

Trabalho - Equipe LoRa

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INTERFACE

The image shows a screenshot of a Windows application window titled "ChatSockets". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main interface is light gray and contains the following elements:

- IP Input:** A text box labeled "IP" containing the address "192.168.100.40".
- Porta Input:** A text box labeled "Porta" containing the value "9400".
- Connect Button:** A gray button labeled "Connect" located to the right of the "Porta" input.
- Server Start Button:** A gray button labeled "Server Start" located to the right of the "Connect" button.
- Nick Input:** A text box labeled "Nick" containing the text "User".
- Chat Area:** A large rectangular area on the left side, intended for displaying chat messages. It has a vertical scrollbar on its right edge.
- User List:** A vertical column of 12 small, empty square checkboxes located between the chat area and the right sidebar.
- Right Sidebar:** A vertical rectangular area on the right side of the window, likely for displaying a list of users or channels.
- Send Button:** A gray button labeled "Send" located at the bottom right of the window.
- Input Field:** A long, empty text input field at the bottom left, intended for typing messages to be sent.

CONFIGURAÇÃO DO SERVIDOR



The image shows a server configuration window. It has two rows of input fields. The first row has an 'IP' label, a text box containing '192.168.100.40', a 'Porta' label, a text box containing '9400', a 'Connect' button, and a 'Server Start' button. The second row has a 'Nick' label and a text box containing 'User'. A red box highlights the 'Porta' text box, with a red '1' below it. Another red box highlights the 'Server Start' button, with a red '2' below it.

IP	192.168.100.40	Porta	9400	Connect	Server Start
Nick	User				

1. Configurar porta do servidor (IP é automático)
2. Iniciar Servidor

CONFIGURAÇÃO DO CLIENTE

The image shows a client configuration window with a light gray background. It contains two rows of input fields and two buttons. The first row has an 'IP' label, a text box containing '192.168.1.11', a 'Porta' label, a text box containing '9400', a 'Connect' button, and a 'Server Start' button. The second row has a 'Nick' label and a text box containing 'Cliente1'. Red boxes and numbers are used to highlight specific elements: a red box around the IP text box with a '1' above it; a red box around the Nick text box with a '2' below it; a red box around the Porta text box with a '3' above it; and a red box around the Connect button with a '4' above it.

IP	192.168.1.11	Porta	9400	Connect	Server Start
Nick	Cliente1				

1. Usar IPv4 da máquina
2. Escolher nome para o cliente
3. Usar a porta configurada no servidor
4. Conectar ao Servidor

SELEÇÃO DE DESTINATÁRIO

<input type="checkbox"/>	1 Leonardo	<input type="checkbox"/>	1 Leonardo
<input checked="" type="checkbox"/>	2 João	<input checked="" type="checkbox"/>	2 João
<input type="checkbox"/>	3 Daniel	<input checked="" type="checkbox"/>	3 Daniel
<input type="checkbox"/>	4 Yuri	<input checked="" type="checkbox"/>	4 Yuri
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

Checkbox para seleccionar os destinatários da mensagem (Entre 1 e 8)

ENVIAR MENSAGEM

1

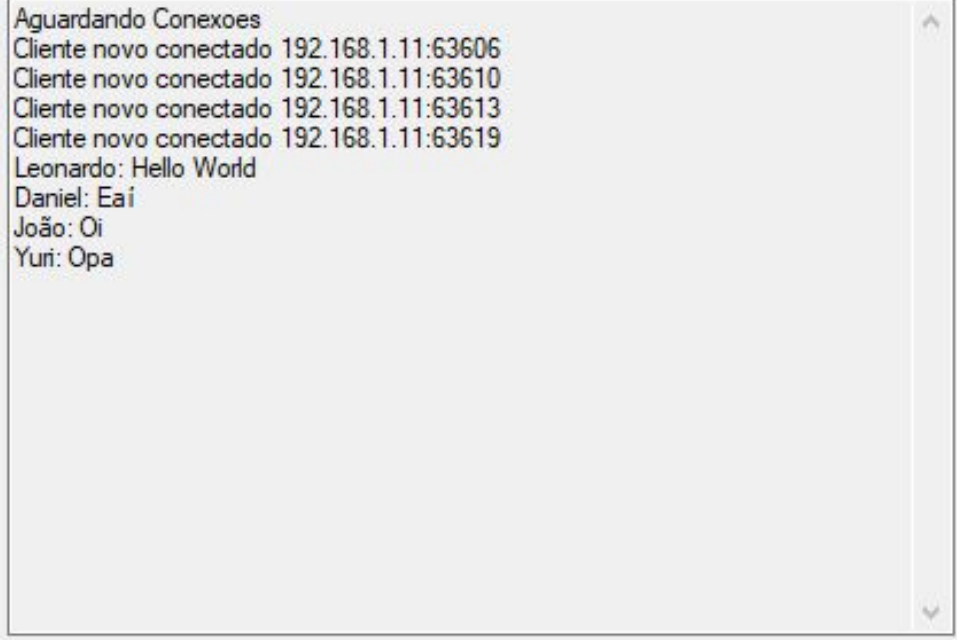
Hello World

2

Send

1. Campo para a string da mensagem
2. Botão para enviar para os destinatários já seleccionados

AVISOS e MENSAGENS



Aguardando Conexoes
Cliente novo conectado 192.168.1.11:63606
Cliente novo conectado 192.168.1.11:63610
Cliente novo conectado 192.168.1.11:63613
Cliente novo conectado 192.168.1.11:63619
Leonardo: Hello World
Daniel: Eai
João: Oi
Yuri: Opa

PROTOCOLO PROPRIETÁRIO



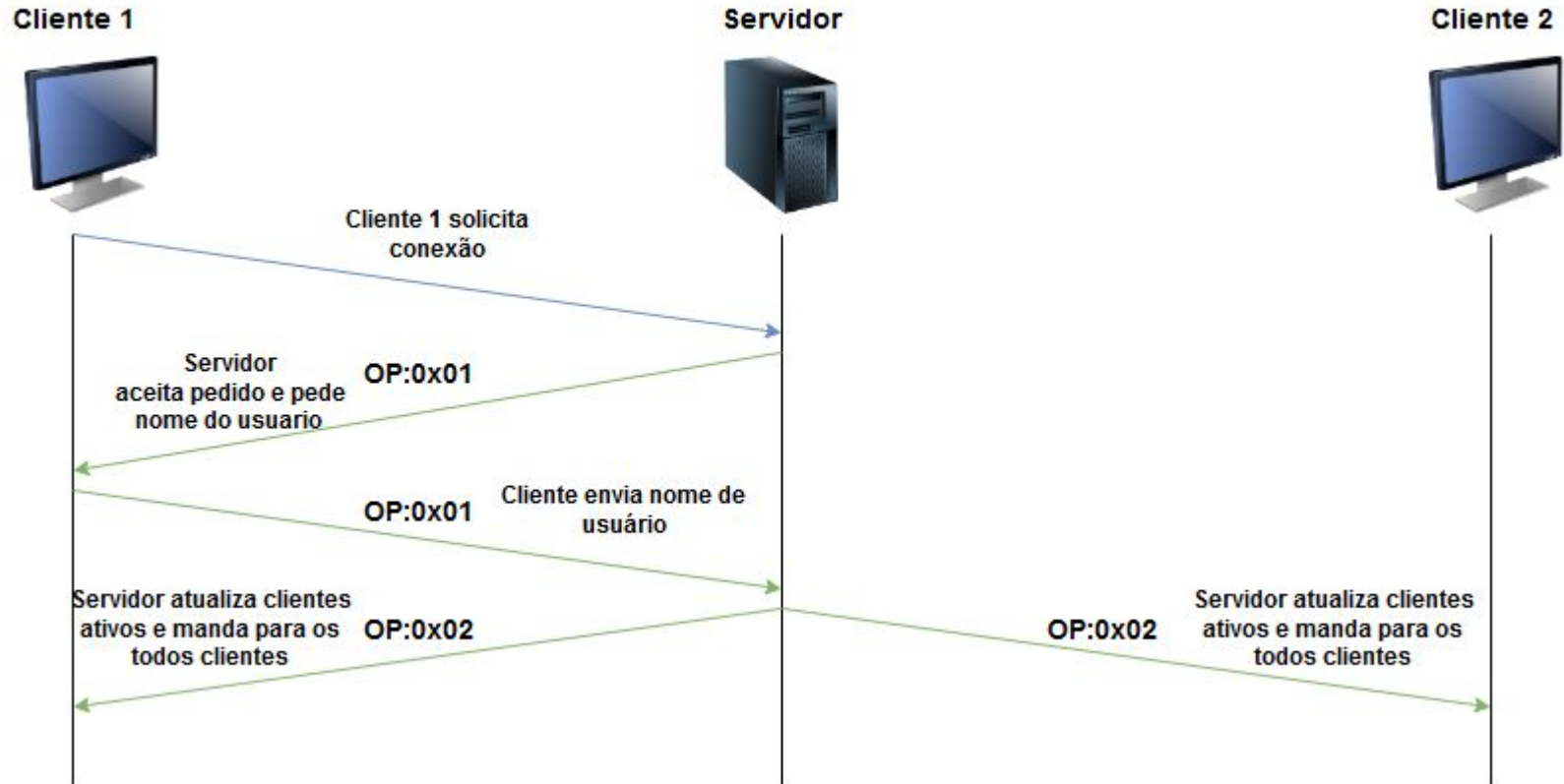
OPCODE (1 byte): 0x01 - pedido/envio de nome de usuário
0x02 - envio de tabela de usuários
0x03 - mensagem de texto

ID ORIGEM (1 byte): número de identificação do remetente da mensagem (Servidor: 0xFF)

ID DESTINO (8 bytes): números de identificação dos destinatários da mensagem, até 8 por mensagem

MENSAGEM (1014 bytes): texto da mensagem (nome de usuário ou tabela de usuários ativos, ou mensagem de texto para usuário)

FUNCIONAMENTO - Conexão de um usuário



FUNCIONAMENTO - Troca de mensagens entre usuários

