PortScanner

Software Documentation

Author: matiwa

Table of contents

Table of contents.	2
Introduction	3
Describing of the application's operation.	3
What is needed for use?	4
Algorithm used.	4
Interface description	4
Source code description.	5
List of drawings.	5
List of listings	5

Introduction

This application is used to scan selected open ports of a remote host.

Describing of the application's operation

```
■ PortScanner

Enter the host:

^
```

Drawing 1: The beginning of the application's operation [own study]

```
Enter the host:
google.com

Port scanning for google.com
This may take a while ...

Port: 20 is not opened.
Port: 21 is not opened.
Port: 22 is not opened.
Port: 23 is not opened.
Port: 25 is not opened.
Port: 53 is not opened.
Port: 75 is not opened.
Port: 80 is opened.
Port: 10 is not opened.
Port: 100 is not opened.
Port: 110 is not opened.
Port: 111 is not opened.
Port: 112 is not opened.
Port: 113 is not opened.
Port: 114 is not opened.
Port: 150 is not opened.
Port: 151 is not opened.
Port: 151 is not opened.
Port: 152 is not opened.
Port: 153 is not opened.
Port: 154 is not opened.
Port: 155 is not opened.
Port: 157 is not opened.
Port: 158 is not opened.
Port: 159 is not opened.
Port: 150 is not opened.
Port: 150 is not opened.
Port: 151 is not opened.
Port: 152 is not opened.
Port: 3389 is not opened.
```

Drawing 2: The effect of the program's work [own study]

After starting the program, the user enters the name of the remote host (website). The effects of the program work slowly. The application displays whether the given ports are open on the remote host side - or not. It's about ports 20, 21, 22, 23, 25, 53, 70, 80, 109, 110, 119, 143, 161, 162, 443 and 3389. Certainly there are some bugs that the developer did not discover while working on the application.

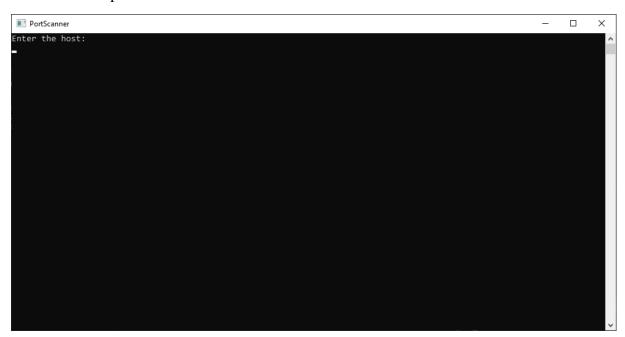
What is needed for use?

The application does not require installation. It only needs the Windows operating system.

Algorithm used

The basic form of the algorithm can be deduced from the previous section. It only needs the Windows operating system. In summary, the application displays information whether the selected ports are open on the remote host side. These are the following ports: 20, 21, 22, 23, 25, 53, 70, 80, 109, 110, 119, 143, 161, 162, 443 and 3389.

Interface description



Drawing 3: Graphical interface [own study]

The interface is typical for a Console Application.

Source code description

The project was made in the C# programming language, in the Visual Studio Community 2017 programming environment. All work was done on the Windows 10 operating system. The application's source code looks like this.

```
using System;
using System.Net.Sockets;
namespace PortScanner
    class Program
         static void Main(string[] args)
             Console.Title = "PortScanner";
             short[] ListaPortow = { 20, 21, 22, 23, 25, 53, 70, 80, 109, 110, 119,
143, 161, 162, 443, 3389 };
             Console.WriteLine("Enter the host:");
             string host = Console.ReadLine();
             Console.WriteLine("\r\nPort scanning for {0}", host);
Console.WriteLine("This may take a while ...\r\n");
             foreach(short port in ListaPortow)
                  try
                  {
                       TcpClient klient = new TcpClient(host, port);
                      Console.WriteLine("Port: {0} is opened.",port);
                  }
                  \operatorname{catch}
                       Console.WriteLine("Port: {0} is not opened.", port);
                  }
             Console.ReadKey();
         }
    }
}
```

Listing 1: Source code [own study]

List of drawings

Drawing 1: The beginning of the application's operation [own study]	3
Drawing 2: The effect of the program's work [own study]	3
Drawing 3: Graphical interface [own study]	4
List of listings	
Listing 1: Source code [own study]	.5