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LAMPIRAN

Lampiran 1 *Source Code* Program

```html
<html>

<head>

      <title>Analisis Citilink</title>

<link rel="stylesheet"
href="https://fonts.googleapis.com/icon?family=Material
+Icons">

<link rel="stylesheet" href="css/material.indigo-
pink.min.css">

<script defer src="js/material.min.js"></script>

<script
src="https://cdnjs.cloudflare.com/ajax/libs/Chart.js/2.
3.0/Chart.bundle.js"></script>

<!-- Bootstrap core CSS -->

<link href="css/bootstrap.min.css" rel="stylesheet">

      <style>

      label{

          font-weight:bolder;

      }

      </style>

   </head>

<body>

<?php


include('PHPExcel-1.8/Classes/PHPExcel/IOFactory.php');

// prepare positive and negative words/menyiapkan kata-
kata positif dan negatif//

$positive_words_path = "positive-words.txt";

$negative_words_path = "negative-words.txt";
```
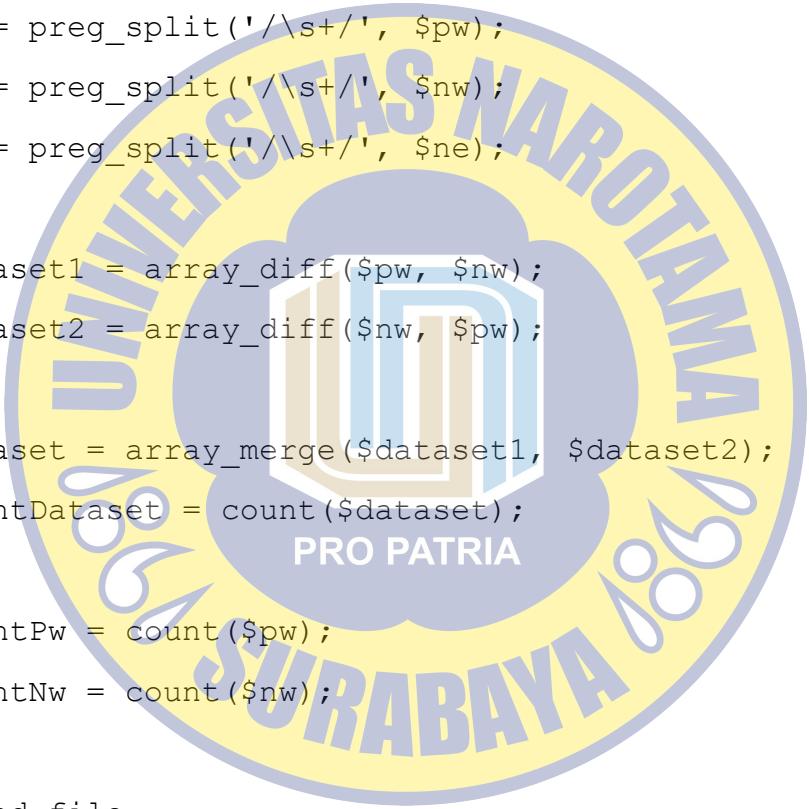
```php
$negation_words_path = "negation.txt";


$pw = file_get_contents($positive_words_path);

$nw = file_get_contents($negative_words_path);

$ne = file_get_contents($negation_words_path);



$pw = preg_split('/\s+/', $pw);

$nw = preg_split('/\s+/', $nw);

$ne = preg_split('/\s+/', $ne);



$dataset1 = array_diff($pw, $nw);

$dataset2 = array_diff($nw, $pw);



$dataset = array_merge($dataset1, $dataset2);

$countDataset = count($dataset);


$countPw = count($pw);

$countNw = count($nw);


//read file

$data = null;


if(isset($_POST['query']) && $_POST['query']){
    $data = array(1, [['A'=>1,'B'=>$_POST['query'],
'C'=>$_POST['queryClass'] ]]);

    }elseif (isset($_FILES['fileUpload'])) {

        $errors="";

        $file_name = $_FILES['fileUpload']['name'];
```

```php
$file_size =$_FILES['fileUpload']['size'];

$file_tmp =$_FILES['fileUpload']['tmp_name'];

$file_type=$_FILES['fileUpload']['type'];


$file_ext=strtolower(end(explode('.',$_FILES['fileUploa
d']['name'])));


$file_name = $file_tmp;

$inputFileType
=PHPExcel_IOFactory::identify($file_name);

$objReader
=PHPExcel_IOFactory::createReader($inputFileType);

$objPHPExcel = $objReader->load($file_name);

$data = array(1,$objPHPExcel->getActiveSheet()-
>toArray(null,true,true,true));

    }

    else

    {

        $i = 0;

    }


$new_data =  array();

$i = 0;

$j = 0;

if($data != NULL){

    if($data[0]==1){

        // looping

        foreach($data[1] AS $row){

            $string = $row['B'];
```

```php
$regex = "@(https?://([-\w\.]+[-
\w])+(:\d+)?(/([\w/_\.#-]*(\?\S+)?[^\.\s])?)?)@";

$data =  preg_replace($regex, ' ', $string);

$data2 =  preg_replace($regex, ' ', $data);

                $text = $data2 . '';

                $new_data[$j]['text'] = $text.'';

                $new_data[$j]['class'] = $row['C'];

                $i++;

                $j++;

        }

    }

}


// dapatkan persyaratan dan hapus stopwords//

$stopwords = file_get_contents("./stopwords_en.txt");

$stopwords = preg_split("/[\s]+/", $stopwords);

    $data_unclassified = [];

    $data_classified = [];

    $confussion_matrix = [
        'positive' => [
                'positive' => 0,
                'negative' => 0
        ],
        'negative' => [
                'positive' => 0,
                'negative' => 0
        ]
    ];
```

```php
if($new_data != NULL){

        $limit = abs(1/($countDataset+$countNw) -
1/($countDataset+$countPw));

        for($x = 0; $x <count($new_data); $x++ ){

            if(!in_array($new_data[$x]['class'],
['positive','negative'])){

                array_push($data_unclassified,
$new_data[$x]);

                continue;

            }

$classified = [];

$term = preg_split("/[\d\W\s]+/",
strtolower($new_data[$x]['text']));

        $term = array_diff($term, $stopwords);

        $term = array_values($term);

        $term = array_count_values($term);


        // Priors probabilities

        $totalP = 2006/6789;

        $totalN = 4783/6789;


$classified['text'] = $new_data[$x]['text'];


$is_negation = 0;

foreach($term as $key => $val){


// check negation handling

if(in_array($key, $ne)){
```

```php
$is_negation = 1;

continue;

}


$classified['term'][$key] = [];

$classified['term'][$key]['tf'] = $val;


// penghitungan Probabilitas Positif//

if((in_array($key, $pw) && !$is_negation) ||
(in_array($key, $nw) && $is_negation)){


$classified['term'][$key]['positive'] =
pow(((2+$is_negation)/($countDataset+$countPw)), $val);

} else {


$classified['term'][$key]['positive'] =
1/($countDataset+$countPw);

}

$totalP *= $classified['term'][$key]['positive'];


// Penghitungan Probabilitas Negatif

if((in_array($key, $nw) && !$is_negation) ||
(!in_array($key, $nw) && $is_negation)){


$classified['term'][$key]['negative'] =
pow(((2+$is_negation)/($countDataset+$countNw)), $val);

} else {
```

```php
$classified['term'][$key]['negative'] =
1/($countDataset+$countNw);

}

$totalN *= $classified['term'][$key]['negative'];


if($is_negation) $is_negation = 0;

}


$classified['positive'] = $totalP;

$classified['negative'] = $totalN;

$classified['actual'] = $new_data[$x]['class'];

$classified['difference'] = abs($totalP - $totalN);


if($totalP > $totalN){

$classified['predicted'] = 'positive';

} else {

$classified['predicted'] = 'negative';

}


$confussion_matrix[$new_data[$x]['class']][$classified[
'predicted']]++;


array_push($data_classified, $classified);

}

echo "Unclassified : ". count($data_unclassified);

echo "</br >";

echo "Classified : ". count($data_classified);

echo "</br >";
```

```php
$i = 1;
?>
<h3>Hasil klasifikasi tweet</h3>

<table border="1">
            <thead>
                <tr>
                    <th>No</th>
                    <th>Tweet</th>
                    <th>Positive</th>
                    <th>Negative</th>
                    <th>Difference</th>
                    <th>Predicted</th>
                    <th>Actual</th>
                    <th>TRUE</th>
                </tr>
</thead>
<tbody>
<?php foreach ($data_classified as $row) {
if(isset($row['term'])){
?>
    <tr>
        <td><?= $i++ ?></td>
        <td>
        <table border="1">
    <tr>
<td><?= $row['text'] ?></td>
</tr>
```

```html
<tr>

    <td>

        <table border="1">

    <tr>

<td> </td>

    <?php foreach($row['term'] as $term => $term_v){
?>

<td><?= $term ?></td>

    <?php } ?>

        </tr>

            <tr>

<td>Term Frequency</td>

<?php foreach($row['term'] as $term_v){ ?>

<td><?= $term_v['tf'] ?></td>

<?php } ?>

</tr>

<tr>

<td>Positive</td>

<?php foreach($row['term'] as $term_v){ ?>

<td><?= $term_v['positive'] ?></td>

<?php } ?>

</tr>
```

```php
    <tr>

    <td>Negative</td>

    <?php foreach($row['term'] as $term_v){ ?>

    <td><?= $term_v['negative'] ?></td>

    <?php } ?>
            </tr>
            </table>
            </td>
            </tr>
            </table>
            </td>
<td><?= $row['positive'] ?></td>
<td><?= $row['negative'] ?></td>
<td><?= $row['difference'] ?></td>
<td><?= $row['predicted'] ?></td>
<td><?= $row['actual'] ?></td>
<td><?= $row['actual'] == $row['predicted'] ? 'YES' :
'NO' ?></td>
</tr>
<?php
}} ?>
</tbody>
</table>

<h3 align="center">Confussion Matrix</h3>
<table border="1" align="center">
```

```html
<tr style="font-weight: bold;">

        <td align="center">Actual / Predicted</td>

                <td align="center">Positive</td>

                <td align="center">Negative</td>

                <td align="center">Total</td>

        </tr>

        <tr>

<td style="font-weight: bold;">Positive</td>

<td><?= $positive =
$confussion_matrix['positive']['positive'] ?></td>

<td><?= $confussion_matrix['positive']['negative']
?></td>

<td style="font-weight: bold;"><?= $actual_positive =
$confussion_matrix['positive']['positive'] +
$confussion_matrix['positive']['negative'] ?></td>

</tr>

<tr>

<td style="font-weight: bold;">Negative</td>

<td><?= $confussion_matrix['negative']['positive']
?></td>

<td><?= $negative =
$confussion_matrix['negative']['negative'] ?></td>

<td style="font-weight: bold;"><?= $actual_negative =
$confussion_matrix['negative']['positive'] +
$confussion_matrix['negative']['negative'] ?></td>

</tr>

<tr>

<td style="font-weight: bold;">Total</td>

<td style="font-weight: bold;"><?= $pos =
$confussion_matrix['positive']['positive'] +
$confussion_matrix['negative']['positive'] ?></td>
```

```php
<td style="font-weight: bold;"><?= $neg =
$confussion_matrix['positive']['negative'] +
$confussion_matrix['negative']['negative'] ?></td>

<td style="font-weight: bold;"><?= $total = $pos + $neg
?></td>

</tr>

</table>


<h3 align="center">Hasil Evaluasi</h3>

<table border="1" align="center">
            <thead align="center">
                <tr>

<th align="center">Evaluasi</th>

<th align="center">Nilai</th>

</tr>

</thead>

<tbody>

<tr>

<td style="font-weight: bold;">Akurasi</td>

<td><?= ($positive+$negative)/$total ?></td>

</tr>

<tr>

<td style="font-weight: bold;">Recall Positive</td>

<td><?=
$confussion_matrix['positive']['positive']/$actual_posi
tive ?></td>

</tr>

<tr>

<td style="font-weight: bold;">Precision Positive</td>
```

```html
<td><?= $confussion_matrix['positive']['positive']/$pos ?></td>

</tr>

<tr>

<td style="font-weight: bold;">Recall Negative</td>

<td><?= $confussion_matrix['negative']['negative']/$actual_negative ?></td>

</tr>

<tr>

<td style="font-weight: bold;">Precision Negative</td>

<td><?= $confussion_matrix['negative']['negative']/$neg ?></td>

</tr>

</tbody>

</table>


<div class="container">

<canvas id="myChart" style="display: block; width: 700px; height: 500px;"></canvas>

</div>

<script>

var ctx = document.getElementById("myChart");

var myChart = new Chart(ctx, {

type: 'bar',

data: {

labels: ["Positive", "Negative"],

datasets: [{

label: '# of Votes',
```

```
data: [<?=
$confussion_matrix['positive']['positive']/$pos ?>, <?=
$confussion_matrix['negative']['negative']/$neg ?>],

backgroundColor: [

'rgba(54, 162, 235, 0.2)',

 'rgba(255, 99, 132, 0.2)'

],

borderColor: [

'rgba(255,99,132,1)',

'rgba(54, 162, 235, 1)'

],

borderWidth: 1

}]

},

options: {

scales: {

yAxes: [{

ticks: {

beginAtZero: true

}

}]

}

}

});

</script>


<?php

}

?>
```

```
 <?php if (!empty($_POST["name"])) echo
$_POST["compression"]; ?><br>

    <div class="container">

<nav class="navbar navbar-dark bg-faded"
style="background-image:url(img/header.png);background-
size: auto 100%;">


<a class="navbar-brand" href="#">Analisis Citilink</a>

</nav>

<div class="container">

<br/>

<br/>

<form  action="" method="post" enctype="multipart/form-
data">

<div class="row">

<div class="col-md-3">

<label>Upload File Dokumen</label>

</div>

<div class="col-md-3">

<input type="file" name="fileUpload">

</div>

</div>

<div class="row">

<div class="col-md-3">

<input type="text" name="query" />

<select name="queryClass">

<option>positive</option>

<option>negative</option>

</select>
```

```html
</div>

</div>

<button type="submit" class="mdl-button mdl-js-button
mdl-button--raised mdl-button--accent">

Upload

</button>

</form>

</div>

</body>

</html>
```