

# PMD report

## Problems found

#	File	Line	Problem
1	D:\File Transfer Socket\src\Client.java	5	<a href="#">All classes, interfaces, enums and annotations must belong to a named package</a>
2	D:\File Transfer Socket\src\Client.java	5	<a href="#">Class comments are required</a>
3	D:\File Transfer Socket\src\Client.java	6	<a href="#">Field comments are required</a>
4	D:\File Transfer Socket\src\Client.java	6	<a href="#">To avoid mistakes add a comment at the beginning of the receive field if you want a default access modifier</a>
5	D:\File Transfer Socket\src\Client.java	6	<a href="#">Use explicit scoping instead of the default package private level</a>
6	D:\File Transfer Socket\src\Client.java	7	<a href="#">Field comments are required</a>
7	D:\File Transfer Socket\src\Client.java	7	<a href="#">To avoid mistakes add a comment at the beginning of the writeData field if you want a default access modifier</a>
8	D:\File Transfer Socket\src\Client.java	7	<a href="#">Use explicit scoping instead of the default package private level</a>
9	D:\File Transfer Socket\src\Client.java	8	<a href="#">Field comments are required</a>
10	D:\File Transfer Socket\src\Client.java	8	<a href="#">To avoid mistakes add a comment at the beginning of the readData field if you want a default access modifier</a>
11	D:\File Transfer Socket\src\Client.java	8	<a href="#">Use explicit scoping instead of the default package private level</a>
12	D:\File Transfer Socket\src\Client.java	10	<a href="#">A method/constructor should not explicitly throw java.lang.Exception</a>
13	D:\File Transfer Socket\src\Client.java	10	<a href="#">Avoid variables with short names like s</a>
14	D:\File Transfer Socket\src\Client.java	10	<a href="#">Parameter 's' is not assigned and could be declared final</a>
15	D:\File Transfer Socket\src\Client.java	10	<a href="#">To avoid mistakes add a comment at the beginning of the Client constructor if you want a default access modifier</a>
16	D:\File Transfer Socket\src\Client.java	15	<a href="#">The method 'listenClient()' has a cognitive complexity of 23, current threshold is 15</a>
17	D:\File Transfer Socket\src\Client.java	15	<a href="#">To avoid mistakes add a comment at the beginning of the listenClient method if you want a default access modifier</a>
18	D:\File Transfer Socket\src\Client.java	15	<a href="#">Use explicit scoping instead of the default package private level</a>
19	D:\File Transfer Socket\src\Client.java	16	<a href="#">To be compliant to J2EE, a webapp should not use any thread.</a>
20	D:\File Transfer Socket\src\Client.java	28	<a href="#">Avoid using Literals in Conditional Statements</a>

21	D:\File Transfer Socket\src\Client.java	29	<a href="#">Avoid instantiating new objects inside loops</a>
22	D:\File Transfer Socket\src\Client.java	29	<a href="#">Local variable 'filePath' could be declared final</a>
23	D:\File Transfer Socket\src\Client.java	30	<a href="#">Avoid instantiating new objects inside loops</a>
24	D:\File Transfer Socket\src\Client.java	30	<a href="#">Local variable 'fileName' could be declared final</a>
25	D:\File Transfer Socket\src\Client.java	32	<a href="#">Local variable 'pathSize' could be declared final</a>
26	D:\File Transfer Socket\src\Client.java	37	<a href="#">Local variable 'nameSize' could be declared final</a>
27	D:\File Transfer Socket\src\Client.java	44	<a href="#">Avoid catching generic exceptions such as NullPointerException, RuntimeException, Exception in try-catch block</a>
28	D:\File Transfer Socket\src\Client.java	45	<a href="#">System.out.println is used</a>
29	D:\File Transfer Socket\src\Client.java	52	<a href="#">Avoid variables with short names like s</a>
30	D:\File Transfer Socket\src\Client.java	52	<a href="#">Parameter 'fileLocation' is not assigned and could be declared final</a>
31	D:\File Transfer Socket\src\Client.java	52	<a href="#">Parameter 's' is not assigned and could be declared final</a>
32	D:\File Transfer Socket\src\Client.java	52	<a href="#">To avoid mistakes add a comment at the beginning of the sendFile method if you want a default access modifier</a>
33	D:\File Transfer Socket\src\Client.java	52	<a href="#">Use explicit scoping instead of the default package private level</a>
34	D:\File Transfer Socket\src\Client.java	54	<a href="#">Local variable 'file' could be declared final</a>
35	D:\File Transfer Socket\src\Client.java	55	<a href="#">Avoid instantiating FileInputStream, FileOutputStream, FileReader, or FileWriter</a>
36	D:\File Transfer Socket\src\Client.java	55	<a href="#">Ensure that resources like this FileInputStream object are closed after use</a>
37	D:\File Transfer Socket\src\Client.java	55	<a href="#">Local variable 'fileRead' could be declared final</a>
38	D:\File Transfer Socket\src\Client.java	61	<a href="#">Local variable 'locationParts' could be declared final</a>
39	D:\File Transfer Socket\src\Client.java	62	<a href="#">Local variable 'fileName' could be declared final</a>
40	D:\File Transfer Socket\src\Client.java	63	<a href="#">Potential violation of Law of Demeter (object not created locally).</a>
41	D:\File Transfer Socket\src\Client.java	69	<a href="#">Local variable 'buffer' could be declared final</a>
42	D:\File Transfer Socket\src\Client.java	70	<a href="#">Found 'DD'-anomaly for variable 'bytes' (lines '70'-'71').</a>
43	D:\File Transfer Socket\src\Client.java	70	<a href="#">The initializer for variable 'bytes' is never used (overwritten on line 71).</a>

44	D:\File Transfer Socket\src\Client.java	71	<a href="#">Avoid assignments in operands</a>
45	D:\File Transfer Socket\src\Client.java	71	<a href="#">Found 'DU'-anomaly for variable 'bytes' (lines '71'-'80').</a>
46	D:\File Transfer Socket\src\Client.java	77	<a href="#">Avoid catching generic exceptions such as NullPointerException, RuntimeException, Exception in try-catch block</a>
47	D:\File Transfer Socket\src\Client.java	78	<a href="#">Avoid printStackTrace(); use a logger call instead.</a>
48	D:\File Transfer Socket\src\Client.java	82	<a href="#">Parameter 'fileName' is not assigned and could be declared final</a>
49	D:\File Transfer Socket\src\Client.java	82	<a href="#">Parameter 'filePath' is not assigned and could be declared final</a>
50	D:\File Transfer Socket\src\Client.java	82	<a href="#">To avoid mistakes add a comment at the beginning of the receiveContents method if you want a default access modifier</a>
51	D:\File Transfer Socket\src\Client.java	82	<a href="#">Use explicit scoping instead of the default package private level</a>
52	D:\File Transfer Socket\src\Client.java	84	<a href="#">Local variable 'folder' could be declared final</a>
53	D:\File Transfer Socket\src\Client.java	88	<a href="#">Avoid instantiating FileInputStream, FileOutputStream, FileReader, or FileWriter</a>
54	D:\File Transfer Socket\src\Client.java	88	<a href="#">Ensure that resources like this FileOutputStream object are closed after use</a>
55	D:\File Transfer Socket\src\Client.java	88	<a href="#">Local variable 'writeFile' could be declared final</a>
56	D:\File Transfer Socket\src\Client.java	92	<a href="#">Found 'DD'-anomaly for variable 'bytes' (lines '92'-'94').</a>
57	D:\File Transfer Socket\src\Client.java	92	<a href="#">The initializer for variable 'bytes' is never used (overwritten on line 94).</a>
58	D:\File Transfer Socket\src\Client.java	93	<a href="#">Local variable 'buffer' could be declared final</a>
59	D:\File Transfer Socket\src\Client.java	94	<a href="#">Avoid assignments in operands</a>
60	D:\File Transfer Socket\src\Client.java	94	<a href="#">Found 'DU'-anomaly for variable 'bytes' (lines '94'-'104').</a>
61	D:\File Transfer Socket\src\Client.java	101	<a href="#">Avoid catching generic exceptions such as NullPointerException, RuntimeException, Exception in try-catch block</a>
62	D:\File Transfer Socket\src\Client.java	102	<a href="#">Avoid printStackTrace(); use a logger call instead.</a>
63	D:\File Transfer Socket\src\Client.java	108	<a href="#">A method/constructor should not explicitly throw java.lang.Exception</a>
64	D:\File Transfer Socket\src\Client.java	108	<a href="#">Parameter 'args' is not assigned and could be declared final</a>
65	D:\File Transfer Socket\src\Client.java	108	<a href="#">Public method and constructor comments are required</a>
66	D:\File Transfer Socket\src\Client.java	109	<a href="#">Avoid variables with short names like sc</a>

67	D:\File Transfer Socket\src\Client.java	109	<a href="#">Ensure that resources like this InputStream object are closed after use</a>
68	D:\File Transfer Socket\src\Client.java	109	<a href="#">Local variable 'sc' could be declared final</a>
69	D:\File Transfer Socket\src\Client.java	110	<a href="#">System.out.print is used</a>
70	D:\File Transfer Socket\src\Client.java	111	<a href="#">Avoid variables with short names like ip</a>
71	D:\File Transfer Socket\src\Client.java	111	<a href="#">Local variable 'ip' could be declared final</a>
72	D:\File Transfer Socket\src\Client.java	112	<a href="#">System.out.println is used</a>
73	D:\File Transfer Socket\src\Client.java	113	<a href="#">Avoid variables with short names like s</a>
74	D:\File Transfer Socket\src\Client.java	113	<a href="#">Ensure that resources like this Socket object are closed after use</a>
75	D:\File Transfer Socket\src\Client.java	113	<a href="#">Local variable 's' could be declared final</a>
76	D:\File Transfer Socket\src\Client.java	114	<a href="#">Avoid variables with short names like c</a>
77	D:\File Transfer Socket\src\Client.java	114	<a href="#">Local variable 'c' could be declared final</a>
78	D:\File Transfer Socket\src\Client.java	117	<a href="#">Local variable 'location' could be declared final</a>
79	D:\File Transfer Socket\src\Client.java	121	<a href="#">Potential violation of Law of Demeter (static property access).</a>
80	D:\File Transfer Socket\src\Client.java	122	<a href="#">Potential violation of Law of Demeter (static property access).</a>
81	D:\File Transfer Socket\src\Server.java	6	<a href="#">All classes, interfaces, enums and annotations must belong to a named package</a>
82	D:\File Transfer Socket\src\Server.java	6	<a href="#">Class comments are required</a>
83	D:\File Transfer Socket\src\Server.java	7	<a href="#">Avoid using implementation types like 'ArrayList'; use the interface instead</a>
84	D:\File Transfer Socket\src\Server.java	7	<a href="#">Field comments are required</a>
85	D:\File Transfer Socket\src\Server.java	7	<a href="#">To avoid mistakes add a comment at the beginning of the clientHandlers field if you want a default access modifier</a>
86	D:\File Transfer Socket\src\Server.java	7	<a href="#">Unnecessary semicolon</a>
87	D:\File Transfer Socket\src\Server.java	7	<a href="#">Use explicit scoping instead of the default package private level</a>
88	D:\File Transfer Socket\src\Server.java	8	<a href="#">Avoid variables with short names like ss</a>
89	D:\File Transfer Socket\src\Server.java	8	<a href="#">Parameter 'ss' is not assigned and could be declared final</a>

90	D:\File Transfer Socket\src\Server.java	8	<a href="#">To avoid mistakes add a comment at the beginning of the Server constructor if you want a default access modifier</a>
91	D:\File Transfer Socket\src\Server.java	11	<a href="#">Avoid variables with short names like s</a>
92	D:\File Transfer Socket\src\Server.java	11	<a href="#">Ensure that resources like this Socket object are closed after use</a>
93	D:\File Transfer Socket\src\Server.java	11	<a href="#">Local variable 's' could be declared final</a>
94	D:\File Transfer Socket\src\Server.java	12	<a href="#">System.out.println is used</a>
95	D:\File Transfer Socket\src\Server.java	13	<a href="#">Avoid instantiating new objects inside loops</a>
96	D:\File Transfer Socket\src\Server.java	13	<a href="#">Local variable 'clientHandler' could be declared final</a>
97	D:\File Transfer Socket\src\Server.java	15	<a href="#">Avoid instantiating new objects inside loops</a>
98	D:\File Transfer Socket\src\Server.java	15	<a href="#">Local variable 'client' could be declared final</a>
99	D:\File Transfer Socket\src\Server.java	15	<a href="#">To be compliant to J2EE, a webapp should not use any thread.</a>
100	D:\File Transfer Socket\src\Server.java	18	<a href="#">Avoid catching generic exceptions such as NullPointerException, RuntimeException, Exception in try-catch block</a>
101	D:\File Transfer Socket\src\Server.java	19	<a href="#">Avoid printStackTrace(); use a logger call instead.</a>
102	D:\File Transfer Socket\src\Server.java	23	<a href="#">A method/constructor should not explicitly throw java.lang.Exception</a>
103	D:\File Transfer Socket\src\Server.java	23	<a href="#">Parameter 'args' is not assigned and could be declared final</a>
104	D:\File Transfer Socket\src\Server.java	23	<a href="#">Public method and constructor comments are required</a>
105	D:\File Transfer Socket\src\Server.java	24	<a href="#">Avoid variables with short names like ss</a>
106	D:\File Transfer Socket\src\Server.java	24	<a href="#">Ensure that resources like this ServerSocket object are closed after use</a>
107	D:\File Transfer Socket\src\Server.java	24	<a href="#">Local variable 'ss' could be declared final</a>
108	D:\File Transfer Socket\src\Server.java	29	<a href="#">Class comments are required</a>
109	D:\File Transfer Socket\src\Server.java	30	<a href="#">Field comments are required</a>
110	D:\File Transfer Socket\src\Server.java	30	<a href="#">To avoid mistakes add a comment at the beginning of the server field if you want a default access modifier</a>
111	D:\File Transfer Socket\src\Server.java	30	<a href="#">Use explicit scoping instead of the default package private level</a>
112	D:\File Transfer Socket\src\Server.java	31	<a href="#">Avoid excessively long variable names like currentClientHandler</a>

113	D:\File Transfer Socket\src\Server.java	31	<a href="#"><u>Field comments are required</u></a>
114	D:\File Transfer Socket\src\Server.java	31	<a href="#"><u>To avoid mistakes add a comment at the beginning of the currentClientHandler field if you want a default access modifier</u></a>
115	D:\File Transfer Socket\src\Server.java	31	<a href="#"><u>Use explicit scoping instead of the default package private level</u></a>
116	D:\File Transfer Socket\src\Server.java	32	<a href="#"><u>Field comments are required</u></a>
117	D:\File Transfer Socket\src\Server.java	32	<a href="#"><u>To avoid mistakes add a comment at the beginning of the receive field if you want a default access modifier</u></a>
118	D:\File Transfer Socket\src\Server.java	32	<a href="#"><u>Use explicit scoping instead of the default package private level</u></a>
119	D:\File Transfer Socket\src\Server.java	33	<a href="#"><u>Avoid unused private fields such as 's'.</u></a>
120	D:\File Transfer Socket\src\Server.java	33	<a href="#"><u>Avoid variables with short names like s</u></a>
121	D:\File Transfer Socket\src\Server.java	33	<a href="#"><u>Field comments are required</u></a>
122	D:\File Transfer Socket\src\Server.java	33	<a href="#"><u>Perhaps 's' could be replaced by a local variable.</u></a>
123	D:\File Transfer Socket\src\Server.java	33	<a href="#"><u>Private field 's' could be made final; it is only initialized in the declaration or constructor.</u></a>
124	D:\File Transfer Socket\src\Server.java	34	<a href="#"><u>Field comments are required</u></a>
125	D:\File Transfer Socket\src\Server.java	34	<a href="#"><u>To avoid mistakes add a comment at the beginning of the readData field if you want a default access modifier</u></a>
126	D:\File Transfer Socket\src\Server.java	34	<a href="#"><u>Use explicit scoping instead of the default package private level</u></a>
127	D:\File Transfer Socket\src\Server.java	35	<a href="#"><u>Field comments are required</u></a>
128	D:\File Transfer Socket\src\Server.java	35	<a href="#"><u>To avoid mistakes add a comment at the beginning of the sendClient field if you want a default access modifier</u></a>
129	D:\File Transfer Socket\src\Server.java	35	<a href="#"><u>Use explicit scoping instead of the default package private level</u></a>
130	D:\File Transfer Socket\src\Server.java	38	<a href="#"><u>A method/constructor should not explicitly throw java.lang.Exception</u></a>
131	D:\File Transfer Socket\src\Server.java	38	<a href="#"><u>Avoid variables with short names like s</u></a>
132	D:\File Transfer Socket\src\Server.java	38	<a href="#"><u>Parameter 's' is not assigned and could be declared final</u></a>
133	D:\File Transfer Socket\src\Server.java	38	<a href="#"><u>Parameter 'server' is not assigned and could be declared final</u></a>
134	D:\File Transfer Socket\src\Server.java	38	<a href="#"><u>To avoid mistakes add a comment at the beginning of the ClientHandler constructor if you want a default access modifier</u></a>
135	D:\File Transfer Socket\src\Server.java	46	<a href="#"><u>Public method and constructor comments are required</u></a>



136	D:\File Transfer Socket\src\Server.java	57	<a href="#">Avoid using Literals in Conditional Statements</a>
137	D:\File Transfer Socket\src\Server.java	59	<a href="#">Local variable 'nameLength' could be declared final</a>
138	D:\File Transfer Socket\src\Server.java	60	<a href="#">Avoid instantiating new objects inside loops</a>
139	D:\File Transfer Socket\src\Server.java	60	<a href="#">Local variable 'fileName' could be declared final</a>
140	D:\File Transfer Socket\src\Server.java	65	<a href="#">Local variable 'file' could be declared final</a>
141	D:\File Transfer Socket\src\Server.java	69	<a href="#">Avoid catching generic exceptions such as NullPointerException, RuntimeException, Exception in try-catch block</a>
142	D:\File Transfer Socket\src\Server.java	70	<a href="#">System.out.println is used</a>
143	D:\File Transfer Socket\src\Server.java	74	<a href="#">Parameter 'fileName' is not assigned and could be declared final</a>
144	D:\File Transfer Socket\src\Server.java	74	<a href="#">Parameter 'filePath' is not assigned and could be declared final</a>
145	D:\File Transfer Socket\src\Server.java	74	<a href="#">To avoid mistakes add a comment at the beginning of the sendOtherClients method if you want a default access modifier</a>
146	D:\File Transfer Socket\src\Server.java	74	<a href="#">Use explicit scoping instead of the default package private level</a>
147	D:\File Transfer Socket\src\Server.java	76	<a href="#">Local variable 'client' could be declared final</a>
148	D:\File Transfer Socket\src\Server.java	77	<a href="#">Avoid using if statements without curly braces</a>
149	D:\File Transfer Socket\src\Server.java	77	<a href="#">This statement should have braces</a>
150	D:\File Transfer Socket\src\Server.java	82	<a href="#">Parameter 'client' is not assigned and could be declared final</a>
151	D:\File Transfer Socket\src\Server.java	82	<a href="#">Parameter 'fileName' is not assigned and could be declared final</a>
152	D:\File Transfer Socket\src\Server.java	82	<a href="#">Parameter 'filePath' is not assigned and could be declared final</a>
153	D:\File Transfer Socket\src\Server.java	82	<a href="#">To avoid mistakes add a comment at the beginning of the sendContents method if you want a default access modifier</a>
154	D:\File Transfer Socket\src\Server.java	82	<a href="#">Use explicit scoping instead of the default package private level</a>
155	D:\File Transfer Socket\src\Server.java	84	<a href="#">Potential violation of Law of Demeter (static property access).</a>
156	D:\File Transfer Socket\src\Server.java	86	<a href="#">Potential violation of Law of Demeter (static property access).</a>
157	D:\File Transfer Socket\src\Server.java	87	<a href="#">Potential violation of Law of Demeter (static property access).</a>
158	D:\File Transfer Socket\src\Server.java	88	<a href="#">Potential violation of Law of Demeter (static property access).</a>

159	D:\File Transfer Socket\src\Server.java	89	<a href="#">Potential violation of Law of Demeter (static property access).</a>
160	D:\File Transfer Socket\src\Server.java	90	<a href="#">Potential violation of Law of Demeter (static property access).</a>
161	D:\File Transfer Socket\src\Server.java	91	<a href="#">Potential violation of Law of Demeter (static property access).</a>
162	D:\File Transfer Socket\src\Server.java	92	<a href="#">Potential violation of Law of Demeter (static property access).</a>
163	D:\File Transfer Socket\src\Server.java	93	<a href="#">Potential violation of Law of Demeter (static property access).</a>
164	D:\File Transfer Socket\src\Server.java	97	<a href="#">Potential violation of Law of Demeter (static property access).</a>
165	D:\File Transfer Socket\src\Server.java	99	<a href="#">Found 'DD'-anomaly for variable 'bytes' (lines '99'-'101').</a>
166	D:\File Transfer Socket\src\Server.java	99	<a href="#">The initializer for variable 'bytes' is never used (overwritten on line 101).</a>
167	D:\File Transfer Socket\src\Server.java	100	<a href="#">Local variable 'buffer' could be declared final</a>
168	D:\File Transfer Socket\src\Server.java	101	<a href="#">Avoid assignments in operands</a>
169	D:\File Transfer Socket\src\Server.java	101	<a href="#">Found 'DU'-anomaly for variable 'bytes' (lines '101'-'110').</a>
170	D:\File Transfer Socket\src\Server.java	102	<a href="#">Potential violation of Law of Demeter (static property access).</a>
171	D:\File Transfer Socket\src\Server.java	103	<a href="#">Potential violation of Law of Demeter (static property access).</a>
172	D:\File Transfer Socket\src\Server.java	107	<a href="#">Avoid catching generic exceptions such as NullPointerException, RuntimeException, Exception in try-catch block</a>
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