**QTCPClient Documentation**

**Overview**
QTCPClient is a simple TCP client application built using the Qt framework. It allows users to connect to a TCP server and send messages or attachments.

**Features**
Connect to a TCP server.
Send text messages to the server.
Send attachments (text files, images) to the server.
Receive messages and attachments from the server.

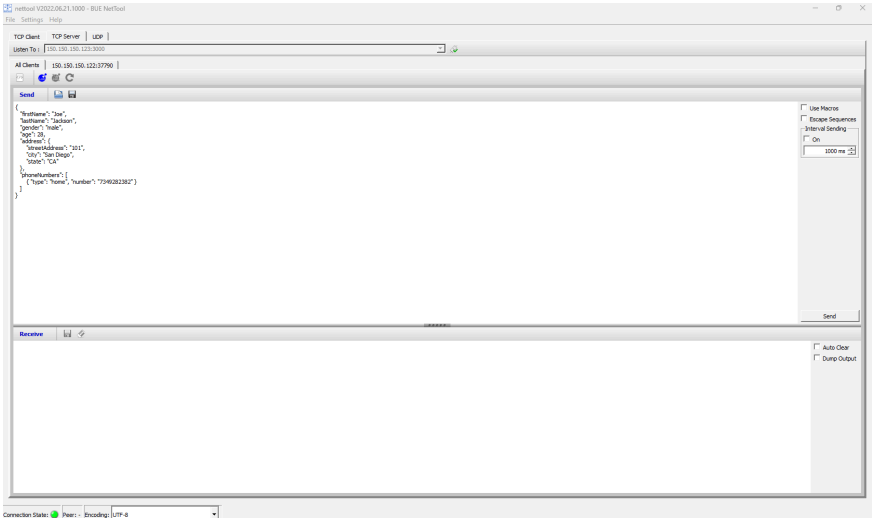
**Implementation Details**
MainWindow Class
Constructor: Establishes the UI and sets up connections to handle socket events.
Destructor: Ensures the socket is closed and memory is deallocated.
readSocket() Function: Reads data from the socket and displays it in the QTextBrowser widget.
discardSocket() Function: Handles socket disconnection events.
displayError() Function: Displays error messages for socket errors.
on_pushButton_sendMessage_clicked() Function: Sends text messages to the server.
on_pushButton_sendAttachment_clicked() Function: Sends attachments to the server.
displayMessage() Function: Displays messages received from the server in the QTextBrowser widget.

**Usage**
Run the application.
Enter the server IP address and port number.
Click the "Connect" button to establish a connection to the server.
Use the "Send Message" button to send text messages to the server.
Use the "Send Attachment" button to send attachments to the server.
Received messages and attachments will be displayed in the QTextBrowser widget.
Dependencies
Qt framework (QtCore, QtGui, QtWidgets, QtNetwork)

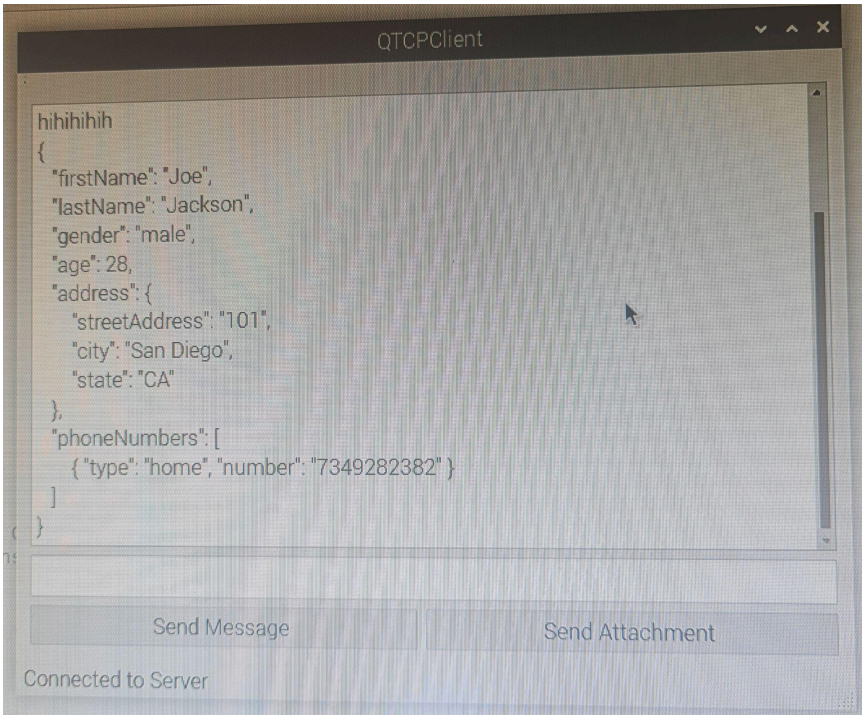
**Screenshots**

**Sending data from the server to the client**

A test jason file is sent from the server to the client.
The “hihihih” seen in the client side was due to testing before.

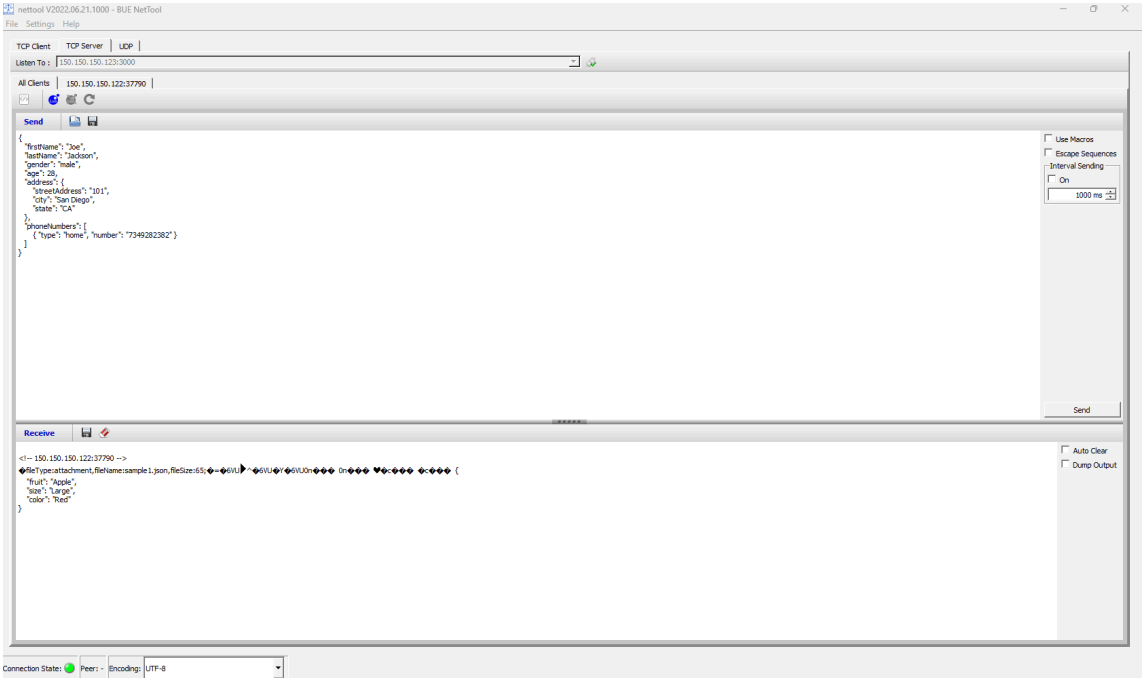


Server side




**Client side**

**Sending data from the client to the server**




This image shows the data which is a jason file sent from the client  received at the receive part.

**Known Issues**

It would be good to check how the data is parsed while sending from the netool.
I have checked the manual but did not got much information but it would be good to check the code for the netool how they have parsed the data while sending them.