SWallet ServerSide

Generated by Doxygen 1.11.0

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 documented files with brief descriptions:

Chapter 4

Class Documentation

4.1 Client Class Reference

Public Member Functions

- void **set_fullName** (QString fullName)
- QString **get_fullName** ()
- void **set_password** (QString password)
- QString **get_password** ()
- void **set_age** (int age)
- int **get_age** ()
- void **set_national_ID** (int national_ID)
- int **get_national_ID** ()
- void **set_phoneNumber** (int phoneNumber)
- int **get_phoneNumber** ()
- void **fill_client_info** (QList< QString > cData, Client &c)

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

- client.h
- client.cpp

4.2 DBManager Class Reference

Public Member Functions

- bool **insertNewSWallet** (Client client)
- bool **checkCredentials** (int Phone_Number, QString Password)
- QList< QString > **fetch_UserData** (int Phone_Number)
- QList< QString > **makeDeposit** (QString Phone_Number, QString Amount)
- QList< QString > **makeWithdraw** (QString Phone_Number, QString Amount)
- QList< QString > **GetClients** ()
- QSqlQueryModel ∗ **fetch_UserTransactions** (QString)

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

- dbmanager.h
- dbmanager.cpp

4.3 MainWindow Class Reference

Inheritance diagram for MainWindow:

4.4 Ui::MainWindow Class Reference

Inheritance diagram for Ui::MainWindow:

Collaboration diagram for Ui::MainWindow:

Additional Inherited Members

Public Member Functions inherited from Ui_MainWindow

- void **setupUi** (QMainWindow ∗MainWindow)
- void **retranslateUi** (QMainWindow ∗MainWindow)

Public Attributes inherited from Ui_MainWindow

- QWidget ∗ **centralwidget**
- QGroupBox ∗ **groupBox**
- QFrame ∗ **nationalID_frame_2**
- QLabel ∗ **nationalID_label_2**
- QLabel ∗ **user_NationalID_2**
- QFrame ∗ **Balance_frame_2**
- QLabel ∗ **Balance_label_2**
- QLabel ∗ **user_balance_2**
- QFrame ∗ **phoneNumber_frame_2**
- QLabel ∗ **phoneNumber_label_2**
- QLabel ∗ **user_phone_Number_2**
- QFrame ∗ **fullName_frame_2**
- QLabel ∗ **fullName_label_2**
- QLabel ∗ **user_fullName_2**
- QTableView ∗ **tableView**
- QWidget ∗ **layoutWidget**
- QVBoxLayout ∗ **verticalLayout**
- QLabel ∗ **Clients_label**
- QListWidget ∗ **Clients_list**
- QPushButton ∗ **pushButton**
- QPushButton ∗ **Update_Button**

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

- build/Desktop_Qt_6_7_0-Debug/ui_mainwindow.h

4.5   ServerManager Class Reference

Inheritance diagram for ServerManager:

Collaboration diagram for ServerManager:

Signals

- void **newClientConnected** (QTcpSocket ∗client)
- void **ClientDisconnected** (QTcpSocket ∗client)

Public Member Functions

- **ServerManager** (ushort port=4500, QObject ∗parent=nullptr)

Public Attributes

- DBManager ∗ **DB**

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

- servermanager.h
- build/Desktop_Qt_6_7_0-Debug/moc_servermanager.cpp
- servermanager.cpp

4.6   Ui_MainWindow Class Reference

Inheritance diagram for Ui_MainWindow:

Public Member Functions

- void **setupUi** (QMainWindow ∗MainWindow)
- void **retranslateUi** (QMainWindow ∗MainWindow)

Public Attributes

- QWidget ∗ **centralwidget**
- QGroupBox ∗ **groupBox**
- QFrame ∗ **nationalID_frame_2**
- QLabel ∗ **nationalID_label_2**
- QLabel ∗ **user_NationalID_2**
- QFrame ∗ **Balance_frame_2**
- QLabel ∗ **Balance_label_2**
- QLabel ∗ **user_balance_2**
- QFrame ∗ **phoneNumber_frame_2**
- QLabel ∗ **phoneNumber_label_2**
- QLabel ∗ **user_phone_Number_2**
- QFrame ∗ **fullName_frame_2**
- QLabel ∗ **fullName_label_2**
- QLabel ∗ **user_fullName_2**
- QTableView ∗ **tableView**
- QWidget ∗ **layoutWidget**
- QVBoxLayout ∗ **verticalLayout**
- QLabel ∗ **Clients_label**
- QListWidget ∗ **Clients_list**
- QPushButton ∗ **pushButton**
- QPushButton ∗ **Update_Button**

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

- build/Desktop_Qt_6_7_0-Debug/ui_mainwindow.h

Chapter 5

File Documentation

5.1 moc_predefs.h

```
00001 #define __DBL_MIN_EXP__ (-1021)
00002 #define __cpp_nontype_template_parameter_auto 201606L
00003 #define __UINT_LEAST16_MAX__ 0xffff
00004 #define __FLT16_HAS_QUIET_NAN__ 1
00005 #define __ATOMIC_ACQUIRE 2
00006 #define __FLT128_MAX_10_EXP__ 4932
00007 #define __FLT_MIN__ 1.17549435082228750796873653722224568e-38F
00008 #define __GCC_IEC_559_COMPLEX 2
00009 #define __cpp_aggregate_nsdmi 201304L
00010 #define __UINT_LEAST8_TYPE__ unsigned char
00011 #define __SIZEOF_FLOAT80__ 16
00012 #define __BFLT16_DENORM_MIN__ 9.18354961579912115600575419704879436e-41BF16
00013 #define __INTMAX_C(c) c ## L
00014 #define __CHAR_BIT__ 8
00015 #define __UINT8_MAX__ 0xff
00016 #define __SCHAR_WIDTH__ 8
00017 #define __WINT_MAX__ 0xffffffffU
00018 #define __FLT32_MIN_EXP__ (-125)
00019 #define __cpp_static_assert 201411L
00020 #define __BFLT16_MIN_10_EXP__ (-37)
00021 #define __ORDER_LITTLE_ENDIAN__ 1234
00022 #define __WCHAR_MAX__ 0x7fffffff
00023 #define __GCC_HAVE_SYNC_COMPARE_AND_SWAP_2 1
00024 #define __GCC_HAVE_SYNC_COMPARE_AND_SWAP_4 1
00025 #define __GCC_HAVE_SYNC_COMPARE_AND_SWAP_8 1
00026 #define __GCC_ATOMIC_CHAR_LOCK_FREE 2
00027 #define __GCC_IEC_559 2
00028 #define __FLT32X_DECIMAL_DIG__ 17
00029 #define __FLT_EVAL_METHOD__ 0
00030 #define __cpp_binary_literals 201304L
00031 #define __FLT64_DECIMAL_DIG__ 17
00032 #define __CET__ 3
00033 #define __cpp_noexcept_function_type 201510L
00034 #define __GCC_ATOMIC_CHAR32_T_LOCK_FREE 2
00035 #define __cpp_variadic_templates 200704L
00036 #define __UINT_FAST64_MAX__ 0xffffffffffffffffUL
00037 #define __SIG_ATOMIC_TYPE__ int
00038 #define __DBL_MIN_10_EXP__ (-307)
00039 #define __FINITE_MATH_ONLY__ 0
00040 #define __cpp_variable_templates 201304L
00041 #define __FLT32X_MAX_EXP__ 1024
00042 #define __GCC_HAVE_SYNC_COMPARE_AND_SWAP_1 1
00043 #define __FLT32_HAS_DENORM__ 1
00044 #define __UINT_FAST8_MAX__ 0xff
00045 #define __cpp_rvalue_reference 200610L
00046 #define __cpp_nested_namespace_definitions 201411L
00047 #define __DEC64_MAX_EXP__ 385
00048 #define __INT8_C(c) c
00049 #define __LDBL_HAS_INFINITY__ 1
00050 #define __INT_LEAST8_WIDTH__ 8
00051 #define __cpp_variadic_using 201611L
00052 #define __UINT_LEAST64_MAX__ 0xffffffffffffffffUL
00053 #define __INT_LEAST8_MAX__ 0x7f
00054 #define __cpp_attributes 200809L
00055 #define __cpp_capture_star_this 201603L
00056 #define __SHRT_MAX__ 0x7fff
00057 #define __LDBL_MAX__ 1.18973149535723176502126385303097021e+4932L
00058 #define __FLT64X_MAX_10_EXP__ 4932
```

```
00059 #define __cpp_if_constexpr 201606L
00060 #define __BFLT16_MAX_10_EXP__ 38
00061 #define __BFLT16_MAX_EXP__ 128
00062 #define __LDBL_IS_IEC_60559__ 1
00063 #define __FLT64X_HAS_QUIET_NAN__ 1
00064 #define __UINT_LEAST8_MAX__ 0xff
00065 #define __GCC_ATOMIC_BOOL_LOCK_FREE 2
00066 #define __FLT128_DENORM_MIN__ 6.47517511943802511092443895822764655e-4966F128
00067 #define __UINTMAX_TYPE__ long unsigned int
00068 #define __cpp_nsdmi 200809L
00069 #define __BFLT16_DECIMAL_DIG__ 4
00070 #define __linux 1
00071 #define __DEC32_EPSILON__ 1E-6DF
00072 #define __FLT_EVAL_METHOD_TS_18661_3__ 0
00073 #define __UINT32_MAX__ 0xffffffffU
00074 #define __GXX_EXPERIMENTAL_CXX0X__ 1
00075 #define __DBL_DENORM_MIN__ double(4.9406564584124654417656879286822172e-324L)
00076 #define __FLT128_MIN_EXP__ (-16381)
00077 #define __WINT_MIN__ 0U
00078 #define __FLT128_MIN_10_EXP__ (-4931)
00079 #define __FLT32X_IS_IEC_60559__ 1
00080 #define __INT_LEAST16_WIDTH__ 16
00081 #define __SCHAR_MAX__ 0x7f
00082 #define __FLT128_MANT_DIG__ 113
00083 #define __WCHAR_MIN__ (-__WCHAR_MAX__ - 1)
00084 #define __INT64_C(c) c ## L
00085 #define __SSP_STRONG__ 3
00086 #define __GCC_ATOMIC_POINTER_LOCK_FREE 2
00087 #define __ATOMIC_SEQ_CST 5
00088 #define __unix 1
00089 #define __INT_LEAST64_MAX__ 0x7fffffffffffffffL
00090 #define __FLT32X_MANT_DIG__ 53
00091 #define __GCC_ATOMIC_CHAR16_T_LOCK_FREE 2
00092 #define __cpp_aligned_new 201606L
00093 #define __FLT32_MAX_10_EXP__ 38
00094 #define __FLT64X_EPSILON__ 1.08420217248550443400745280086994171e-19F64x
00095 #define __STDC_HOSTED__ 1
00096 #define __DEC64_MIN_EXP__ (-382)
00097 #define __cpp_decltype_auto 201304L
00098 #define __DBL_DIG__ 15
00099 #define __FLT_EPSILON__ 1.19209289550781250000000000000000000e-7F
00100 #define __GXX_WEAK__ 1
00101 #define __SHRT_WIDTH__ 16
00102 #define __FLT32_IS_IEC_60559__ 1
00103 #define __LDBL_MIN__ 3.36210314311209350626267781732175260e-4932L
00104 #define __DBL_IS_IEC_60559__ 1
00105 #define __DEC32_MAX__ 9.999999E96DF
00106 #define __cpp_threadsafe_static_init 200806L
00107 #define __cpp_enumerator_attributes 201411L
00108 #define __FLT64X_DENORM_MIN__ 3.64519953188247460252840593361941982e-4951F64x
00109 #define __FLT32X_HAS_INFINITY__ 1
00110 #define __unix__ 1
00111 #define __INT_WIDTH__ 32
00112 #define __STDC_IEC_559__ 1
00113 #define __STDC_ISO_10646__ 201706L
00114 #define __DECIMAL_DIG__ 21
00115 #define __STDC_IEC_559_COMPLEX__ 1
00116 #define __FLT64_EPSILON__ 2.22044604925031308084726333618164062e-16F64
00117 #define __gnu_linux__ 1
00118 #define __INT16_MAX__ 0x7fff
00119 #define __FLT64_MIN_EXP__ (-1021)
00120 #define __FLT64X_MIN_10_EXP__ (-4931)
00121 #define __LDBL_HAS_QUIET_NAN__ 1
00122 #define __cpp_return_type_deduction 201304L
00123 #define __FLT16_MIN_EXP__ (-13)
00124 #define __FLT64_MANT_DIG__ 53
00125 #define __FLT64X_MANT_DIG__ 64
00126 #define __BFLT16_DIG__ 2
00127 #define __GNUC__ 13
00128 #define __GXX_RTTI 1
00129 #define __MMX__ 1
00130 #define __FLT_HAS_DENORM__ 1
00131 #define __SIZEOF_LONG_DOUBLE__ 16
00132 #define __BIGGEST_ALIGNMENT__ 16
00133 #define __STDC_UTF_16__ 1
00134 #define __FLT64_MAX_10_EXP__ 308
00135 #define __BFLT16_IS_IEC_60559__ 0
00136 #define __FLT16_MAX_10_EXP__ 4
00137 #define __cpp_delegating_constructors 200604L
00138 #define __DBL_MAX__ double(1.79769313486231570814527423731704357e+308L)
00139 #define __cpp_raw_strings 200710L
00140 #define __INT_FAST32_MAX__ 0x7fffffffffffffffL
00141 #define __DBL_HAS_INFINITY__ 1
00142 #define __INT64_MAX__ 0x7fffffffffffffffL
00143 #define __SIZEOF_FLOAT__ 4
00144 #define __HAVE_SPECULATION_SAFE_VALUE 1
00145 #define __cpp_fold_expressions 201603L
```

```
00146 #define __DEC32_MIN_EXP__ (-94)
00147 #define __INTPTR_WIDTH__ 64
00148 #define __UINT_LEAST32_MAX__ 0xffffffffU
00149 #define __FLT32X_HAS_DENORM__ 1
00150 #define __INT_FAST16_TYPE__ long int
00151 #define __MMX_WITH_SSE__ 1
00152 #define __LDBL_HAS_DENORM__ 1
00153 #define __SEG_GS 1
00154 #define __BFLT16_EPSILON__ 7.812500000000000000000000000000000000e-3BF16
00155 #define __cplusplus 201703L
00156 #define __cpp_ref_qualifiers 200710L
00157 #define __DEC32_MIN__ 1E-95DF
00158 #define __DEPRECATED 1
00159 #define __cpp_rvalue_references 200610L
00160 #define __DBL_MAX_EXP__ 1024
00161 #define __WCHAR_WIDTH__ 32
00162 #define __FLT32_MAX__ 3.40282346638528859811704183484516925e+38F32
00163 #define __DEC128_EPSILON__ 1E-33DL
00164 #define __FLT16_DECIMAL_DIG__ 5
00165 #define __SSE2_MATH__ 1
00166 #define __ATOMIC_HLE_RELEASE 131072
00167 #define __PTRDIFF_MAX__ 0x7fffffffffffffffL
00168 #define __amd64 1
00169 #define __ATOMIC_HLE_ACQUIRE 65536
00170 #define __GNUG__ 13
00171 #define __LONG_LONG_MAX__ 0x7fffffffffffffffLL
00172 #define __SIZEOF_SIZE_T__ 8
00173 #define __BFLT16_HAS_INFINITY__ 1
00174 #define __FLT64X_MIN_EXP__ (-16381)
00175 #define __SIZEOF_WINT_T__ 4
00176 #define __FLT32X_DIG__ 15
00177 #define __LONG_LONG_WIDTH__ 64
00178 #define __cpp_initializer_lists 200806L
00179 #define __FLT32_MAX_EXP__ 128
00180 #define __cpp_hex_float 201603L
00181 #define __GXX_ABI_VERSION 1018
00182 #define __FLT_MIN_EXP__ (-125)
00183 #define __GCC_HAVE_DWARF2_CFI_ASM 1
00184 #define __x86_64 1
00185 #define __cpp_lambdas 200907L
00186 #define __INT_FAST64_TYPE__ long int
00187 #define __BFLT16_MAX__ 3.38953138925153547590470800371487867e+38BF16
00188 #define __FLT64_DENORM_MIN__ 4.94065645841246544176568792868221372e-324F64
00189 #define __cpp_template_auto 201606L
00190 #define __FLT16_DENORM_MIN__ 5.96046447753906250000000000000000000e-8F16
00191 #define __FLT128_EPSILON__ 1.92592994438723585305597794258492732e-34F128
00192 #define __FLT64X_NORM_MAX__ 1.18973149535723176502126385303097021e+4932F64x
00193 #define __SIZEOF_POINTER__ 8
00194 #define __SIZE_TYPE__ long unsigned int
00195 #define __LP64__ 1
00196 #define __DBL_HAS_QUIET_NAN__ 1
00197 #define __FLT32X_EPSILON__ 2.22044604925031308084726333618164062e-16F32x
00198 #define __LDBL_MAX_EXP__ 16384
00199 #define __DECIMAL_BID_FORMAT__ 1
00200 #define __FLT64_MIN_10_EXP__ (-307)
00201 #define __FLT16_MIN_10_EXP__ (-4)
00202 #define __FLT64X_DECIMAL_DIG__ 21
00203 #define __DEC128_MIN__ 1E-6143DL
00204 #define __REGISTER_PREFIX__
00205 #define __UINT16_MAX__ 0xffff
00206 #define __FLT128_HAS_INFINITY__ 1
00207 #define __FLT32_MIN__ 1.17549435082228750796873653722224568e-38F32
00208 #define __UINT8_TYPE__ unsigned char
00209 #define __FLT_DIG__ 6
00210 #define __NO_INLINE__ 1
00211 #define __DEC_EVAL_METHOD__ 2
00212 #define __FLT_MANT_DIG__ 24
00213 #define __LDBL_DECIMAL_DIG__ 21
00214 #define __VERSION__ "13.2.0"
00215 #define __UINT64_C(c) c ## UL
00216 #define __cpp_unicode_characters 201411L
00217 #define _STDC_PREDEF_H 1
00218 #define __INT_LEAST32_MAX__ 0x7fffffff
00219 #define __GCC_ATOMIC_INT_LOCK_FREE 2
00220 #define __FLT128_MAX_EXP__ 16384
00221 #define __FLT32_MANT_DIG__ 24
00222 #define __FLOAT_WORD_ORDER__ __ORDER_LITTLE_ENDIAN__
00223 #define __FLT32X_MIN_EXP__ (-1021)
00224 #define __STDC_IEC_60559_COMPLEX__ 201404L
00225 #define __cpp_aggregate_bases 201603L
00226 #define __BFLT16_MIN__ 1.17549435082228750796873653722224568e-38BF16
00227 #define __FLT128_HAS_DENORM__ 1
00228 #define __FLT32_DECIMAL_DIG__ 9
00229 #define __FLT128_DIG__ 33
00230 #define __INT32_C(c) c
00231 #define __DEC64_EPSILON__ 1E-15DD
00232 #define __ORDER_PDP_ENDIAN__ 3412
```

```
00233 #define __DEC128_MIN_EXP__ (-6142)
00234 #define __DEC128_MAX__ 9.999999999999999999999999999999999E6144DL
00235 #define __INT_FAST32_TYPE__ long int
00236 #define __UINT_LEAST16_TYPE__ short unsigned int
00237 #define __DEC128_MAX_EXP__ 6145
00238 #define unix 1
00239 #define __DBL_HAS_DENORM__ 1
00240 #define __cpp_rtti 199711L
00241 #define __UINT64_MAX__ 0xffffffffffffffffUL
00242 #define __FLT_IS_IEC_60559__ 1
00243 #define __GNUC_WIDE_EXECUTION_CHARSET_NAME "UTF-32LE"
00244 #define __FLT64X_DIG__ 18
00245 #define __INT8_TYPE__ signed char
00246 #define __cpp_digit_separators 201309L
00247 #define __ELF__ 1
00248 #define __GCC_ASM_FLAG_OUTPUTS__ 1
00249 #define __UINT32_TYPE__ unsigned int
00250 #define __BFLT16_HAS_QUIET_NAN__ 1
00251 #define __FLT_RADIX__ 2
00252 #define __INT_LEAST16_TYPE__ short int
00253 #define __LDBL_EPSILON__ 1.08420217248550443400745280086994171e-19L
00254 #define __UINTMAX_C(c) c ## UL
00255 #define __FLT16_DIG__ 3
00256 #define __k8 1
00257 #define __FLT32X_MIN__ 2.22507385850720138309023271733240406e-308F32x
00258 #define __SIG_ATOMIC_MAX__ 0x7fffffff
00259 #define __cpp_constexpr 201603L
00260 #define __GCC_ATOMIC_WCHAR_T_LOCK_FREE 2
00261 #define __USER_LABEL_PREFIX__
00262 #define __STDC_IEC_60559_BFP__ 201404L
00263 #define __SIZEOF_PTRDIFF_T__ 8
00264 #define __FLT64X_HAS_INFINITY__ 1
00265 #define __SIZEOF_LONG__ 8
00266 #define __LDBL_DIG__ 18
00267 #define __FLT64_IS_IEC_60559__ 1
00268 #define __x86_64__ 1
00269 #define __FLT16_IS_IEC_60559__ 1
00270 #define __FLT16_MAX_EXP__ 16
00271 #define __DEC32_SUBNORMAL_MIN__ 0.000001E-95DF
00272 #define __INT_FAST16_MAX__ 0x7fffffffffffffffL
00273 #define __GCC_CONSTRUCTIVE_SIZE 64
00274 #define __FLT64_DIG__ 15
00275 #define __UINT_FAST32_MAX__ 0xffffffffffffffffUL
00276 #define __UINT_LEAST64_TYPE__ long unsigned int
00277 #define __FLT16_EPSILON__ 9.76562500000000000000000000000000000e-4F16
00278 #define __FLT_HAS_QUIET_NAN__ 1
00279 #define __FLT_MAX_10_EXP__ 38
00280 #define __LONG_MAX__ 0x7fffffffffffffffL
00281 #define __FLT64X_HAS_DENORM__ 1
00282 #define __DEC128_SUBNORMAL_MIN__ 0.000000000000000000000000000000001E-6143DL
00283 #define __FLT_HAS_INFINITY__ 1
00284 #define __GNUC_EXECUTION_CHARSET_NAME "UTF-8"
00285 #define __cpp_unicode_literals 200710L
00286 #define __UINT_FAST16_TYPE__ long unsigned int
00287 #define __DEC64_MAX__ 9.999999999999999E384DD
00288 #define __INT_FAST32_WIDTH__ 64
00289 #define __CHAR16_TYPE__ short unsigned int
00290 #define __PRAGMA_REDEFINE_EXTNAME 1
00291 #define __SIZE_WIDTH__ 64
00292 #define __SEG_FS 1
00293 #define __INT_LEAST16_MAX__ 0x7fff
00294 #define __FLT16_NORM_MAX__ 6.55040000000000000000000000000000000e+4F16
00295 #define __DEC64_MANT_DIG__ 16
00296 #define __FLT32_DENORM_MIN__ 1.40129846432481707092372958328991613e-45F32
00297 #define __SIG_ATOMIC_WIDTH__ 32
00298 #define __INT_LEAST64_TYPE__ long int
00299 #define __INT16_TYPE__ short int
00300 #define __INT_LEAST8_TYPE__ signed char
00301 #define __FLT16_MAX__ 6.55040000000000000000000000000000000e+4F16
00302 #define __FLT128_MIN__ 3.36210314311209350626267781732175260e-4932F128
00303 #define __cpp_structured_bindings 201606L
00304 #define __SIZEOF_INT__ 4
00305 #define __DEC32_MAX_EXP__ 97
00306 #define __INT_FAST8_MAX__ 0x7f
00307 #define __FLT128_MAX__ 1.18973149535723176508575932662800702e+4932F128
00308 #define __INTPTR_MAX__ 0x7fffffffffffffffL
00309 #define __cpp_sized_deallocation 201309L
00310 #define __cpp_guaranteed_copy_elision 201606L
00311 #define linux 1
00312 #define __FLT64_HAS_QUIET_NAN__ 1
00313 #define __FLT32_MIN_10_EXP__ (-37)
00314 #define __EXCEPTIONS 1
00315 #define __UINT16_C(c) c
00316 #define __PTRDIFF_WIDTH__ 64
00317 #define __LDBL_MANT_DIG__ 64
00318 #define __cpp_range_based_for 201603L
00319 #define __INT_FAST16_WIDTH__ 64
```

```
00320 #define __FLT64_HAS_INFINITY__ 1
00321 #define __FLT64X_MAX__ 1.18973149535723176502126385303097021e+4932F64x
00322 #define __FLT16_HAS_INFINITY__ 1
00323 #define __STDCPP_DEFAULT_NEW_ALIGNMENT__ 16
00324 #define __SIG_ATOMIC_MIN__ (-__SIG_ATOMIC_MAX__ - 1)
00325 #define __code_model_small__ 1
00326 #define __GCC_ATOMIC_LONG_LOCK_FREE 2
00327 #define __cpp_nontype_template_args 201411L
00328 #define __DEC32_MANT_DIG__ 7
00329 #define __k8__ 1
00330 #define __INTPTR_TYPE__ long int
00331 #define __UINT16_TYPE__ short unsigned int
00332 #define __WCHAR_TYPE__ int
00333 #define __pic__ 2
00334 #define __UINTPTR_MAX__ 0xffffffffffffffffUL
00335 #define __INT_FAST64_WIDTH__ 64
00336 #define __cpp_decltype 200707L
00337 #define __INT_FAST64_MAX__ 0x7fffffffffffffffL
00338 #define __GCC_ATOMIC_TEST_AND_SET_TRUEVAL 1
00339 #define __FLT_NORM_MAX__ 3.40282346638528859811704183484516925e+38F
00340 #define __FLT32_HAS_INFINITY__ 1
00341 #define __FLT64X_MAX_EXP__ 16384
00342 #define __UINT_FAST64_TYPE__ long unsigned int
00343 #define __cpp_inline_variables 201606L
00344 #define __BFLT16_MIN_EXP__ (-125)
00345 #define __INT_MAX__ 0x7fffffff
00346 #define __linux__ 1
00347 #define __INT64_TYPE__ long int
00348 #define __FLT_MAX_EXP__ 128
00349 #define __ORDER_BIG_ENDIAN__ 4321
00350 #define __DBL_MANT_DIG__ 53
00351 #define __cpp_inheriting_constructors 201511L
00352 #define __SIZEOF_FLOAT128__ 16
00353 #define __BFLT16_MANT_DIG__ 8
00354 #define __DEC64_MIN__ 1E-383DD
00355 #define __WINT_TYPE__ unsigned int
00356 #define __UINT_LEAST32_TYPE__ unsigned int
00357 #define __SIZEOF_SHORT__ 2
00358 #define __FLT32_NORM_MAX__ 3.40282346638528859811704183484516925e+38F32
00359 #define __SSE__ 1
00360 #define __LDBL_MIN_EXP__ (-16381)
00361 #define __FLT64_MAX__ 1.79769313486231570814527423731704357e+308F64
00362 #define __amd64__ 1
00363 #define __WINT_WIDTH__ 32
00364 #define __INT_LEAST64_WIDTH__ 64
00365 #define __FLT32X_MAX_10_EXP__ 308
00366 #define __cpp_namespace_attributes 201411L
00367 #define __SIZEOF_INT128__ 16
00368 #define __FLT16_MIN__ 6.103515625000000000000000000000000000e-5F16
00369 #define __FLT64X_IS_IEC_60559__ 1
00370 #define __LDBL_MAX_10_EXP__ 4932
00371 #define __ATOMIC_RELAXED 0
00372 #define __DBL_EPSILON__ double(2.22044604925031308084726333618164062e-16L)
00373 #define __INT_LEAST32_TYPE__ int
00374 #define _LP64 1
00375 #define __UINT8_C(c) c
00376 #define __FLT64_MAX_EXP__ 1024
00377 #define __SIZEOF_WCHAR_T__ 4
00378 #define __GNUC_PATCHLEVEL__ 0
00379 #define __FLT128_NORM_MAX__ 1.18973149535723176508575932662800702e+4932F128
00380 #define __FLT64_NORM_MAX__ 1.79769313486231570814527423731704357e+308F64
00381 #define __FLT128_HAS_QUIET_NAN__ 1
00382 #define __INTMAX_MAX__ 0x7fffffffffffffffL
00383 #define __INT_FAST8_TYPE__ signed char
00384 #define __FLT64X_MIN__ 3.36210314311209350626267781732175260e-4932F64x
00385 #define __STDCPP_THREADS__ 1
00386 #define __BFLT16_HAS_DENORM__ 1
00387 #define __GNUC_STDC_INLINE__ 1
00388 #define __FLT64_HAS_DENORM__ 1
00389 #define __FLT32_EPSILON__ 1.19209289550781250000000000000000000e-7F32
00390 #define __FLT16_HAS_DENORM__ 1
00391 #define __DBL_DECIMAL_DIG__ 17
00392 #define __STDC_UTF_32__ 1
00393 #define __INT_FAST8_WIDTH__ 8
00394 #define __FXSR__ 1
00395 #define __FLT32X_MAX__ 1.79769313486231570814527423731704357e+308F32x
00396 #define __DBL_NORM_MAX__ double(1.79769313486231570814527423731704357e+308L)
00397 #define __BYTE_ORDER__ __ORDER_LITTLE_ENDIAN__
00398 #define __GCC_DESTRUCTIVE_SIZE 64
00399 #define __INTMAX_WIDTH__ 64
00400 #define __cpp_runtime_arrays 198712L
00401 #define __FLT32_DIG__ 6
00402 #define __UINT64_TYPE__ long unsigned int
00403 #define __UINT32_C(c) c ## U
00404 #define __cpp_alias_templates 200704L
00405 #define __FLT_DENORM_MIN__ 1.40129846432481707092372958328991613e-45F
00406 #define __FLT128_IS_IEC_60559__ 1
```

```
00407 #define __INT8_MAX__ 0x7f
00408 #define __LONG_WIDTH__ 64
00409 #define __DBL_MIN__ double(2.2250738585072013830902327173324040e-308L)
00410 #define __PIC__ 2
00411 #define __INT32_MAX__ 0x7fffffff
00412 #define __UINT_FAST32_TYPE__ long unsigned int
00413 #define __FLT16_MANT_DIG__ 11
00414 #define __FLT32X_NORM_MAX__ 1.79769313486231570814527423731704357e+308F32x
00415 #define __CHAR32_TYPE__ unsigned int
00416 #define __FLT_MAX__ 3.40282346638528859811704183484516925e+38F
00417 #define __SSE2__ 1
00418 #define __cpp_deduction_guides 201703L
00419 #define __BFLT16_NORM_MAX__ 3.38953138925153547590470800371487867e+38BF16
00420 #define __INT32_TYPE__ int
00421 #define __SIZEOF_DOUBLE__ 8
00422 #define __cpp_exceptions 199711L
00423 #define __FLT_MIN_10_EXP__ (-37)
00424 #define __FLT64_MIN__ 2.22507385850720138309023271733240406e-308F64
00425 #define __INT_LEAST32_WIDTH__ 32
00426 #define __INTMAX_TYPE__ long int
00427 #define __GLIBCXX_BITSIZE_INT_N_0 128
00428 #define __FLT32X_HAS_QUIET_NAN__ 1
00429 #define __ATOMIC_CONSUME 1
00430 #define __GNUC_MINOR__ 2
00431 #define __GLIBCXX_TYPE_INT_N_0 __int128
00432 #define __UINTMAX_MAX__ 0xffffffffffffffffUL
00433 #define __FLT32X_DENORM_MIN__ 4.94065645841246544176568792868221372e-324F32x
00434 #define __cpp_template_template_args 201611L
00435 #define __DBL_MAX_10_EXP__ 308
00436 #define __LDBL_DENORM_MIN__ 3.64519953188247460252840593361941982e-4951L
00437 #define __INT16_C(c) c
00438 #define __STDC__ 1
00439 #define __PTRDIFF_TYPE__ long int
00440 #define __FLT32X_MIN_10_EXP__ (-307)
00441 #define __UINTPTR_TYPE__ long unsigned int
00442 #define __DEC64_SUBNORMAL_MIN__ 0.000000000000001E-383DD
00443 #define __DEC128_MANT_DIG__ 34
00444 #define __LDBL_MIN_10_EXP__ (-4931)
00445 #define __cpp_generic_lambdas 201304L
00446 #define __SSE_MATH__ 1
00447 #define __SIZEOF_LONG_LONG__ 8
00448 #define __cpp_user_defined_literals 200809L
00449 #define __FLT128_DECIMAL_DIG__ 36
00450 #define __GCC_ATOMIC_LLONG_LOCK_FREE 2
00451 #define __FLT32_HAS_QUIET_NAN__ 1
00452 #define __FLT_DECIMAL_DIG__ 9
00453 #define __UINT_FAST16_MAX__ 0xffffffffffffffffUL
00454 #define __LDBL_NORM_MAX__ 1.18973149535723176502126385303097021e+4932L
00455 #define __GCC_ATOMIC_SHORT_LOCK_FREE 2
00456 #define __SIZE_MAX__ 0xffffffffffffffffUL
00457 #define __UINT_FAST8_TYPE__ unsigned char
00458 #define _GNU_SOURCE 1
00459 #define __cpp_init_captures 201304L
00460 #define __ATOMIC_ACQ_REL 4
00461 #define __ATOMIC_RELEASE 3
```

5.2 ui_mainwindow.h

```
00001 /********************************************************************************
00002 ** Form generated from reading UI file 'mainwindow.ui'
00003 **
00004 ** Created by: Qt User Interface Compiler version 6.7.0
00005 **
00006 ** WARNING! All changes made in this file will be lost when recompiling UI file!
00007 ********************************************************************************/
00008
00009 #ifndef UI_MAINWINDOW_H
00010 #define UI_MAINWINDOW_H
00011
00012 #include <QtCore/QVariant>
00013 #include <QtWidgets/QApplication>
00014 #include <QtWidgets/QFrame>
00015 #include <QtWidgets/QGroupBox>
00016 #include <QtWidgets/QHeaderView>
00017 #include <QtWidgets/QLabel>
00018 #include <QtWidgets/QListWidget>
00019 #include <QtWidgets/QMainWindow>
00020 #include <QtWidgets/QPushButton>
00021 #include <QtWidgets/QTableView>
00022 #include <QtWidgets/QVBoxLayout>
00023 #include <QtWidgets/QWidget>
00024
00025 QT_BEGIN_NAMESPACE
```

```
00026
00027 class Ui_MainWindow
00028 {
00029 public:
00030     QWidget *centralwidget;
00031     QGroupBox *groupBox;
00032     QFrame *nationalID_frame_2;
00033     QLabel *nationalID_label_2;
00034     QLabel *user_NationalID_2;
00035     QFrame *Balance_frame_2;
00036     QLabel *Balance_label_2;
00037     QLabel *user_balance_2;
00038     QFrame *phoneNumber_frame_2;
00039     QLabel *phoneNumber_label_2;
00040     QLabel *user_phone_Number_2;
00041     QFrame *fullName_frame_2;
00042     QLabel *fullName_label_2;
00043     QLabel *user_fullName_2;
00044     QTableView *tableView;
00045     QWidget *layoutWidget;
00046     QVBoxLayout *verticalLayout;
00047     QLabel *Clients_label;
00048     QListWidget *Clients_list;
00049     QPushButton *pushButton;
00050     QPushButton *Update_Button;
00051
00052     void setupUi(QMainWindow *MainWindow)
00053     {
00054         if (MainWindow->objectName().isEmpty())
00055             MainWindow->setObjectName("MainWindow");
00056         MainWindow->resize(800, 600);
00057         centralwidget = new QWidget(MainWindow);
00058         centralwidget->setObjectName("centralwidget");
00059         groupBox = new QGroupBox(centralwidget);
00060         groupBox->setObjectName("groupBox");
00061         groupBox->setGeometry(QRect(30, 30, 461, 331));
00062         nationalID_frame_2 = new QFrame(groupBox);
00063         nationalID_frame_2->setObjectName("nationalID_frame_2");
00064         nationalID_frame_2->setGeometry(QRect(10, 160, 431, 51));
00065         nationalID_frame_2->setFrameShape(QFrame::StyledPanel);
00066         nationalID_frame_2->setFrameShadow(QFrame::Raised);
00067         nationalID_label_2 = new QLabel(nationalID_frame_2);
00068         nationalID_label_2->setObjectName("nationalID_label_2");
00069         nationalID_label_2->setGeometry(QRect(20, 10, 81, 31));
00070         user_NationalID_2 = new QLabel(nationalID_frame_2);
00071         user_NationalID_2->setObjectName("user_NationalID_2");
00072         user_NationalID_2->setGeometry(QRect(130, 10, 271, 31));
00073         Balance_frame_2 = new QFrame(groupBox);
00074         Balance_frame_2->setObjectName("Balance_frame_2");
00075         Balance_frame_2->setGeometry(QRect(90, 270, 251, 51));
00076         Balance_frame_2->setFrameShape(QFrame::StyledPanel);
00077         Balance_frame_2->setFrameShadow(QFrame::Raised);
00078         Balance_label_2 = new QLabel(Balance_frame_2);
00079         Balance_label_2->setObjectName("Balance_label_2");
00080         Balance_label_2->setGeometry(QRect(10, 10, 61, 31));
00081         user_balance_2 = new QLabel(Balance_frame_2);
00082         user_balance_2->setObjectName("user_balance_2");
00083         user_balance_2->setGeometry(QRect(80, 10, 151, 31));
00084         phoneNumber_frame_2 = new QFrame(groupBox);
00085         phoneNumber_frame_2->setObjectName("phoneNumber_frame_2");
00086         phoneNumber_frame_2->setGeometry(QRect(10, 40, 431, 51));
00087         phoneNumber_frame_2->setFrameShape(QFrame::StyledPanel);
00088         phoneNumber_frame_2->setFrameShadow(QFrame::Raised);
00089         phoneNumber_label_2 = new QLabel(phoneNumber_frame_2);
00090         phoneNumber_label_2->setObjectName("phoneNumber_label_2");
00091         phoneNumber_label_2->setGeometry(QRect(10, 10, 101, 31));
00092         user_phone_Number_2 = new QLabel(phoneNumber_frame_2);
00093         user_phone_Number_2->setObjectName("user_phone_Number_2");
00094         user_phone_Number_2->setGeometry(QRect(130, 10, 271, 31));
00095         fullName_frame_2 = new QFrame(groupBox);
00096         fullName_frame_2->setObjectName("fullName_frame_2");
00097         fullName_frame_2->setEnabled(true);
00098         fullName_frame_2->setGeometry(QRect(10, 100, 431, 51));
00099         fullName_frame_2->setAutoFillBackground(false);
00100         fullName_frame_2->setFrameShape(QFrame::StyledPanel);
00101         fullName_frame_2->setFrameShadow(QFrame::Raised);
00102         fullName_label_2 = new QLabel(fullName_frame_2);
00103         fullName_label_2->setObjectName("fullName_label_2");
00104         fullName_label_2->setGeometry(QRect(20, 10, 81, 31));
00105         user_fullName_2 = new QLabel(fullName_frame_2);
00106         user_fullName_2->setObjectName("user_fullName_2");
00107         user_fullName_2->setGeometry(QRect(130, 10, 271, 31));
00108         tableView = new QTableView(centralwidget);
00109         tableView->setObjectName("tableView");
00110         tableView->setGeometry(QRect(30, 380, 741, 192));
00111         layoutWidget = new QWidget(centralwidget);
00112         layoutWidget->setObjectName("layoutWidget");
```

```
00113            layoutWidget->setGeometry(QRect(510, 49, 258, 311));
00114            verticalLayout = new QVBoxLayout(layoutWidget);
00115            verticalLayout->setObjectName("verticalLayout");
00116            verticalLayout->setContentsMargins(0, 0, 0, 0);
00117            Clients_label = new QLabel(layoutWidget);
00118            Clients_label->setObjectName("Clients_label");
00119
00120            verticalLayout->addWidget(Clients_label);
00121
00122            Clients_list = new QListWidget(layoutWidget);
00123            Clients_list->setObjectName("Clients_list");
00124
00125            verticalLayout->addWidget(Clients_list);
00126
00127            pushButton = new QPushButton(layoutWidget);
00128            pushButton->setObjectName("pushButton");
00129
00130            verticalLayout->addWidget(pushButton);
00131
00132            Update_Button = new QPushButton(centralwidget);
00133            Update_Button->setObjectName("Update_Button");
00134            Update_Button->setGeometry(QRect(590, 10, 88, 26));
00135            MainWindow->setCentralWidget(centralwidget);
00136
00137            retranslateUi(MainWindow);
00138
00139            QMetaObject::connectSlotsByName(MainWindow);
00140        } // setupUi
00141
00142        void retranslateUi(QMainWindow *MainWindow)
00143        {
00144            MainWindow->setWindowTitle(QCoreApplication::translate("MainWindow", "MainWindow", nullptr));
00145            groupBox->setTitle(QCoreApplication::translate("MainWindow", "Client Information", nullptr));
00146            nationalID_label_2->setText(QCoreApplication::translate("MainWindow", "National ID",
        nullptr));
00147            user_NationalID_2->setText(QString());
00148            Balance_label_2->setText(QCoreApplication::translate("MainWindow", "Balance", nullptr));
00149            user_balance_2->setText(QString());
00150            phoneNumber_label_2->setText(QCoreApplication::translate("MainWindow", "Phone Number",
        nullptr));
00151            user_phone_Number_2->setText(QString());
00152            fullName_label_2->setText(QCoreApplication::translate("MainWindow", "Full Name", nullptr));
00153            user_fullName_2->setText(QString());
00154            Clients_label->setText(QCoreApplication::translate("MainWindow", "Clients", nullptr));
00155            pushButton->setText(QCoreApplication::translate("MainWindow", "Show INFO", nullptr));
00156            Update_Button->setText(QCoreApplication::translate("MainWindow", "Update ", nullptr));
00157        } // retranslateUi
00158
00159 };
00160
00161 namespace Ui {
00162     class MainWindow: public Ui_MainWindow {};
00163 } // namespace Ui
00164
00165 QT_END_NAMESPACE
00166
00167 #endif // UI_MAINWINDOW_H
```

5.3 client.h

```
00001 #ifndef CLIENT_H
00002 #define CLIENT_H
00003 #include <QString>
00004 class Client
00005 {
00006 private:
00007     QString fullName,password;
00008     int age, national_ID, phoneNumber;
00009 public:
00010     Client();
00011     void set_fullName(QString fullName);
00012     QString get_fullName();
00013     void set_password(QString password);
00014     QString get_password();
00015     void set_age(int age);
00016     int get_age();
00017     void set_national_ID(int national_ID);
00018     int get_national_ID();
00019     void set_phoneNumber(int phoneNumber);
00020     int get_phoneNumber();
00021     void fill_client_info(QList<QString> cData ,Client &c);
00022 };
00023
00024 #endif // CLIENT_H
```

5.4 dbmanager.h

```
00001 #ifndef DBMANAGER_H
00002 #define DBMANAGER_H
00003 #include "client.h"
00004 #include <QtSql>
00005 #include <QtDebug>
00006 class DBManager
00007 {
00008 public:
00009     DBManager();
00010     bool insertNewSWallet(Client client);
00011     bool checkCredentials(int Phone_Number, QString Password);
00012     QList<QString> fetch_UserData(int Phone_Number);
00013     QList<QString> makeDeposit(QString Phone_Number, QString Amount);
00014     QList<QString> makeWithdraw(QString Phone_Number, QString Amount);
00015     QList<QString> GetClients();
00016     QSqlQueryModel * fetch_UserTransactions(QString);
00017 private: // Fields
00018     QSqlDatabase db;
00019 private: // Methods
00020     void openConnection();
00021 };
00022
00023 #endif // DBMANAGER_H
```

5.5 mainwindow.h

```
00001 #ifndef MAINWINDOW_H
00002 #define MAINWINDOW_H
00003 #include "servermanager.h"
00004 #include <QMainWindow>
00005 #include <QMessageBox>
00006 QT_BEGIN_NAMESPACE
00007 namespace Ui {
00008 class MainWindow;
00009 }
00010 QT_END_NAMESPACE
00011
00012 class MainWindow : public QMainWindow
00013 {
00014     Q_OBJECT
00015
00016 public:
00017     MainWindow(QWidget *parent = nullptr);
00018     ~MainWindow();
00019 private slots:
00020     void newClientConnected(QTcpSocket * client);
00021     void ClientDisconnected(QTcpSocket * client);
00022     void on_pushButton_clicked();
00023
00024     void on_Update_Button_clicked();
00025
00026 private: // Fields
00027     Ui::MainWindow *ui;
00028     ServerManager * server ;
00029 private: // Methods
00030     void setupServer();
00031     void displayClientsList();
00032     void setClientInfo(QString, QList<QString>);
00033 };
00034 #endif // MAINWINDOW_H
```

5.6 servermanager.h

```
00001 #ifndef SERVERMANAGER_H
00002 #define SERVERMANAGER_H
00003
00004 #include "client.h"
00005 #include "dbmanager.h"
00006 #include <QObject>
00007 #include <QTcpServer>
00008 #include <QTcpSocket>
00009 class ServerManager : public QObject
00010 {
00011     Q_OBJECT
00012 public:
00013     explicit ServerManager(ushort port = 4500 ,QObject *parent = nullptr);
00014 private slots:
```

```
00015      void newClientConnectionRecieved();
00016      void onClientDisconnected();
00017      void dataRecieved(QTcpSocket * client);
00018 signals:
00019      void newClientConnected(QTcpSocket * client);
00020      void ClientDisconnected(QTcpSocket * client);
00021 private: // Fields
00022      QTcpServer * server;
00023      QList<QTcpSocket *> clients;
00024      QTcpSocket * clientSocket;
00025      Client client;
00026
00027 private: //Methods
00028      void setupServer(ushort port);
00029      void setupDB();
00030 public:
00031      DBManager * DB;
00032
00033 };
00034
00035 #endif // SERVERMANAGER_H
```

Index