CHAPTER V
IMPLEMENTATION AND TESTING

5.1 Implementation

First, we have to activate XAMPP. Log into the terminal, and type su then enter the password, the next step typing / opt / lampp / lampp start and to be able to turn the file into the browser it is done typing chmod 777 -R / opt / lampp / htdocs / (folder name) TARICKY / then go into the browser and type localhost / TARICKY / index.php.

5.1.1 Step 1

This program shows the making of the fields that will be filled in a lot of cities that user as the desired user and make the button click button to next step.

```php
<?php
include_once("connect.php");

<!DOCTYPE html>
<html>
<head>
<title>JARAK ANTAR DUA KOTA</title>
</head>
<body>
<form method = "POST" action = "coran.php">
    MASUKKAN BERAPA KOTA : <input type="text" name="coran">
    <input type="submit" value="click">
</form>
```

*Figure 5.1.1 Source Code Showing All Data*
5.1.2 Step 2

This program is to fill in the name of the desired city by the user and to fill in the distance. Fill in the name of the many cities adapted to input a lot of cities that are loaded before the first user, such as user input many cities then the user also must specify the name of the city as much as 4 times also.

```php
echo "<table border="1" bgcolor="pink">
<tr><td>
for($i=1; $i<=$n; $i++)
{
    echo "<tr>
    for($j=1; $j<=$m; $j++)
    {
        //Kolom 1 berisi keterangan
        IF($i==$j)
        {
            echo "<td>
        echo "</td>
    }
    ELSE IF($i == 1)
    {
        //Kolom 1
        echo "<td>
        $i=$j-1;
        echo "<font color="blue">"."City[$i]. "</font>";</n        echo "</td> //td baris
    }
    ELSE IF($i == 1)
    {
        echo "<td>
        $i=$j-1;
        echo "<font color="blue">"."City[$i]. "</font>";</n        echo "</td>
    }
    ELSE IF($j == $i)
    {
        echo "<td>
        $i=$j-1;
        echo "<font color="blue">"."City[$i]. "</font>";</n        echo "</td> //td baris
    }
    ELSE IF($j == $i)
    {
        echo "<td>";
        $i=$j-1;
        echo "<font color="blue">"."City[$i]. "</font>";</n        echo "</td> //td baris
    }
```

Figure 5.1.2 Source code to input cities and distance
5.1.3 Step 3

After user input the city name is entered and gives the distance, then the last step is to display the name of the city and the distance into a column and row is called the matrix.

```php
for($i=1; $i<=$nbykota; $i++)
{
    echo '<tr>
        for($j=1; $j<=$nbykota; $j++)
        {
            //kolom 1 baris 1 kosongan
            if($i==1 && $j==1)
            {
                echo '<td></td>
                    echo '</td>
                }
            ELSE IF($i == 1)
            {
                //kolom 1
                echo '<td>
                $a=1-1;
                echo '<font color="blue">$.city[$a]."</font>
                echo '</td>
                //td bars
            }
            ELSE IF($i == 1)
            {
                echo '</td>
                $b=$j-1;
                echo '<font color="blue">$.city[$b]."</font>
                echo '</td>
            }
        }
    }
}
```

Figure 5.1.3 Source Code To Matrix Form
5.2 Testing

To know how far the tolerance of these applications with input different cities, the process generated by this application will see the truth. These are the testing result table:

Table 5.2 Testing Table

<table>
<thead>
<tr>
<th>No</th>
<th>Cities Selected</th>
<th>Application Result</th>
<th>Successfully</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 City = Semarang, Banjar Negara, Yogyakarta, Kudus and Distance</td>
<td>Semarang, Banjarnegara, Yogyakarta, Kudus</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>5 City = Pati, Klaten, Semarang, Yogyakarta, Banjar Negara</td>
<td>Pati, Klaten, Semarang, Yogyakarta, Banjarnegara</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>6 City = Semarang, Yogyakarta, Sragen, Pekalongan, Blora, Ponorogo</td>
<td>Semarang, Yogyakarta, Sragen, Pekalongan, Blora, Ponorogo</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>8 City = Yogyakarta, Kudus, Pekalongan, Pati, Bandung, Banjar Negara, Lembang</td>
<td>Yogyakarta, Kudus, Pekalongan, Pati, Bandung, Banjarnegara, Lembang</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>SUCCESSFULLY</td>
<td></td>
<td>85%</td>
</tr>
</tbody>
</table>

From the above test we can see when the user enter more than 7 of the city is not able to keep up due to storage only 7 only, then this program is not yet able to walk perfectly.
5.3 Interface

5.3.1 Main Menu

Open a browser and type in: localhost / (foldername) TARICKY / index.php. Then much input the desired city and then click the button.

![Screenshot of the interface](image)

Figure 5.3.1 Index
5.3.2 Enter the city name and the distances between cities

Top left button will appear as the number of cities that previously entered and then fill in the name of the city. After filling in the name of the city in the city then the label under the table will automatically change according to the name of the city that is loaded. Then give the distance between cities in the textbox that had been prepared.

![Figure 5.3.2 Select the cities from all data](image)

Figure 5.3.2 Select the cities from all data
5.3.3 City and the distance Matrix

So this is the result of input city names and distances between cities that had been filled in by the user, if the name of the city x and y equal the distance does not appear in the table or equal to 0.

**SIMPAN JARAK DAN KOTA SATUAN KM**

<table>
<thead>
<tr>
<th></th>
<th>SEMARANG</th>
<th>BANJARNEGARA</th>
<th>YOGYAKARTA</th>
<th>KUDUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMARANG</td>
<td></td>
<td>20</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>BANJARNEGARA</td>
<td>40</td>
<td></td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>YOGYAKARTA</td>
<td>40</td>
<td>60</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td>KUDUS</td>
<td>20</td>
<td>80</td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 5.3.3 Displaying the Matrix*