File Reference

```
#include <iostream>
#include <vector>
#include <string>
```

Classes

- class zmogus

5.24 zmogus.h

Go to the documentation of this file.

```
00001 #ifndef ZMOGUS_H
00002 #define ZMOGUS_H
00003
00004 #include <iostream>
00005 #include <vector>
00006 #include <string>
00007
00008 using namespace std;
00009
00010 class zmogus {
00011 public:
00012     virtual ~zmogus() = default;
00013    protected:
00014     zmogus() {}
00015 };
00016
00017 #endif // ZMOGUS_H
```

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