

# Remote Shell

1.0

Generated by Doxygen 1.8.17



<b>1 Hierarchical Index</b>	<b>1</b>
1.1 Class Hierarchy . . . . .	1
<b>2 Class Index</b>	<b>3</b>
2.1 Class List . . . . .	3
<b>3 Class Documentation</b>	<b>5</b>
3.1 ss.shell.BuiltInProcess Class Reference . . . . .	5
3.1.1 Constructor & Destructor Documentation . . . . .	5
3.1.1.1 BuiltInProcess() [1/2] . . . . .	5
3.1.1.2 BuiltInProcess() [2/2] . . . . .	6
3.1.2 Member Function Documentation . . . . .	6
3.1.2.1 getCWD() . . . . .	6
3.1.2.2 getIsLoggedIn() . . . . .	7
3.1.2.3 getLogsOutput() . . . . .	7
3.1.2.4 getUsername() . . . . .	7
3.1.2.5 getUserType() . . . . .	7
3.2 ss.shell.utils.BuiltIns Class Reference . . . . .	8
3.2.1 Member Function Documentation . . . . .	9
3.2.1.1 isBuiltIn() . . . . .	9
3.2.1.2 isProcessBuilder() . . . . .	9
3.3 ss.shell.client.ClientApplication Class Reference . . . . .	10
3.4 ss.shell.utils.Filesystem Class Reference . . . . .	11
3.4.1 Constructor & Destructor Documentation . . . . .	11
3.4.1.1 Filesystem() [1/2] . . . . .	11
3.4.1.2 Filesystem() [2/2] . . . . .	12
3.4.2 Member Function Documentation . . . . .	12
3.4.2.1 changePassword() . . . . .	12
3.4.2.2 changeUserType() . . . . .	12
3.4.2.3 deleteUser() . . . . .	13
3.4.2.4 getDirsInUserDir() . . . . .	13
3.4.2.5 getLogOutput() . . . . .	13
3.4.2.6 getLogs() . . . . .	14
3.4.2.7 getLogsOutput() . . . . .	14
3.4.2.8 getPassword() . . . . .	14
3.4.2.9 getUserFiles() . . . . .	14
3.4.2.10 getUserType() . . . . .	15
3.4.2.11 hasDirectory() . . . . .	15
3.4.2.12 listUsers() . . . . .	15
3.4.2.13 login() . . . . .	15
3.5 ss.shell.utils.Logs.LogLevel Enum Reference . . . . .	16
3.5.1 Detailed Description . . . . .	16
3.6 ss.shell.utils.Logs Class Reference . . . . .	16

3.6.1 Member Function Documentation . . . . .	17
3.6.1.1 addToOutputTotal() . . . . .	17
3.6.1.2 getOuterBottom() . . . . .	17
3.6.1.3 getOuterTop() . . . . .	18
3.6.1.4 getOutputTotal() . . . . .	18
3.6.1.5 getTwoDigits() . . . . .	18
3.6.1.6 logToFile() [1/2] . . . . .	18
3.6.1.7 logToFile() [2/2] . . . . .	19
3.6.1.8 outputInfo() . . . . .	19
3.6.1.9 outputPrompt() . . . . .	19
3.6.1.10 outputShort() . . . . .	20
3.6.1.11 print() . . . . .	20
3.6.1.12 printLine() [1/2] . . . . .	20
3.6.1.13 printLine() [2/2] . . . . .	21
3.7 ss.shell.Shell Class Reference . . . . .	21
3.7.1 Constructor & Destructor Documentation . . . . .	21
3.7.1.1 Shell() . . . . .	21
3.7.2 Member Function Documentation . . . . .	22
3.7.2.1 getCWD() . . . . .	22
3.7.2.2 getDoExit() . . . . .	22
3.7.2.3 getIsLoggedIn() . . . . .	22
3.7.2.4 getOutput() . . . . .	23
3.7.2.5 getUsername() . . . . .	23
3.7.2.6 getUserType() . . . . .	23
3.7.2.7 prompt() . . . . .	23
3.8 ss.shell.server.ShellServer Class Reference . . . . .	24
3.8.1 Detailed Description . . . . .	25
3.8.2 Constructor & Destructor Documentation . . . . .	25
3.8.2.1 ShellServer() . . . . .	25
3.8.3 Member Function Documentation . . . . .	25
3.8.3.1 main() . . . . .	25
3.8.3.2 stopServer() . . . . .	25
3.9 ss.shell.utils.BuiltIns.ShellType Enum Reference . . . . .	26
3.9.1 Detailed Description . . . . .	26
3.10 ss.shell.utils.Logs.Store Enum Reference . . . . .	26
3.10.1 Detailed Description . . . . .	26
3.11 ss.shell.utils.BuiltIns.UserTypes Enum Reference . . . . .	27
3.11.1 Detailed Description . . . . .	27
<b>Index</b>	<b>29</b>

# Chapter 1

## Hierarchical Index

### 1.1 Class Hierarchy

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

ss.shell.BuiltInProcess . . . . .	5
ss.shell.utils.BuiltIns . . . . .	8
ss.shell.utils.Filesystem . . . . .	11
ss.shell.utils.Logs.LogLevel . . . . .	16
ss.shell.utils.Logs . . . . .	16
ss.shell.Shell . . . . .	21
ss.shell.utils.BuiltIns.ShellType . . . . .	26
ss.shell.utils.Logs.Store . . . . .	26
Thread	
ss.shell.server.ShellServer . . . . .	24
ss.shell.utils.BuiltIns.UserTypes . . . . .	27
Application	
ss.shell.client.ClientApplication . . . . .	10



## Chapter 2

# Class Index

### 2.1 Class List

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

<b>ss.shell.BuiltInProcess</b>	5
<b>ss.shell.utils.BuiltIns</b>	8
<b>ss.shell.client.ClientApplication</b>	10
<b>ss.shell.utils.Filesystem</b>	11
<b>ss.shell.utils.Logs.LogLevel</b>	
The severity level of the logs	16
<b>ss.shell.utils.Logs</b>	16
<b>ss.shell.Shell</b>	21
<b>ss.shell.server.ShellServer</b>	24
<b>ss.shell.utils.BuiltIns.ShellType</b>	
The different types of shells that can be run on this program	26
<b>ss.shell.utils.Logs.Store</b>	
Whether to store the logged output to the logs file	26
<b>ss.shell.utils.BuiltIns.UserTypes</b>	
The different types of user groups	27





## Chapter 3

# Class Documentation

### 3.1 ss.shell.BuiltInProcess Class Reference

#### Public Member Functions

- **BuiltInProcess** (String username, String cwd, UserTypes type, ShellType shellType)  
*Constructor for the class.*
- **BuiltInProcess** (String username, String cwd, UserTypes type, boolean isLoggedIn, ShellType shellType)  
*Override constructor for the class.*
- String **getUsername** ()  
*Gets the username of the current user.*
- String **getCWD** ()  
*Gets the cwd of the current user.*
- UserTypes **getUserType** ()  
*Gets the user type of the current user.*
- boolean **getIsLoggedIn** ()  
*Gets the boolean of if the user is logged in or not.*
- String **getLogsOutput** ()  
*Gets the output logs object.*
- void **execute** (String[] command)  
*Execute the correct command based on command.*

#### 3.1.1 Constructor & Destructor Documentation

##### 3.1.1.1 BuiltInProcess() [1/2]

```
ss.shell.BuiltInProcess.BuiltInProcess (
    String username,
    String cwd,
    UserTypes type,
    ShellType shellType )
```

Constructor for the class.

**Parameters**

<i>username</i>	The current username. "guest" is default.
<i>cwd</i>	The current working directory. Home path is default.
<i>type</i>	The current type of the user. "standard" is default.
<i>shellType</i>	The type of shell being run. "remote" or "local".

**3.1.1.2 BuiltInProcess() [2/2]**

```

ss.shell.BuiltInProcess.BuiltInProcess (
    String username,
    String cwd,
    UserTypes type,
    boolean isLoggedIn,
    ShellType shellType )

```

Override constructor for the class.

**Parameters**

<i>username</i>	The current username. "guest" is default.
<i>cwd</i>	The current working directory. Home path is default.
<i>type</i>	The current type of the user. "standard" is default.
<i>is↵LoggedIn</i>	If the user is logged in or not.
<i>shellType</i>	The type of shell being run. "remote" or "local".

**3.1.2 Member Function Documentation****3.1.2.1 getCWD()**

```
String ss.shell.BuiltInProcess.getCWD ( )
```

Gets the cwd of the current user.

**Returns**

cwd of the current user.

### 3.1.2.2 getIsLoggedIn()

```
boolean ss.shell.BuiltInProcess.getIsLoggedIn ( )
```

Gets the boolean of if the user is logged in or not.

#### Returns

the boolean of if the user is logged in or not.

### 3.1.2.3 getLogsOutput()

```
String ss.shell.BuiltInProcess.getLogsOutput ( )
```

Gets the output logs object.

#### Returns

the output logs object.

### 3.1.2.4 getUsername()

```
String ss.shell.BuiltInProcess.getUsername ( )
```

Gets the username of the current user.

#### Returns

username of the current user.

### 3.1.2.5 getUserType()

```
UserTypes ss.shell.BuiltInProcess.getUserType ( )
```

Gets the user type of the current user.

#### Returns

user type of the current user.

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

- Shell/src/main/java/ss/shell/BuiltInProcess.java

## 3.2 ss.shell.utils.BuiltIns Class Reference

### Classes

- enum **ShellType**  
*The different types of shells that can be run on this program.*
- enum **UserTypes**  
*The different types of user groups.*

### Static Public Member Functions

- static boolean **isBuiltIn** (String command)  
*Check if a command is a built-in command.*
- static boolean **isProcessBuilder** (String command)  
*Check if a command is a process builder command.*

### Static Public Attributes

- static final String **SUPER** = "super"  
*Built in commands.*
- static final String **ADDUSER** = "adduser"
- static final String **DELUSER** = "deluser"
- static final String **LISTUSERS** = "listusers"
- static final String **CHPASS** = "chpass"
- static final String **CHUSERTYPE** = "chusertype"
- static final String **LOGIN** = "login"
- static final String **LOGOUT** = "logout"
- static final String **WHOAMI** = "whoami"
- static final String **MOVE** = "move"
- static final String **COPY** = "copy"
- static final String **CD** = "cd"
- static final String **SHOWDIR** = "showdir"
- static final String **HELP** = "help"
- static final String **HISTORY** = "history"
- static final String[] **COMMANDS** = { **SUPER**, **ADDUSER**, **DELUSER**, **LISTUSERS**, **CHPASS**, **CHUSERTYPE**, **LOGIN**, **LOGOUT**, **WHOAMI**, **MOVE**, **COPY**, **CD**, **SHOWDIR**, **HELP**, **HISTORY**}
- static final String[] **DESCS** = {**SUPER\_DESC**, **ADDUSER\_DESC**, **DELUSER\_DESC**, **LISTUSERS\_DESC**, **CHPASS\_DESC**, **CHUSERTYPE\_DESC**, **LOGIN\_DESC**, **LOGOUT\_DESC**, **WHOAMI\_DESC**, **MOVE\_DESC**, **COPY\_DESC**, **CD\_DESC**, **SHOWDIR\_DESC**, **HELP\_DESC**, **HISTORY\_DESC**}
- static final String **PB\_LS** = "ls"  
*Process builder allowed commands.*
- static final String **PB\_CP** = "cp"
- static final String **PB\_MV** = "mv"
- static final String **PB\_MKDIR** = "mkdir"
- static final String **PB\_RMDIR** = "rmdir"
- static final String **PB\_HELP** = "help"
- static final String **PB\_PWD** = "pwd"
- static final String **PB\_PS** = "ps"
- static final String **PB\_WHICH** = "which"
- static final String[] **PB\_COMMANDS** = { **PB\_LS**, **PB\_CP**, **PB\_MV**, **PB\_MKDIR**, **PB\_RMDIR**, **PB\_HELP**, **PB\_PWD**, **PB\_PS**, **PB\_WHICH**}
- static final String[] **PB\_DESCS** = {**PB\_LS\_DESC**, **PB\_CP\_DESC**, **PB\_MV\_DESC**, **PB\_MKDIR\_DESC**, **PB\_RMDIR\_DESC**, **PB\_HELP\_DESC**, **PB\_PWD\_DESC**, **PB\_PS\_DESC**, **PB\_WHICH\_DESC**}
- static final String **HOME\_PATH** = System.getProperty("user.dir") + "/src/main/resources/home/"

## 3.2.1 Member Function Documentation

### 3.2.1.1 isBuiltIn()

```
static boolean ss.shell.utils.BuiltIns.isBuiltIn (
    String command ) [static]
```

Check if a command is a built-in command.

#### Parameters

<i>command</i>	Command to check.
----------------	-------------------

#### Returns

True if command is a built-in command.

### 3.2.1.2 isProcessBuilder()

```
static boolean ss.shell.utils.BuiltIns.isProcessBuilder (
    String command ) [static]
```

Check if a command is a process builder command.

#### Parameters

<i>command</i>	Command to check.
----------------	-------------------

#### Returns

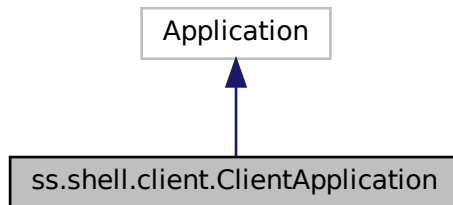
True if command is a process builder command.

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

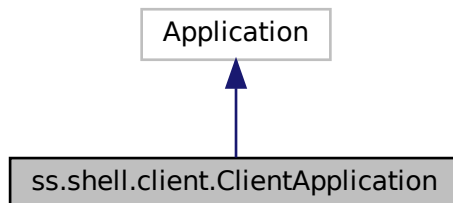
- Shell/src/main/java/ss/shell/utils/BuiltIns.java

### 3.3 ss.shell.client.ClientApplication Class Reference

Inheritance diagram for ss.shell.client.ClientApplication:



Collaboration diagram for ss.shell.client.ClientApplication:



#### Public Member Functions

- void **start** (Stage stage)

#### Static Public Member Functions

- static void **main** (String[] args)

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

- Shell/src/main/java/ss/shell/client/ClientApplication.java

## 3.4 ss.shell.utils.Filesystem Class Reference

### Public Member Functions

- **Filesystem** (String username, String password, UserTypes type, ShellType shellType)  
*Constructor for the **Filesystem** (p. 11) class.*
- **Filesystem** (String cwd)  
*Override constructor for the **Filesystem** (p. 11) class.*
- boolean **login** ()  
*Logging in needs to check if the user has a directory and if they do, check if the password matches the user info file.*
- void **createUser** ()  
*Creating a user needs to check if the user has a directory.*
- void **deleteUser** ()  
*Deletes the user directory and all of its contents.*
- String **getPassword** ()  
*Gets the current password of the user.*
- BuiltIns.UserTypes **getUserType** ()  
*Gets the current group type of the user.*
- boolean **changePassword** (String newPassword)  
*Change the password for the user.*
- boolean **changeUserType** (BuiltIns.UserTypes newType)  
*Change the group type for the user.*
- boolean **hasDirectory** ()  
*Check if the user has a directory already.*
- String[] **getDirInUserDir** ()  
*Gets the directories in the user's directory.*
- File[] **getLogs** (String filename)  
*Gets the log files in the home directory (where they are stored).*
- String[] **getLogOutput** (File[] logFiles)  
*Returns the lines inside the log files provided.*
- File[] **getUserFiles** ()  
*Gets all the user files from the home directory.*
- String[] **listUsers** (File[] userFiles)  
*Lists the users from the user files in the home directory.*
- String **getLogsOutput** ()  
*Gets the output logs object.*

### 3.4.1 Constructor & Destructor Documentation

#### 3.4.1.1 Filesystem() [1/2]

```
ss.shell.utils.Filesystem.Filesystem (
    String username,
    String password,
    UserTypes type,
    ShellType shellType )
```

Constructor for the **Filesystem** (p. 11) class.

**Parameters**

<i>username</i>	The username of the user.
<i>password</i>	The password of the user (hashed).
<i>type</i>	The group type of the user.
<i>shellType</i>	The type of shell being run for.

**3.4.1.2 Filesystem() [2/2]**

```
ss.shell.utils.Filesystem.Filesystem (  
    String cwd )
```

Override constructor for the **Filesystem** (p. 11) class.

**Parameters**

<i>cwd</i>	The current working directory of the user.
------------	--

**3.4.2 Member Function Documentation****3.4.2.1 changePassword()**

```
boolean ss.shell.utils.Filesystem.changePassword (  
    String newPassword )
```

Change the password for the user.

**Parameters**

<i>newPassword</i>	the new password for the user.
--------------------	--------------------------------

**Returns**

true if the password was changed successfully.

**3.4.2.2 changeUserType()**

```
boolean ss.shell.utils.Filesystem.changeUserType (  
    BuiltIns.UserTypes newType )
```

Change the group type for the user.



**Parameters**

<i>newType</i>	the new group type for the user.
----------------	----------------------------------

**Returns**

true if the change was successful.

**3.4.2.3 deleteUser()**

```
void ss.shell.utils.Filesystem.deleteUser ( )
```

Deletes the user directory and all of its contents.

Also deletes the user info file.

**3.4.2.4 getDirsInUserDir()**

```
String [] ss.shell.utils.Filesystem.getDirsInUserDir ( )
```

Gets the directories in the user's directory.

**Returns**

list of directory names.

**3.4.2.5 getLogOutput()**

```
String [] ss.shell.utils.Filesystem.getLogOutput (
    File[] logFiles )
```

Returns the lines inside the log files provided.

**Parameters**

<i>logFiles</i>	the log files to read.
-----------------	------------------------

**Returns**

the lines inside the log files.

#### 3.4.2.6 getLogs()

```
File [] ss.shell.utils.Filesystem.getLogs (
    String filename )
```

Gets the log files in the home directory (where they are stored).

##### Parameters

<i>filename</i>	the name of the log file to find.
-----------------	-----------------------------------

##### Returns

the log file if it exists.

#### 3.4.2.7 getLogsOutput()

```
String ss.shell.utils.Filesystem.getLogsOutput ( )
```

Gets the output logs object.

##### Returns

the output logs object.

#### 3.4.2.8 getPassword()

```
String ss.shell.utils.Filesystem.getPassword ( )
```

Gets the current password of the user.

##### Returns

the current password of the user.

#### 3.4.2.9 getUserFiles()

```
File [] ss.shell.utils.Filesystem.getUserFiles ( )
```

Gets all the user files from the home directory.

##### Returns

the user files.

#### 3.4.2.10 getUserType()

```
BuiltIns.UserTypes ss.shell.utils.Filesystem.getUserType ( )
```

Gets the current group type of the user.

##### Returns

the current group type of the user.

#### 3.4.2.11 hasDirectory()

```
boolean ss.shell.utils.Filesystem.hasDirectory ( )
```

Check if the user has a directory already.

##### Returns

true if the user has a directory.

#### 3.4.2.12 listUsers()

```
String [ ] ss.shell.utils.Filesystem.listUsers (
    File [ ] userFiles )
```

Lists the users from the user files in the home directory.

##### Parameters

<i>userFiles</i>	the user files to read.
------------------	-------------------------

##### Returns

the users from the user files.

#### 3.4.2.13 login()

```
boolean ss.shell.utils.Filesystem.login ( )
```

Logging in needs to check if the user has a directory and if they do, check if the password matches the user info file.

#### Returns

true if the user has a directory and the password matches.

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

- Shell/src/main/java/ss/shell/Utils/Filesystem.java

## 3.5 ss.shell.utils.Logs.LogLevel Enum Reference

The severity level of the logs.

#### Public Attributes

- **INFO**
- **WARNING**
- **ERROR**

#### 3.5.1 Detailed Description

The severity level of the logs.

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

- Shell/src/main/java/ss/shell/Utils/Logs.java

## 3.6 ss.shell.utils.Logs Class Reference

#### Classes

- enum **LogLevel**  
*The severity level of the logs.*
- enum **Store**  
*Whether to store the logged output to the logs file.*

#### Public Member Functions

- void **outputPrompt** (String prompt, **Store** store)  
*Add the HTML prompt to the total output.*
- void **outputShort** (String output, **Store** store)  
*Add the HTML short to the total output.*
- void **outputInfo** (String output, **Store** store, **LogLevel** level)  
*Add the HTML info to the total output.*
- String **getOuterTop** ()  
*Get the top of the HTML string.*
- String **getOuterBottom** ()  
*Get the bottom of the HTML string.*
- String **getOutputTotal** ()  
*Get the total output HTML.*
- void **addToOutputTotal** (String output)  
*Directly add extra text to the total output string.*

## Static Public Member Functions

- static void **printLine** (String text, **Store** store)  
*Prints a line (with  
) of text and stores output in the logs file.*
- static void **printLine** (String text, **LogLevel** level)  
*Prints a line (with  
) of text and stores output in the logs file.*
- static void **print** (String text, **Store** store)  
*Prints a line of text and stores output in the logs file.*
- static void **logToFile** (String text)  
*Stores text in the logs file with a date and time stamp.*
- static void **logToFile** (String[] text)  
*Stores text in the logs file with a date and time stamp.*
- static String **getTwoDigits** (int input)  
*Returns the full 2 digits of input string.*

### 3.6.1 Member Function Documentation

#### 3.6.1.1 addToOutputTotal()

```
void ss.shell.utils.Logs.addToOutputTotal (
    String output )
```

Directly add extra text to the total output string.

##### Parameters

<i>output</i>	Text to add.
---------------	--------------

#### 3.6.1.2 getOuterBottom()

```
String ss.shell.utils.Logs.getOuterBottom ( )
```

Get the bottom of the HTML string.

##### Returns

The bottom of the HTML string.

### 3.6.1.3 getOuterTop()

```
String ss.shell.utils.Logs.getOuterTop ( )
```

Get the top of the HTML string.

#### Returns

The top of the HTML string.

### 3.6.1.4 getOutputTotal()

```
String ss.shell.utils.Logs.getOutputTotal ( )
```

Get the total output HTML.

#### Returns

The whole HTML string to output.

### 3.6.1.5 getTwoDigits()

```
static String ss.shell.utils.Logs.getTwoDigits (
    int input ) [static]
```

Returns the full 2 digits of input string.

#### Parameters

<i>input</i>	Input int.
--------------	------------

#### Returns

Input string with 2 digits.

### 3.6.1.6 logToFile() [1/2]

```
static void ss.shell.utils.Logs.logToFile (
    String text ) [static]
```

Stores text in the logs file with a date and time stamp.

## Parameters

<i>text</i>	Input text.
-------------	-------------

**3.6.1.7 logToFile()** [2/2]

```
static void ss.shell.utils.Logs.logToFile (
    String[] text ) [static]
```

Stores text in the logs file with a date and time stamp.

## Parameters

<i>text</i>	Input text.
-------------	-------------

**3.6.1.8 outputInfo()**

```
void ss.shell.utils.Logs.outputInfo (
    String output,
    Store store,
    LogLevel level )
```

Add the HTML info to the total output.

## Parameters

<i>output</i>	Output.
<i>store</i>	Whether to store the output to logs.
<i>level</i>	Log level.

**3.6.1.9 outputPrompt()**

```
void ss.shell.utils.Logs.outputPrompt (
    String prompt,
    Store store )
```

Add the HTML prompt to the total output.

## Parameters

<i>prompt</i>	Prompt to output.
<i>store</i>	Whether to store the output to logs.

### 3.6.1.10 outputShort()

```
void ss.shell.utils.Logs.outputShort (
    String output,
    Store store )
```

Add the HTML short to the total output.

#### Parameters

<i>output</i>	Output.
<i>store</i>	Whether to store the output to logs.

### 3.6.1.11 print()

```
static void ss.shell.utils.Logs.print (
    String text,
    Store store ) [static]
```

Prints a line of text and stores output in the logs file.

#### Parameters

<i>text</i>	Input text.
<i>store</i>	<b>Store</b> (p. 26) output in logs file.

### 3.6.1.12 printLine() [1/2]

```
static void ss.shell.utils.Logs.printLine (
    String text,
    LogLevel level ) [static]
```

Prints a line (with  
) of text and stores output in the logs file.

#### Parameters

<i>text</i>	Input text.
<i>level</i>	Log level.



### 3.6.1.13 printLine() [2/2]

```
static void ss.shell.utils.Logs.printLine (
    String text,
    Store store ) [static]
```

Prints a line (with  
) of text and stores output in the logs file.

#### Parameters

<i>text</i>	Input text.
<i>store</i>	Tell it not to store output in logs file.

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

- Shell/src/main/java/ss/shell/utils/Logs.java

## 3.7 ss.shell.Shell Class Reference

### Public Member Functions

- **Shell** (String input, String username, String cwd, UserTypes type, boolean isLoggedIn)  
*Constructor for the class.*
- void **prompt** ()  
*Constructor method for the class.*
- boolean **getDoExit** ()  
*Gets the exit status.*
- String **getUsername** ()  
*Gets the username of the current user.*
- String **getCWD** ()  
*Gets the cwd of the current user.*
- UserTypes **getUserType** ()  
*Gets the user type of the current user.*
- boolean **getIsLoggedIn** ()  
*Gets the boolean of if the user is logged in or not.*
- String **getOutput** ()  
*Gets the total output of all the html from the logs object.*

### 3.7.1 Constructor & Destructor Documentation

#### 3.7.1.1 Shell()

```
ss.shell.Shell.Shell (
    String input,
    String username,
    String cwd,
    UserTypes type,
    boolean isLoggedIn )
```

Constructor for the class.

**Parameters**

<i>input</i>	The user input from the form.
<i>username</i>	The current username. "guest" is default.
<i>cwd</i>	The current working directory. Home path is default.
<i>type</i>	The current type of the user. "standard" is default.
<i>is↔ LoggedIn</i>	If the user is logged in or not.

### 3.7.2 Member Function Documentation

#### 3.7.2.1 getCWD()

```
String ss.shell.Shell.getCWD ( )
```

Gets the cwd of the current user.

**Returns**

cwd of the current user.

#### 3.7.2.2 getDoExit()

```
boolean ss.shell.Shell.getDoExit ( )
```

Gets the exit status.

**Returns**

if the user has entered an exit command.

#### 3.7.2.3 getIsLoggedIn()

```
boolean ss.shell.Shell.getIsLoggedIn ( )
```

Gets the boolean of if the user is logged in or not.

**Returns**

the boolean of if the user is logged in or not.

#### 3.7.2.4 `getOutput()`

```
String ss.shell.Shell.getOutput ( )
```

Gets the total output of all the html from the logs object.

##### Returns

the output html.

#### 3.7.2.5 `getUsername()`

```
String ss.shell.Shell.getUsername ( )
```

Gets the username of the current user.

##### Returns

username of the current user.

#### 3.7.2.6 `getUserType()`

```
UserTypes ss.shell.Shell.getUserType ( )
```

Gets the user type of the current user.

##### Returns

user type of the current user.

#### 3.7.2.7 `prompt()`

```
void ss.shell.Shell.prompt ( )
```

Constructor method for the class.

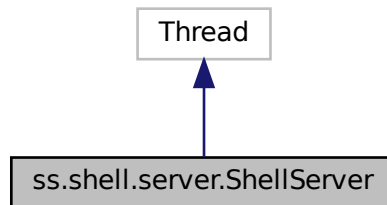
Handles all the logic to do with picking the command type.

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

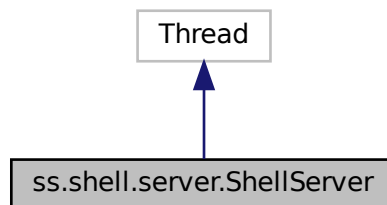
- Shell/src/main/java/ss/shell/Shell.java

### 3.8 ss.shell.server.ShellServer Class Reference

Inheritance diagram for ss.shell.server.ShellServer:



Collaboration diagram for ss.shell.server.ShellServer:



#### Public Member Functions

- **ShellServer** (String name, int port)  
*ShellServer* (p. 24) constructor.
- void **run** ()  
*Run the server (overrides thread runnable).*
- void **stopServer** (ServerSocket server)  
*Stops the server.*

#### Static Public Member Functions

- static void **main** (String[] args)  
*Starts the servers.*

### 3.8.1 Detailed Description

#### Author

pedro  
Joshua

### 3.8.2 Constructor & Destructor Documentation

#### 3.8.2.1 ShellServer()

```
ss.shell.server.ShellServer.ShellServer (
    String name,
    int port )
```

**ShellServer** (p. 24) constructor.

#### Parameters

<i>name</i>	The name of the server.
<i>port</i>	The port to listen on.

### 3.8.3 Member Function Documentation

#### 3.8.3.1 main()

```
static void ss.shell.server.ShellServer.main (
    String[] args ) [static]
```

Starts the servers.

#### Parameters

<i>args</i>	Java main args.
-------------	-----------------

#### 3.8.3.2 stopServer()

```
void ss.shell.server.ShellServer.stopServer (
    ServerSocket server )
```

Stops the server.

#### Parameters

<i>server</i>	The socket to close.
---------------	----------------------

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

- Shell/src/main/java/ss/shell/server/ShellServer.java

## 3.9 ss.shell.utils.BuiltIns.ShellType Enum Reference

The different types of shells that can be run on this program.

### Public Attributes

- LOCAL
- REMOTE

### 3.9.1 Detailed Description

The different types of shells that can be run on this program.

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

- Shell/src/main/java/ss/shell/utils/BuiltIns.java

## 3.10 ss.shell.utils.Logs.Store Enum Reference

Whether to store the logged output to the logs file.

### Public Attributes

- YES
- NO

### 3.10.1 Detailed Description

Whether to store the logged output to the logs file.

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

- Shell/src/main/java/ss/shell/utils/Logs.java

## 3.11 `ss.shell.utils.BuiltIns.UserTypes` Enum Reference

The different types of user groups.

### Public Attributes

- `STANDARD`
- `SUPERUSER`

### 3.11.1 Detailed Description

The different types of user groups.

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

- `Shell/src/main/java/ss/shell/utils/BuiltIns.java`





# Index

- addToOutputTotal
  - ss.shell.utils.Logs, 17
- BuiltInProcess
  - ss.shell.BuiltInProcess, 5, 6
- changePassword
  - ss.shell.utils.Filesystem, 12
- changeUserType
  - ss.shell.utils.Filesystem, 12
- deleteUser
  - ss.shell.utils.Filesystem, 13
- Filesystem
  - ss.shell.utils.Filesystem, 11, 12
- getCWD
  - ss.shell.BuiltInProcess, 6
  - ss.shell.Shell, 22
- getDirInUserDir
  - ss.shell.utils.Filesystem, 13
- getDoExit
  - ss.shell.Shell, 22
- getIsLoggedIn
  - ss.shell.BuiltInProcess, 6
  - ss.shell.Shell, 22
- getLogOutput
  - ss.shell.utils.Filesystem, 13
- getLogs
  - ss.shell.utils.Filesystem, 13
- getLogsOutput
  - ss.shell.BuiltInProcess, 7
  - ss.shell.utils.Filesystem, 14
- getOuterBottom
  - ss.shell.utils.Logs, 17
- getOuterTop
  - ss.shell.utils.Logs, 17
- getOutput
  - ss.shell.Shell, 22
- getOutputTotal
  - ss.shell.utils.Logs, 18
- getPassword
  - ss.shell.utils.Filesystem, 14
- getTwoDigits
  - ss.shell.utils.Logs, 18
- getUserFiles
  - ss.shell.utils.Filesystem, 14
- getUsername
  - ss.shell.BuiltInProcess, 7
  - ss.shell.Shell, 23
- getUserType
  - ss.shell.BuiltInProcess, 7
  - ss.shell.Shell, 23
  - ss.shell.utils.Filesystem, 14
- hasDirectory
  - ss.shell.utils.Filesystem, 15
- isBuiltIn
  - ss.shell.utils.BuiltIns, 9
- isProcessBuilder
  - ss.shell.utils.BuiltIns, 9
- listUsers
  - ss.shell.utils.Filesystem, 15
- login
  - ss.shell.utils.Filesystem, 15
- logToFile
  - ss.shell.utils.Logs, 18, 19
- main
  - ss.shell.server.ShellServer, 25
- outputInfo
  - ss.shell.utils.Logs, 19
- outputPrompt
  - ss.shell.utils.Logs, 19
- outputShort
  - ss.shell.utils.Logs, 20
- print
  - ss.shell.utils.Logs, 20
- printLine
  - ss.shell.utils.Logs, 20
- prompt
  - ss.shell.Shell, 23
- Shell
  - ss.shell.Shell, 21
- ShellServer
  - ss.shell.server.ShellServer, 25
- ss.shell.BuiltInProcess, 5
  - BuiltInProcess, 5, 6
  - getCWD, 6
  - getIsLoggedIn, 6
  - getLogsOutput, 7
  - getUsername, 7
  - getUserType, 7
- ss.shell.client.ClientApplication, 10
- ss.shell.server.ShellServer, 24
  - main, 25

- ShellServer, 25
- stopServer, 25
- ss.shell.Shell, 21
  - getCWD, 22
  - getDoExit, 22
  - getIsLoggedIn, 22
  - getOutput, 22
  - getUsername, 23
  - getUserType, 23
  - prompt, 23
  - Shell, 21
- ss.shell.utils.BuiltIns, 8
  - isBuiltIn, 9
  - isProcessBuilder, 9
- ss.shell.utils.BuiltIns.ShellType, 26
- ss.shell.utils.BuiltIns.UserTypes, 27
- ss.shell.utils.Filesystem, 11
  - changePassword, 12
  - changeUserType, 12
  - deleteUser, 13
  - Filesystem, 11, 12
  - getDirsInUserDir, 13
  - getLogOutput, 13
  - getLogs, 13
  - getLogsOutput, 14
  - getPassword, 14
  - getUserFiles, 14
  - getUserType, 14
  - hasDirectory, 15
  - listUsers, 15
  - login, 15
- ss.shell.utils.Logs, 16
  - addToOutputTotal, 17
  - getOuterBottom, 17
  - getOuterTop, 17
  - getOutputTotal, 18
  - getTwoDigits, 18
  - logToFile, 18, 19
  - outputInfo, 19
  - outputPrompt, 19
  - outputShort, 20
  - print, 20
  - printLine, 20
- ss.shell.utils.Logs.LogLevel, 16
- ss.shell.utils.Logs.Store, 26
- stopServer
  - ss.shell.server.ShellServer, 25