**LAMPIRAN C**

**SEGMEN PROGRAM**

**CLASS CLIENT**

1. Public Class Client
2. '--- PREFIXES ---
3. Private Const \_INFO As String = "0x00"
4. Private Const \_MESSAGE As String = "0x01"
5. Private Const \_DISCONNECT As String = "0xFF"
6. Private socket As TcpClient
7. Private isConnected As Boolean = True
8. Private listenThread As Thread
9. Private stream As NetworkStream
10. Private \_user, \_computer, \_IP, \_ID As String
11. Public ReadOnly Property User As String
12. Get
13. Return Me.\_user
14. End Get
15. End Property
16. Public ReadOnly Property Computer As String
17. Get
18. Return Me.\_computer
19. End Get
20. End Property
21. Public ReadOnly Property IP As String
22. Get
23. Return Me.\_IP
24. End Get
25. End Property
26. Public ReadOnly Property ID As String
27. Get
28. Return Me.\_ID
29. End Get
30. End Property
31. Public ReadOnly Property Connected As Boolean
32. Get
33. Return Me.isConnected
34. End Get
35. End Property
36. Public Event OnRead(ByVal id As String, ByVal msg As String)
37. Public Event OnConnected(ByVal id As String, ByVal comName As String, ByVal ipClient As String)
38. Public Event OnDisconnected(ByVal id As String)
39. 'Constructor
40. Public Sub New(ByVal sct As TcpClient, ByRef clientID As String)
41. Me.socket = sct
42. Me.\_ID = Guid.NewGuid().ToString()
43. clientID = Me.\_ID
44. Try
45. stream = socket.GetStream()
46. Catch ex As Exception
47. End Try
48. '--- Start Listening ---
49. listenThread = New Thread(AddressOf listen)
50. listenThread.Start()
51. End Sub
52. 'handler untuk client disconnected
53. Protected Overrides Sub Finalize()
54. Try
55. listenThread.Abort()
56. Finally
57. MyBase.Finalize()
58. End Try
59. End Sub
60. 'sending message to client
61. Public Sub sendMessage(ByVal msg As String)
62. Dim jam As String
63. Dim men As String
64. Dim det As String
65. Dim mil As String
66. jam = Now.Hour.ToString
67. men = Now.Minute.ToString
68. det = Now.Second.ToString
69. mil = Now.Millisecond.ToString
70. msg = msg + "[" + jam + "," + men + "," + det + "," + mil + "]"
71. Dim bytes() As Byte
72. bytes = System.Text.Encoding.ASCII.GetBytes(\_MESSAGE & msg)
73. If stream.CanWrite Then
74. stream.Write(bytes, 0, bytes.Length)
75. stream.Flush()
76. Thread.Sleep(100)
77. End If
78. End Sub
79. 'client connect
80. Public Sub Connect(ByVal IpServer As String, ByVal Port As Integer)
81. socket.Connect(IPAddress.Parse(IpServer), Port)
82. \_user = Environment.UserName
83. \_computer = Dns.GetHostName()
84. \_IP = IpServer
85. stream = socket.GetStream()
86. Try
87. Dim bytes() As Byte
88. bytes = System.Text.Encoding.ASCII.GetBytes(\_INFO & \_IP & ":" & \_computer & ":" & \_user)
89. stream.Write(bytes, 0, bytes.Length)
90. stream.Flush()
91. RaiseEvent OnConnected(\_ID, \_computer, \_IP)
92. Catch ex As Exception
93. End Try
94. End Sub
95. 'client close
96. Public Sub Close()
97. Try
98. Dim bytes() As Byte
99. bytes = System.Text.Encoding.ASCII.GetBytes(\_DISCONNECT)
100. If stream.CanWrite Then
101. stream.Write(bytes, 0, bytes.Length)
102. stream.Flush()
103. End If
104. If isConnected Or listenThread.IsAlive Then listenThread.Abort()
105. Catch ex As Exception
106. Console.WriteLine(ex.Message)
107. Finally
108. isConnected = False
109. End Try
110. End Sub
111. 'membaca pesan dari user
112. Private Sub listen()
113. While isConnected
114. If socket.Available > 0 And isConnected Then
115. Dim i As Int32
116. Dim bytes() As Byte = New Byte(1023 + 4) {}
117. Dim data As String = Nothing
118. Do
119. If stream.CanRead And isConnected Then
120. i = stream.Read(bytes, 0, bytes.Length)
121. data = System.Text.Encoding.ASCII.GetString(bytes, 0, i)
122. If data.StartsWith(\_MESSAGE) Then RaiseEvent OnRead(\_ID, data.Substring(4))
123. If data.StartsWith(\_INFO) Then
124. Dim info() As String = data.Substring(4).Split(":")
125. \_IP = info(0)
126. \_computer = info(1)
127. \_user = info(2)
128. RaiseEvent OnConnected(\_user, \_computer, \_IP)
129. End If
130. If data.StartsWith(\_DISCONNECT) And isConnected Then
131. isConnected = False
132. RaiseEvent OnDisconnected(\_ID)
133. End If
134. End If
135. Loop While i > 0
136. End If
137. End While
138. End Sub
139. End Class