

TCP socket based client server application

Your goal is to implement a client/server application (as two separate programs) which communicate over TCP sockets.

The protocol between the client and the server should allow executing the following commands by the client:

1. Ping - Client sends a ping request and server responds with a ping response.
2. Time - Client sends a time request and server responds with a time response containing the current time on the machine running the server program.

The communication implementation should be implemented in such a way that will allow replacing the sockets implementation with a different implementation.

The client/server protocol should support adding new commands easily.

Code can be written in: Python/C/C++/Java.

1. Client & server socket based implementation supporting the ping & time commands:

The server program should accept a port argument which will determine the port the server will listen on. The server should run indefinitely.

The client program should accept 2 arguments:

- A pair of the server's ip address and port (<ip>:<port>)
- The command to execute (ping/time).

Client should print the response from the server and the server should print incoming requests from clients.

2. Write an additional communication implementation over RabbitMQ/Redis.

Good luck!

