

Voter

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Chapter 1

Namespace Index

1.1 Namespace List

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

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Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

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Class Index

3.1 Class List

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Chapter 4

Namespace Documentation

4.1 Package Voter

Classes

- class [Client](#)
- class [Configuration](#)
loading config from file
- class [Confirmation](#)
confirmation for voter - proxy sends him this column which he/she has choosen (precisely signed, explicit and token)
- class [Constants](#)
constants used in project
- class [Form1](#)
graphical user interface
- class [Logs](#)
allows to collect and display logs
- class [Parser](#)
parsing recived messages
- class **Program**
- class [Voter](#)
[Voter](#) class - getting vote from person
- class [VoterBallot](#)
[Voter](#) ballot (vote's data as SL, SR, vote, yes/no position)

Chapter 5

Class Documentation

5.1 Voter.Client Class Reference

Public Member Functions

- [Client](#) (string name, [Logs](#) logs, [Voter](#) voter)
want to create to clients class
- bool **connect** (string ip, string port, string target)
- void **disconnect** (bool error=false)
- void **sendMessage** (string msg)

Properties

- bool **Connected** `[get]`

5.1.1 Constructor & Destructor Documentation

5.1.1.1 `Voter.Client.Client (string name, Logs logs, Voter voter) [inline]`

want to create to clients class

Parameters

<i>name</i>	name of voter
<i>logs</i>	log instance
<i>voter</i>	Voter instance

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

- Voter/Voter/Client.cs

5.2 Voter.Configuration Class Reference

loading config from file

Public Member Functions

- [Configuration](#) ([Logs](#) logs)

use to load configuration from xml file

- bool **loadConfiguration** (string path)

save loaded configuration in parameters

Properties

- string **VoterID** [get]
- string **ElectionAuthorityIP** [get]
- string **ElectionAuthorityPort** [get]
- string **ProxyIP** [get]
- string **ProxyPort** [get]
- int **NumberOfCandidates** [get]
- string **Name** [get]

5.2.1 Detailed Description

loading config from file

5.2.2 Constructor & Destructor Documentation

5.2.2.1 Voter.Configuration.Configuration (Logs logs) [inline]

use to load configuration from xml file

Parameters

<i>logs</i>	display messages in logs
-------------	--------------------------

5.2.3 Member Function Documentation

5.2.3.1 bool Voter.Configuration.loadConfiguration (string path) [inline]

save loaded configuration in parameters

Parameters

<i>path</i>	path to file with configuration
-------------	---------------------------------

Returns

true if configuration is loaded successfully

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

- Voter/Voter/Configuration.cs

5.3 Voter.Confirmation Class Reference

confirmation for voter - proxy sends him this column which he/she has choosen (precisely signed, explicit and token)

Public Member Functions

- [Confirmation](#) (ListView ListView)
constructor
- void [addConfirm](#) (bool anotherThread=false)
add and display confirmation

Properties

- int [ColumnNumber](#) [set]
number of column choosen as confirmation
- string [Column](#) [get, set]
string which contains value of column
- BigInteger [Token](#) [get, set]
token received from EA as a confirmation
- BigInteger [SignedColumn](#) [get, set]
representation of column signed by EA
- int [Index](#) [get]

5.3.1 Detailed Description

confirmation for voter - proxy sends him this column which he/she has choosen (precisely signed, explicit and token)

5.3.2 Constructor & Destructor Documentation

5.3.2.1 VoterConfirmation Confirmation (ListView ListView) [inline]

constructor

Parameters

<i>ListView</i>	list view to represent confirm
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5.3.3 Member Function Documentation

5.3.3.1 void VoterConfirmation.addConfirm (bool anotherThread = false) [inline]

add and display confirmation

Parameters

<i>anotherThread</i>	thread flag
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5.3.4 Property Documentation

5.3.4.1 string VoterConfirmation.Column [get], [set]

string which contains value of column

5.3.4.2 int VoterConfirmation.ColumnNumber [set]

number of column choosen as confirmation

5.3.4.3 BigInteger Voter.Confirmation.SignedColumn [get], [set]

representation of column signed by EA

5.3.4.4 BigInteger Voter.Confirmation.Token [get], [set]

token received from EA as a confirmation

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

- Voter/Voter/Confirmation.cs

5.4 Voter.Constants Class Reference

constants used in project

Public Attributes

- const int **LOG_INFO** = 0
- const int **LOG_MESSAGE** = 1
- const int **LOG_ERROR** = 2
- const int **BALLOTSIZE** = 4
- const string **LOCALHOST** = "localhost"
- const string **CONNECTION_PASS** = "Voter connected successfully to "
- const string **CONNECTION_FAILED** = "Voter could not connect to "
- const string **CONNECTION_DISCONNECTED** = "Voter disconnected from Election Authority"
- const string **CONNECTION_DISCONNECTED_ERROR** = "Error ocured during disconnecting [Voter](#) from Election Authority"
- const string **ELECTION_AUTHORITY** = "Election Authority"
- const string **PROXY** = "Proxy"
- const string **ID** = "ID"
- const string **ELECTION_AUTHORITY_IP** = "electionAuthorityIP"
- const string **ELECTION_AUTHORITY_PORT** = "electionAuthorityPort"
- const string **PROXY_IP** = "proxyIP"
- const string **PROXY_PORT** = "proxyPort"
- const string **NAME** = "name"
- const string **CONFIGURATION_LOADED_FROM** = "Configuration loaded from file: "
- const string **NUMBEROFVOTERS** = "numberOfVoters"
- const string **VOTE_DONE** = "Vote accepted."
- const string **VOTE_ERROR** = "Vote error, you've already voted to this candidate"
- const string **GET_SL_AND_SR** = "GET_SL_AND_SR"
- const string **SL_AND_SR** = "SL_AND_SR"
- const string **SR_AND_SR_RECEIVED** = "SL and SR received correctly from Proxy"
- const string **GET_CANDIDATE_LIST** = "GET_CANDIDATE_LIST"
- const string **CONNECTION_SUCCESSFUL** = "CONNECTION_SUCCESSFUL"
- const string **CANDIDATE_LIST_RESPONSE** = "CANDIDATE_LIST_RESPONSE"
- const string **CONNECTED** = "CONNECTED"
- const string **GET_YES_NO_POSITION** = "GET_YES_NO_POSITION"
- const string **YES_NO_POSITION** = "YES_NO_POSITION"
- const string **VOTE_FINISH** = "Process of voting done. Congratulations!"
- const string **VOTE** = "VOTE"
- const string **SIGNED_COLUMNS_TOKEN** = "SIGNED_COLUMNS_TOKEN"
- const string **SIGNED_COLUMNS_TOKEN_RECEIVED** = "Signed blind columns received from Proxy."

5.4.1 Detailed Description

constants used in project

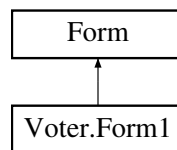
The documentation for this class was generated from the following file:

- Voter/Voter/Constants.cs

5.5 Voter.Form1 Class Reference

graphical user interface

Inheritance diagram for Voter.Form1:



Public Member Functions

- [Form1](#) ()
constructor of form
- void [disableSLAndSRButton](#) ()
disable SL and SR buttons
- void [disableConectionProxyButton](#) ()
disable connection with Proxy button
- void [disableConnectionEAButton](#) ()
disable connection with Election Authority button
- void [disableGetCandidateListButton](#) ()
disable Get Candidate List button

Protected Member Functions

- override void [Dispose](#) (bool disposing)
Clean up any resources being used.

Properties

- List< TextBox > [TextBoxes](#) [get]
TextBoxes property which allow to get the list
- List< Button[]> [VoteButtons](#) [get]
VoteButtons property which allow to get the list
- int [confBox](#) [get, set]
confBox property which allow to set and get value of confirmation box

5.5.1 Detailed Description

graphical user interface

5.5.2 Constructor & Destructor Documentation

5.5.2.1 Voter.Form1.Form1 () [inline]

constructor of form

5.5.3 Member Function Documentation

5.5.3.1 void Voter.Form1.disableConectionProxyButton () [inline]

disable connection with Proxy button

5.5.3.2 void Voter.Form1.disableConnectionEAButton () [inline]

disable connection with Election Authority button

5.5.3.3 void Voter.Form1.disableGetCandidateListButton () [inline]

disable Get Candidate List button

5.5.3.4 void Voter.Form1.disableSLAndSRButton () [inline]

disable SL and SR buttons

5.5.3.5 override void Voter.Form1.Dispose (bool *disposing*) [inline],[protected]

Clean up any resources being used.

Parameters

<i>disposing</i>	true if managed resources should be disposed; otherwise, false.
------------------	---

5.5.4 Property Documentation

5.5.4.1 int Voter.Form1.confBox [get],[set]

confBox property which allow to set and get value of confirmation box

5.5.4.2 List<TextBox> Voter.Form1.TextBoxes [get]

TextBoxes property which allow to get the list

5.5.4.3 List<Button[]> Voter.Form1.VoteButtons [get]

VoteButtons property which allow to get the list

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

- Voter/Voter/Form1.cs
- Voter/Voter/Form1.Designer.cs

5.6 Voter.Logs Class Reference

allows to collect and display logs

Public Member Functions

- [Logs](#) (ListView logsListView)
Logs instance's constructor
- void [addLog](#) (string log, bool time, int flag, bool anotherThread=false)
adds log

Properties

- string **VoterName** [get, set]

5.6.1 Detailed Description

allows to collect and display logs

5.6.2 Constructor & Destructor Documentation

5.6.2.1 Voter.Logs.Logs (ListView logsListView) [inline]

[Logs](#) instance's constructor

Parameters

<i>logsListView</i>	logs list view
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5.6.3 Member Function Documentation

5.6.3.1 void Voter.Logs.addLog (string log, bool time, int flag, bool anotherThread = false) [inline]

adds log

Parameters

<i>log</i>	log message
<i>time</i>	if print time
<i>flag</i>	type of message (error, info...)
<i>anotherThread</i>	thread flag

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

- Voter/Voter/Logs.cs

5.7 Voter.Parser Class Reference

parsing recived messages

Public Member Functions

- [Parser](#) ([Logs](#) logs, [Voter](#) voter)
parser's constructor
- void [parseMessage](#) (string msg)
parses message

5.7.1 Detailed Description

parsing recived messages

5.7.2 Constructor & Destructor Documentation

5.7.2.1 Voter.Parser.Parser ([Logs](#) logs, [Voter](#) voter) `[inline]`

parser's constructor

Parameters

<i>logs</i>	log instance
<i>voter</i>	voter instance

5.7.3 Member Function Documentation

5.7.3.1 void Voter.Parser.parseMessage ([string](#) msg) `[inline]`

parses message

Parameters

<i>msg</i>	recived message
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Returns

parsing result

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

- Voter/Voter/Parser.cs

5.8 Voter.Voter Class Reference

[Voter](#) class - getting vote from person

Public Member Functions

- [Voter](#) ([Logs](#) logs, [Configuration](#) configuration, [Form1](#) form, [Confirmation](#) confirm)
constructor
- void [requestForSLandSR](#) ()
request for SL and SR (voter to proxy)
- void [disableSLandSRButton](#) ()
disable SL and SR getting button
- void [requestForCandidatesList](#) ()

- request for candidate list (voter to EA)*
- void [disableConnectionProxyButton](#) ()
disable connection to proxy button
- void [disableConnectionEAButton](#) ()
disable connection to ea button
- void [saveCandidateList](#) (string msg)
saves candidates list
- void [sendVoteToProxy](#) ()
sends vote to proxy (ie. message: VOTE& Voter_name;1:0:0:0;1:0:0:0;0:0:0:1;0:0:0:1;0:0:0:1)
- void [setConfirm](#) (int column)
sets confirmation
- void [saveSignedColumnAndToken](#) (string message)
save signed column and token

Properties

- [Client ProxyClient](#) [get]
- [Client ElectionAuthorityClient](#) [get]
- [VoterBallot VoterBallot](#) [get]

5.8.1 Detailed Description

[Voter](#) class - getting vote from person

5.8.2 Constructor & Destructor Documentation

5.8.2.1 [Voter.Voter.Voter \(Logs logs, Configuration configuration, Form1 form, Confirmation confirm \)](#) [inline]

constructor

Parameters

<i>logs</i>	log instance
<i>configuration</i>	configuration loaded
<i>form</i>	form application
<i>confirm</i>	confirmation for voter

5.8.3 Member Function Documentation

5.8.3.1 [void Voter.Voter.disableConnectionEAButton \(\)](#) [inline]

disable connection to ea button

5.8.3.2 [void Voter.Voter.disableConnectionProxyButton \(\)](#) [inline]

disable connection to proxy button

5.8.3.3 [void Voter.Voter.disableSLAndSRButton \(\)](#) [inline]

disable SL and SR getting button

5.8.3.4 void Voter.Voter.requestForCandidatesList () [inline]

request for candidate list (voter to EA)

5.8.3.5 void Voter.Voter.requestForSLandSR () [inline]

request for SL and SR (voter to proxy)

5.8.3.6 void Voter.Voter.saveCandidateList (string *msg*) [inline]

saves cadidates list

Parameters

<i>msg</i>	recived message
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5.8.3.7 void Voter.Voter.saveSignedColumnAndToken (string *message*) [inline]

save signed column and token

Parameters

<i>message</i>	recived message
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5.8.3.8 void Voter.Voter.sendVoteToProxy () [inline]

sends vote to proxy (ie. message: VOTE& Voter_name;1:0:0:0;1:0:0:0;0:0:0:1;0:0:0:1;0:0:0:1)

5.8.3.9 void Voter.Voter.setConfirm (int *column*) [inline]

sets confirmation

Parameters

<i>column</i>	confirmation column choosed by voter
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The documentation for this class was generated from the following file:

- Voter/Voter/Voter.cs

5.9 Voter.VoterBallot Class Reference

[Voter](#) ballot (vote's data as SL, SR, vote, yes/no position)

Public Member Functions

- [VoterBallot](#) (int numbOfCand)
constructor
- bool [vote](#) (int x, int y)
try-to-vote for x,y position
- bool [voteDone](#) ()
checks if voting is done

Properties

- int[,] **Voted** [get]
- BigInteger **SL** [get, set]
- BigInteger **SR** [get, set]
- BigInteger **Token** [get, set]
- BigInteger **SignedBlindColumn** [get, set]

5.9.1 Detailed Description

[Voter](#) ballot (vote's data as SL, SR, vote, yes/no position)

5.9.2 Constructor & Destructor Documentation

5.9.2.1 Voter.VoterBallot.VoterBallot (int *numbOfCand*) [inline]

constructor

Parameters

<i>numbOfCand</i>	
-------------------	--

5.9.3 Member Function Documentation

5.9.3.1 bool Voter.VoterBallot.vote (int *x*, int *y*) [inline]

try-to-vote for x,y position

Parameters

<i>x</i>	1st dimension
<i>y</i>	2nd dimension

Returns

result of try-to-vote action

5.9.3.2 bool Voter.VoterBallot.voteDone () [inline]

checks if voting is done

Returns

if voting is done

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

- Voter/Voter/VoterBallot.cs

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