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| CODE |

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\*File : p11.cpp

\*Description : Using TCP/IP sockets, write a client – server program to make the client send the file name and to make the server send back the contents of the requested file if present.

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\*Tools : Ubuntu 13.04, gcc 4.7.3 compiler

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//client.cpp

#include <iostream>

#include <arpa/inet.h>

using namespace std;

int main(int argc, char\* argv[])

{

char fname[50], buffer[1025];

int sd;

struct sockaddr\_in address;

address.sin\_family = AF\_INET;

address.sin\_port = htons(5000);

address.sin\_addr.s\_addr = inet\_addr("127.0.0.1");

sd = socket(AF\_INET, SOCK\_STREAM, 0);

connect(sd, (struct sockaddr\*)&address, sizeof(address));

cout<<"Enter a filename: ";

cin>>fname;

cout<<"Sending request"<<endl;

send(sd, fname, sizeof(fname), 0);

cout<<"Recieved response:"<<endl;

int n=recv(sd, buffer, sizeof(buffer), 0);

buffer[n]='\0';

cout<<buffer;

cout<<endl;

return 0;

}

//server.cpp

#include <iostream>

#include <fstream>

#include <string.h>

#include <arpa/inet.h>

using namespace std;

int main()

{

char fname[50];

int sd, source, file;

struct sockaddr\_in address;

address.sin\_family = AF\_INET;

address.sin\_port = htons(5000);

address.sin\_addr.s\_addr = INADDR\_ANY;

cout<<"Waiting for request."<<endl;

sd = socket(AF\_INET, SOCK\_STREAM, 0);

bind(sd, (struct sockaddr\*)&address, sizeof(address));

listen(sd, 10);

while(1)

{

source = accept(sd, (struct sockaddr\*)NULL, NULL);

recv(source, fname, sizeof(fname), 0);

cout<<"Received request for: "<<fname<<endl;

ifstream is (fname);

if (is)

{

is.seekg (0, is.end);

int length = is.tellg();

is.seekg (0, is.beg);

char \* buffer = new char [length];

cout << "Sending " << length << " characters... "<<endl;

is.read (buffer,length);

is.close();

send(source, buffer, length, 0);

delete[] buffer;

}

else

{

cout<<"Sending file not found"<<endl;

send(source, "File not found", sizeof("File not found"), 0);

}

}

return 0;

}

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| --- |
| **OUTPUT** |



