Part-A

MICRO PROJECT REPORT

ON

Prepare A IP Address Using Swing

In partial fulfilment of Diploma In Computer Engineering

(5th Semester)

In the subject of :

ADVANCE JAVA PROGRAMMING (22517)

Submitted by:-

ISHWARI MAHALLE

SHIVAM KURHADKAR

SEJAL TALHAN

SARTHAK ADHAU

KRUTIKA NAGOSE

Submitted to:-

Maharashtra State Board of Technical Education, Mumbai (M.S.B.T.E)

Under the guidance of:-

MR. P. U. MALVE

Lecturer in,

Department of Computer Engineering

Government Polytechnic Arvi, Dist.-Wardha

(2023-2024)

Government Polytechnic, Arvi

Department of Computer Engineering

Certificate

This is to certify, that the student whose name is mentioned below of Fifth Semester of Diploma in Computer Engineering has satisfactorily completed the Micro-Project entitled "**Prepare A IP Address Using Swing**" in the subject of Advance Java Programming (22517) for the academic year 2023-2024 as prescribed in MSBTE curriculum.

Name	Enrollment No.	Seat No.
ISHWARI MAHALLE	2101320053	
SHIVAM KURHADKAR	2101320054	
SEJAL TALHAN	2101320058	
SARTHAK ADHAU	2101320062	
KRUTIKA NAGOSE	2101320076	

Subject Teacher
MR. P. U. MALVE

Head Of Department
H.O.D
Dr.M.A.Ali

Principal
Dr.M.A.Ali

Place:- Arvi

Date:- / / 2023

Declaration

We under signed hereby declare that the Micro-Project report entitled **"Prepare A IP Address Using Swing"** contents is the outcome of our own literature survey. We further declare that the contents of this report are properly citied and well acknowledge. This present report is not submitted to any other examination of this or any other institute for the award of any diploma.

Place: Arvi (Signature)

Date: / / 2023

AIMS / BENEFITS OF THE MICRO PROJECT :

• To Perform Basic IP FINDING using java.

• To Find ip address and can also easily rrack on site. • Can be use to moniter the ip address.

COURSE OUTCOMES ACHIEVED :

1) Interpret The Basic Code Of “ADVANCECE JAVA".

2) Task Remainder Making In " ADVANCECE JAVA" Programming . 3) Use Functions In " ADVANCECE JAVA" Programs For Building a basic frame .

RESOURCES REQUIRED:

Sr.No.	Name of Resource / Material	Specifications	Quantity	Remarks
1	Computer System	i3-i4 RAM minimum 8GB, 9^{TH} GEN	1	
2	Operating System	Windows 10	1	
3	Software	MS Word 2010	1	

Action Plan:

Sr. No	Details of Activity	Planned start date	Planned finish date	Team Members
1	To discuss and get the topic of micro project.			All
2	Start planning on topic of micro project.			All
3	Collect information about our topic.			All
4	Distribute works within group members.			All
5	To start with creating with main copy of micro project.			All
6	Collect different information about micro project			
7	Initiate different views about micro project.			All
8	Editing process must be one before hard copy.			All
9	Check soft copy properly before preparing of hardcopy.			All
10	To start creating copy properly.			All
11	Checking the information from monitor.			All
12	Check the soft copy.			All
13	To present soft copy via Gmail.			All
14	Represented the hardcopy of main micro project.			All

Group Members:

R O L L NO.	NAME OF STUDENTS	ENROLLMENT NO.	SIGNATURE
04	Ishwari Mahalle	2101320053	
05	Shivam Kurhadkar	2101320054	
08	Sejal Talhan	2101320058	
	Sarthak Adhau	2101320062	
16	Krutika Nagose	2101320076	

Part B : Micro-Project Report

“Prepar a IP Address Using Swing”

Rationale:

IP addresses using a Java Swing application is a user-friendly way to help individuals understand and interact with this fundamental networking concept. Here's an introduction to IP addresses using a simple Swing-based graphical application:

In the digital world, devices communicate with each other over networks, much like we use postal addresses to send mail. Instead of houses and streets, computers and devices use something called an "IP address" to find and talk to each other on the internet or a local network.

The "IP Address Explorer" is a simple Java Swing application that provides an interactive way to learn about IP addresses. This application allows users to explore their own device's IP address, helping them understand the concept in a hands-on manner.

Features:

1.	**Display Current IP Address:**	The main feature of the application is to display the user's device's current IP address.
2	**Explanation Panel:**	Text area can provide a brief explanation of what an IP address is in
3	**"Learn More" Button:**	A "Learn More" button can direct users to external resources or tutorials for a deeper understanding of IP addresses.

How to Use:

1.	**Launch the Application:**	Users start the application, and a window appears with a button labeled “Show My IP Address”
2.	**Exploring the IP Address:**	When users click the "Show My IP Address" button, the application displays their device's IP address on the screen. Users can then read and address.
3	**Understanding IP Addresses:**	The explanation panel can provide a simple description of what an IP address is, how it's used, and why it's important in
4	**Learning More:**	To access additional resources, such as are want to explore the topic further, they can click the "Learn More" button videos, or tutorials.

Educational Value:

The "IP Address Explorer" serves as a hands-on tool for users to grasp the concept of IP addresses in a practical manner. By interacting with the application, users can gain a better understanding of how IP addresses work and why they are crucial in networking. This application can be an excellent resource for students and individuals new to networking concepts.

This Swing-based application is a user-friendly way to introduce the fundamental concept of IP addresses, making it accessible and engaging for learners.

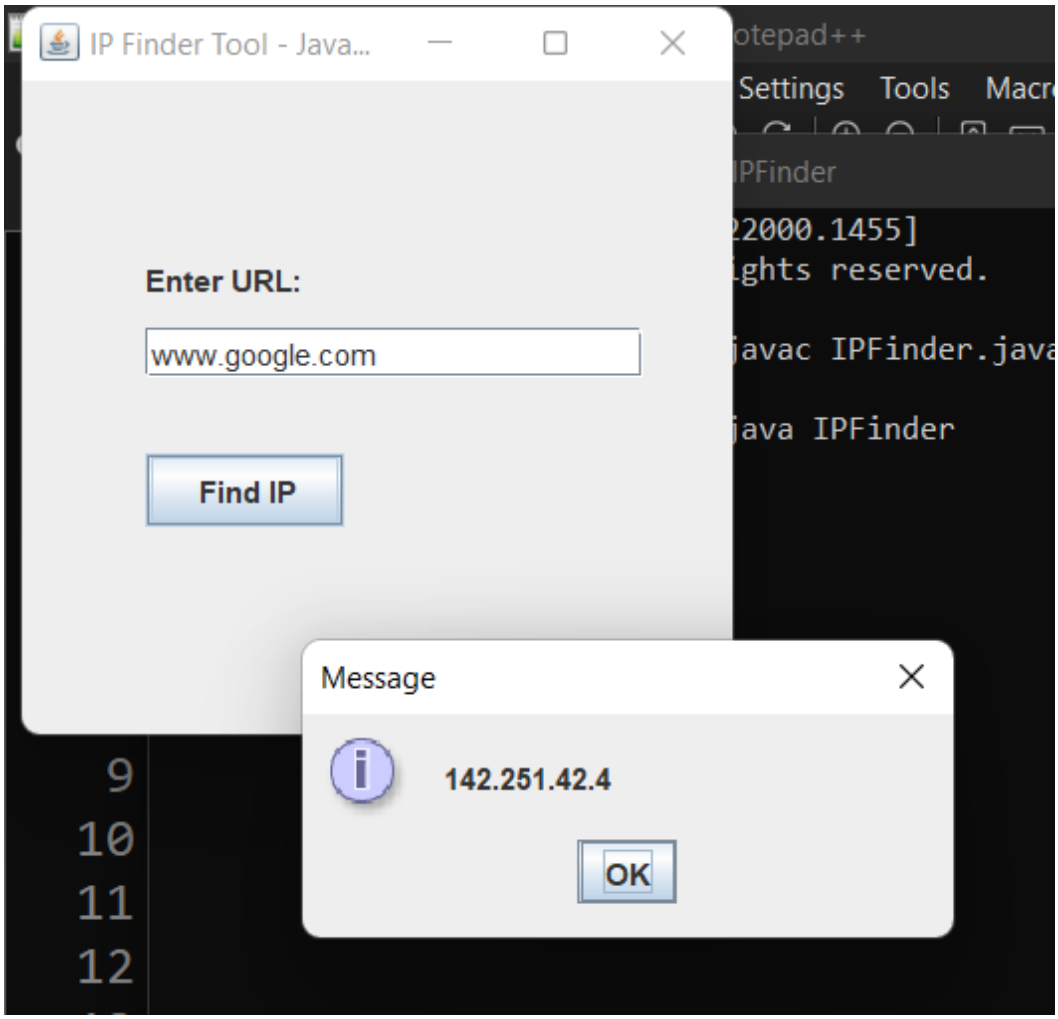
PROGRAM :

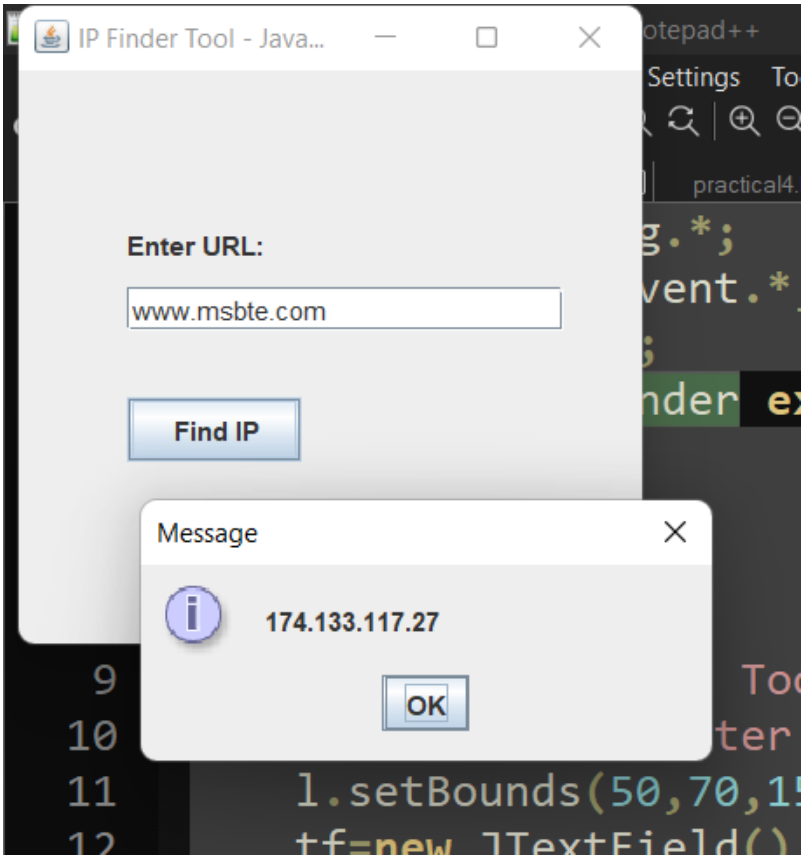
```
import javax.swing.*;
import java.awt.event.*;
import java.awt.event.ActionListener;
import java.net.*;

public class IPFinder extends JFrame implements ActionListener
{
 JLabel l;
 JTextField tf;
 JButton b;
 IPFinder()
{
 super("IP Finder Tool - google");

 l = new JLabel("Enter URL:");
 l.setBounds(50, 70, 150, 20);
tf = new JTextField();
tf.setBounds(50, 100, 200, 20);
b = new JButton("Find IP");


 b.setBounds(50, 150, 80, 30);
 b.addActionListener(this);
  add(l);
add(tf);
add(b);
```

```
        setSize(300, 300);
setVisible(true);
setLayout(null);


       }
       public void actionPerformed(ActionEvent e)
      {
      String url=tf.getText();


try
     {


       InetAddress ia=InetAddress.getByName(url);
       String ip=ia.getHostAddress();
       JOptionPane.showMessageDialog(this,ip);


      }
      catch (UnknownHostException e1)
     {       JOptionPane.showMessageDialog(this,e1.toString());
      }
}
      public static void main(String[] args)
      {
      new IPFinder();
      }
     }
```

OUTPUT:


IP Finder Tool - google
Enter URL:
Find IP


IP Finder Tool - Java...
Enter URL:
www.google.com
Find IP
Message
142.251.42.4
OK
Settings
Tools
IPFinder
javac IPFinder.java
java IPFinder



Conclusion:

the "IP Address Explorer" is a simple yet effective Java Swing application that provides a user-friendly introduction to the fundamental concept of IP addresses. Through this application, users can easily discover their own device's IP address and gain a basic understanding of its significance in networking. By presenting the information in a user-friendly and interactive manner, it offers a practical and engaging way to learn about IP addresses. This tool can be particularly valuable for newcomers to networking concepts, serving as a gateway to a broader understanding of how devices communicate over the internet and local networks.

Reference:

- https://www.w3school.com
- https://www.tutorialspoint.com
- https://www.javapoint.com