

BAB IV

IMPLEMENTASI DAN PEMBAHASAN SISTEM

A. Implementasi Sistem

Aplikasi sistem pakar untuk diagnosa penyakit kambing dibangun dengan menggunakan bahasa pemrograman berbasis *web* yaitu *PHP* dan *database MySQL*. Untuk mengetahui apakah fungsionalitas system telah berjalan sesuai algoritma dan mampu menghasilkan diagnosis penyakit yang sesuai dengan hasil diagnosis pakar dilakukan dengan skenario yang sederhana. Pertama, pengunjung memilih gejala penyakit .

B. Penjelasan Program

Didalam penjelasan program ini dijelaskan tentang alur pembuatan dan kegunaan program yang dibuat beserta tampilan desain. Berikut ini tampilan-tampilan halaman yang ada dalam program yang dibuat:

1. Halaman Utama

Menu utama sistem pakar digunakan untuk tampilan utama dari sistempakar dan yang pertama kali muncul di *web browser* saat dijalankan oleh *user* Menu utama sistem pakar dapat dilihat pada gambar 4.1 dibawah ini :



Gambar 4.1 Halaman Utama

Source code

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Sistem Pakar</title>
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<meta name="description" content="">
<meta name="author" content="">
<!-- Le styles -->
<link href="css/bootstrap.css" rel="stylesheet">
<link href="css/bootstrap-responsive.css"
rel="stylesheet">
<style type="text/css">
body {
padding-top: 60px;
padding-bottom: 15px;
}
<li class="divider"></li>
<li class="nav-header">Nav header</li>
<li><a href="#">Separated link</a></li>
<li><a href="#">One more separated link</a></li>
</ul>
</li>
.hero-unit{
background-image:url(img/header.png);
background-size: 100% 100%;
min-height: 175px;
}
</style>

```

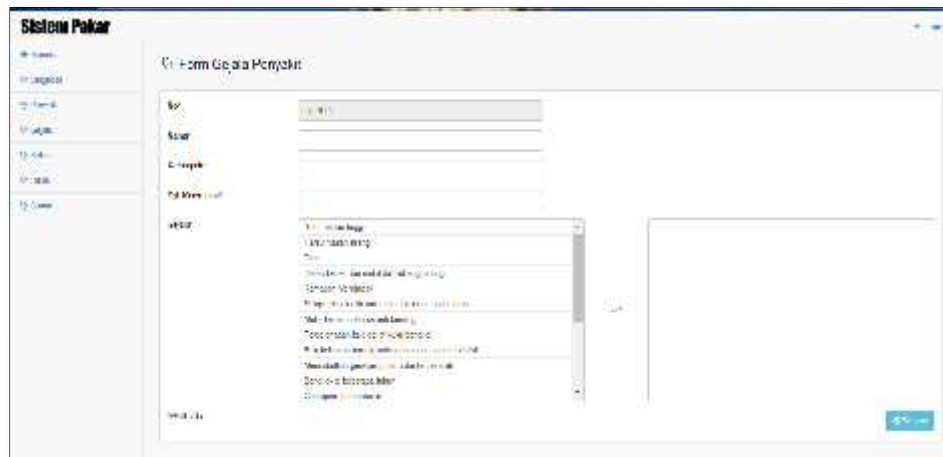
```

</head>
<body>
<div class="navbar navbar-inverse navbar-fixed-
top">
<div class="navbar-inner">
<div class="container">
<a class="brand" href="index.php">Sistem Pakar</a>
<div class="nav-collapse collapse">
<ul class="nav">
<li class="active"><a href="#">Home</a></li>
<li><a href="konsultasi.php">Konsultasi</a></li>
<li><a href="profil.php">Profil</a></li>
<li><a href="kontak.php">Kontak</a></li>
<!--
<li class="dropdown">
<a href="#" class="dropdown-toggle" data-
toggle="dropdown">Dropdown <b
class="caret"></b></a>
<ul class="dropdown-menu">
<li><a href="#">Action</a></li>
<li><a href="#">Another action</a></li>
<li><a href="#">Something else here</a></li>
<li class="divider"></li>
<li class="nav-header">Nav header</li>
<li><a href="#">Separated link</a></li>
<li><a href="#">One more separated link</a></li>
</ul>
</li>
-->
</ul>
<a href="login/login.php">
<button class="navbar-form pull-right btn btn-
primary">Log in</button>
</a>
</div><!--/.nav-collapse -->
</div>
</div>
</div>

```

2. Halaman Diagnosa

Pada menu ini digunakan oleh pengunjung untuk melakukan konsultasi yaitu dengan memilih gejala penyakit kambing yang tersedia dalam tampilan.



Gambar 4.2 Halaman Diagnosa

Source code

```

<?php
include "login/config.php";
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Sistem Pakar</title>
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<meta name="description" content="">
<meta name="author" content="">
<!-- Le styles -->
<link href="css/bootstrap.css" rel="stylesheet">
<link href="css/bootstrap-responsive.css"
rel="stylesheet">
<style type="text/css">
body {
padding-top: 60px;
padding-bottom: 15px;
}
.hero-unit{
background-image:url(img/header.png);
background-size: 100% 100%;
min-height: 175px;
}
</ul>
<a href="login/login.php">

```

```

<button class="navbar-form pull-right btn btn-
primary">Log in</button>
</a>
</div><!--/.nav-collapse -->
</div>
</div>
</div>
<div class="container">
<!-- Main hero unit for a primary marketing
message or call to action -->
<div class="hero-unit">
</div>
<!-- Example row of columns -->
<div class="row">
<div class="span12">
<h2>Konsultasi</h2>
<hr>
</br>
<table width="425" cellpadding="0"
cellspacing="0">
<tr><td><center><table width="940" cellpadding="0"
cellspacing="0">
<tr>
<td height="60" align="center"
bgcolor="#fff"><span class="style1">
<?php
$answer =(isset($_REQUEST['answer'])&&
$_REQUEST['answer']
!=NULL)?$_REQUEST['answer']:'';
$tblData = "data t2";
if(!$answer) $answer = 1;

$stampil="select kd_pertanyaan, pertanyaan, ifyes,
ifno, t1.kd_solusi, keterangan
from solusi t1, {$tblData}
where t1.kd_solusi=t2.kd_solusi and
kd_pertanyaan='{ $answer}'";
$hasil=mysql_query($stampil);
if(mysql_num_rows($hasil))
{
$row          = mysql_fetch_array($hasil);
$pertanyaan = nl2br($row['pertanyaan']);
$keterangan = nl2br($row['keterangan']);
echo ($pertanyaan);
?>
</span></td>
</tr>

```

3. Halaman Penyakit

Pada menu ini berisi informasi data penyakit pada kambing. Tampilan halamannya seperti gambar berikut ini



Gambar 4.3 Halaman Penyakit

Source code

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Sistem Pakar</title>
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<meta name="description" content="">
<meta name="author" content="">
<!-- Le styles -->
<link href="css/bootstrap.css" rel="stylesheet">
<link href="css/bootstrap-responsive.css"
rel="stylesheet">
<style type="text/css">
body {
padding-top: 60px;
padding-bottom: 15px;
}
.hero-unit{
background-image:url(img/header.png);
background-size: 100% 100%;
min-height: 175px;
}

```

```

</style>
</head>
<body>
<div class="navbar navbar-inverse navbar-fixed-
top">
<div class="navbar-inner">
<div class="container">
<a class="brand" href="index.php">Sistem Pakar</a>
<div class="nav-collapse collapse">
<ul class="nav">
<li><a href="index.php">Home</a></li>
<li><a href="konsultasi.php">Konsultasi</a></li>
<li class="active"><a href="#">Profil</a></li>
<li><a href="kontak.php">Kontak</a></li>
<!--
<li class="dropdown">
<a href="#" class="dropdown-toggle" data-
toggle="dropdown">Dropdown <b
class="caret"></b></a>
<ul class="dropdown-menu">
<li><a href="#">Action</a></li>
<li><a href="#">Another action</a></li>
<li><a href="#">Something else here</a></li>
<li class="divider"></li>
<li class="nav-header">Nav header</li>
<li><a href="#">Separated link</a></li>
<li><a href="#">One more separated link</a></li>
</ul>
</li>
-->
</ul>
<a href="login/login.php">
<button class="navbar-form pull-right btn btn-
primary">Log in</button>
</a>
</div><!--/.nav-collapse -->
</div>
</div>
</div>

```

4. Menu Gejala

Padahalaman ini menampilkan gejala penyakit yang diderita oleh kambing.



Gambar 4.4 Menu Gejala

Source code

```
<?php
include "login/config.php";
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Sistem Pakar</title>
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<meta name="description" content="">
<meta name="author" content="">
<!-- Le styles -->
<link href="css/bootstrap.css" rel="stylesheet">
<link href="css/bootstrap-responsive.css"
rel="stylesheet">
<style type="text/css">
body {
padding-top: 60px;
padding-bottom: 15px;
}
.hero-unit{
background-image:url(img/header.png);
background-size: 100% 100%;
min-height: 175px;
}
</style>
```



```

</head>
<body>
<div class="navbar navbar-inverse navbar-fixed-
top">
<div class="navbar-inner">
<div class="container">
<a class="brand" href="index.php">Sistem Pakar</a>
<div class="nav-collapse collapse">
<ul class="nav">
<li><a href="index.php">Home</a></li>
<li><a href="konsultasi.php">Konsultasi</a></li>
<li><a href="profil.php">Profil</a></li>
<li class="active"><a href="#">Kontak</a></li>
<!--
<li class="dropdown">
<a href="#" class="dropdown-toggle" data-
toggle="dropdown">Dropdown <b
class="caret"></b></a>
<ul class="dropdown-menu">
<li><a href="#">Action</a></li>
<li><a href="#">Another action</a></li>
<li><a href="#">Something else here</a></li>
<li class="divider"></li>
<li class="nav-header">Nav header</li>
<li><a href="#">Separated link</a></li>
<li><a href="#">One more separated link</a></li>
</ul>
</li>
-->
</ul>
<a href="login/login.php">
<button class="navbar-form pull-right btn btn-
primary">Log in</button>
</a>
</div><!--/.nav-collapse -->
</div>
</div>
</div>
<div class="container">
<!-- Main hero unit for a primary marketing
message or call to action -->
<div class="hero-unit">
</div>
<!-- Example row of columns -->
<div class="row">
<div class="span12">
<h2>Kontak</h2><hr>
<div class="row-fluid">

```

```

<!-- Start: CONTACT US FORM -->
<div class="span5">
<div class="page-header">
<h2>Isi Pesan</h2>
</div>
<form class="form-contact-us"
action="insert_kontak.php" method="post">
<?php
$message = $_GET['msg'];
if ($message == 'success') {
?>
<div class="alert alert-success">
<button type="button" class="close" data-
dismiss="alert">&times;</button>
<strong>Pesan berhasil dikirim.
</div>

```

5. Menu Solusi

Pada halaman ini berisi tentang informasi solusi untuk penyakit yang menyerang kambing.



Gambar 4.5 Menu Solusi

Source code

```

<?php if ( ! defined('BASEPATH')) exit('No direct
script access allowed');
/*
| -----
| -----

```

```

| Profiler Sections
| -----
|
| This file lets you determine whether or not
various sections of Profiler
| data are displayed when the Profiler is enabled.
| Please see the user guide for info:
|
|
http://codeigniter.com/user_guide/general/profiling.html
|
*/
/* End of file profiler.php */
/* Location: ./application/config/profiler.php */

```

6. Menu *Login Admin*

Menu ini dibuat khusus untuk administrator tidak untuk umum, dengan menu ini *administrator* dapat memasukkan data yang dibutuhkan dalam aplikasi tersebut.



Gambar 4.6 Menu *Login Admin*

Source code

```

<?php session_start();
ini_set('display_errors',FALSE);
//untuk koneksi
include "./include/conn.php";
$koneksi=open_connection();

```

```

//untuk koneksi
include "../encryption/function.php";
//untuk tanggal log
$waktu=date("Y-m-d H:i:s");
if(isset($_POST['username'])){
$username=htmlentities(trim($_POST['username']));
;
$password=htmlentities(md5($_POST['password']));
$login=mysql_query("select * from tabel_admin
where username='$username' and
password='$password'");
$cek_login=mysql_num_rows($login);
//untuk user biasa
if (empty($cek_login))
{
?><script
language="javascript">document.location.href="inde
x.php?<?php echo
paramEncrypt('status=error')?>"</script><?php
}else{
//daftarkan ID jika user dan password BENAR
while ($row=mysql_fetch_array($login))
{
?><script
language="javascript">document.location.href="home
.php"</script><?php
}
}else{
$id_admin=$row['id_admin'];
$nama=$row['nama'];
$tanggal=$row['tanggal'];
$_SESSION['id_admin']=$id_admin;
$_SESSION['nama']=$nama;
$_SESSION['tanggal']=$tanggal;
mysql_query("update tabel_admin set
tanggal='$waktu' where id_admin='$id_admin'");
}
?><script
language="javascript">document.location.href="home
.php"</script><?php
}
}else{
unset($_POST['username']);
}
?>

```

7. Menu Utama Admin

Menu ini hanya dapat diakses oleh admin yang telah berhasil melakukan *logindengan* memasukkan *username* dan *password* dengan benar.



Gambar 4.7 Menu Utama Admin

Source code

```
<?php
include_once('../login/config.php');
include('../login/cek-login.php');
?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-
strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type"
content="text/html; charset=UTF-8" />
<title>Halaman Admin</title>
<link rel="stylesheet" href="css/screen.css"
type="text/css" media="screen" title="default" />
<!-- jquery core -->
<script src="js/jquery/jquery-1.4.1.min.js"
type="text/javascript"></script>
</head>
<body>
<!-- Start: page-top-outer -->
<div id="page-top-outer">
```

```

<!-- Start: page-top -->
<div id="page-top">
<!-- start logo -->
<div id="logo">
<a href=""><h1>Administrator</h1></a>
</div>
<!-- end logo -->
</div>
<!-- End: page-top -->
</div>
<!-- End: page-top-outer -->
<div class="clear">&nbsp;</div>
<!-- start nav-outer-repeat START -->
<div class="nav-outer-repeat">
<!-- start nav-outer -->
<div class="nav-outer">
<!-- start nav-right -->
<div id="nav-right">
<div class="nav-divider">&nbsp;</div>
<a href=" ../login/logout.php" id="logout"></a>
<div class="clear">&nbsp;</div>
</div>
</ul>

```

8. Menu Halaman Data Penyakit

Menu ini terdapat pada menu admin pada menu ini admin dapat menambah, menghapus dan mengedit data penyakit kambing.

ID	Penyakit	Aksi
P001	Demam Penyakit Kambing	[Edit] [Hapus]
P002	Kontaminasi	[Edit] [Hapus]
P003	Infeksi saluran pernapasan	[Edit] [Hapus]
P004	Pemeriksaan mikroskopis susu (PMK)	[Edit] [Hapus]
P005	Penyakit kental	[Edit] [Hapus]
P006	Peradangan usus	[Edit] [Hapus]
P007	Berdak (peradangan paru-paru)	[Edit] [Hapus]
P008	Pneumonia	[Edit] [Hapus]
P009	Gagal ginjal (toksik penyakit)	[Edit] [Hapus]

Gambar 4.8 Menu Halaman Data Penyakit

Source code

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Administrator</title>
<link rel="shortcut icon" href="<?php echo
base_url(); ?>assets/favicon.ico">
<link href="<?php echo base_url();
?>assets/css/bootstrap.css" rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/font-awesome.css" rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/dataTables.bootstrap.css"
rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/datepicker.css" rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/daterangepicker.css"
rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/bootstrap-timepicker.css"
rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/multi-select.css" rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/select2.css" rel="stylesheet">
<link href="<?php echo base_url();
?>assets/css/style.css" rel="stylesheet">
</head>
<body>
<div id="wrapper">
<nav class="navbar navbar-default navbar-fixed-
top" role="navigation" style="margin-bottom: 0">
<div class="navbar-header">
<button type="button" class="navbar-toggle" data-
toggle="collapse" data-target=".sidebar-collapse">
<span class="sr-only">Toggle navigation</span>
<span class="icon-bar"></span>
<span class="icon-bar"></span>
<span class="icon-bar"></span>
</button>
<?php echo anchor('', img('assets/img/logo.png'),
'class="navbar-brand"'); ?>
</div>
```

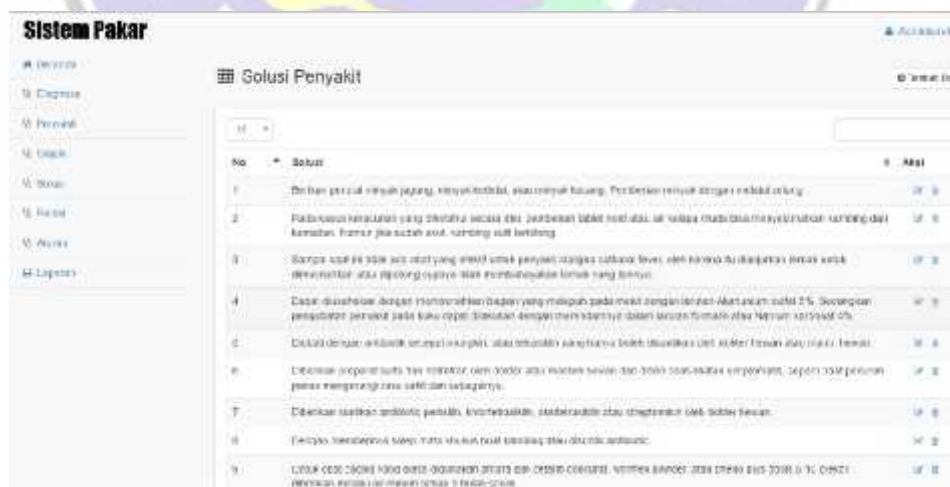
```

<ul class="nav navbar-top-links navbar-right">
<?php if (!$this->session->userdata('id')) { ?>
<li><?php echo anchor('auth', '<i class="fa fa-
sign-in fa-fw"></i> Login'); ?></li>
<?php } else { ?>
<li class="dropdown">
<a class="dropdown-toggle" data-toggle="dropdown"
href="#">
<i class="fa fa-user fa-fw"></i><?php echo $this-
>session->userdata('nama'); ?><i class="fa fa-
caret-down"></i>
</a>
<ul class="dropdown-menu dropdown-user">
<li><?php echo anchor('auth/profile', '<i
class="fa fa-user fa-fw"></i> User Profile');
?></li>
<li class="divider"></li>
<li><?php echo anchor('auth/logout', '<i class="fa
fa-sign-out fa-fw"></i> Logout'); ?></li>
</ul>
</li>
<?php } ?>
</ul>

```

9. Menu Halaman Solusi

Menu ini berisi tentang solusi penyakit pada kambing pada menu ini admin dapat menambah, menghapus dan mengedit data solusi penyakit kambing.



Gambar 4.9 Menu Halaman Solusi

Source code

```
<div id="wrapper">
<nav class="navbar navbar-default navbar-fixed-top" role="navigation" style="margin-bottom: 0">
<div class="navbar-header">
<button type="button" class="navbar-toggle" data-toggle="collapse" data-target=".sidebar-collapse">
<span class="sr-only">Toggle navigation</span>
<span class="icon-bar"></span>
<span class="icon-bar"></span>
<span class="icon-bar"></span>
</button>
<?php echo anchor('', img('assets/img/logo.png'), 'class="navbar-brand"'); ?>
</div>
<ul class="nav navbar-top-links navbar-right">
<?php if (!$this->session->userdata('id')) { ?>
<li><?php echo anchor('auth', '<i class="fa fa-sign-in fa-fw"></i> Login'); ?></li>
<?php } else { ?>
<li class="dropdown"><a class="dropdown-toggle" data-toggle="dropdown" href="#">
<i class="fa fa-user fa-fw"></i><?php echo $this->session->userdata('nama'); ?><i class="fa fa-caret-down"></i>
</a>
<ul class="dropdown-menu dropdown-user">
<li><?php echo anchor('auth/profile', '<i class="fa fa-user fa-fw"></i> User Profile'); ?></li>
<li class="divider"></li>
<li><?php echo anchor('auth/logout', '<i class="fa fa-sign-out fa-fw"></i> Logout'); ?></li>
</ul>
</li>
<?php } ?>
</ul>
<div class="navbar-default navbar-static-side" role="navigation">
<div class="sidebar-collapse">
<ul class="nav" id="side-menu">
<li><?php echo anchor('', '<i class="fa fa-home fa-fw"></i> Beranda'); ?></li>
<li><?php echo anchor('diagnosa', '<i class="fa fa-stethoscope fa-fw"></i> Diagnosa'); ?></li>
<li><?php echo anchor('penyakit', '<i class="fa fa-stethoscope fa-fw"></i> Penyakit'); ?></li>
```

```

<li><?php echo anchor('gejala', '<i class="fa fa-stethoscope fa-fw"></i> Gejala'); ?></li>
<li><?php echo anchor('solusi', '<i class="fa fa-stethoscope fa-fw"></i> Solusi'); ?></li>
<li><?php echo anchor('relasi', '<i class="fa fa-stethoscope fa-fw"></i> Relasi'); ?></li>
<li><?php echo anchor('aturan', '<i class="fa fa-stethoscope fa-fw"></i> Aturan'); ?></li>
<?php if ($this->session->userdata('id')) { ?>
<li><?php echo anchor('laporan', '<i class="fa fa-print fa-fw"></i> Laporan'); ?></li>
<? } ?>
</ul>
</div>
</div>
</nav>

```

10. Menu Halaman Data Diagnosa

Menu ini berisi tentang data diagnose penyakit kambing pada menu ini admin dapat menambah, menghapus dan mengedit data diagnosa penyakit kambing.



Gambar 4.10 Menu Halaman Data Diagnosa

Source code

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>Database Error</title>

```

```

<style type="text/css">
::selection{ background-color: #E13300; color:
white; }
::moz-selection{ background-color: #E13300; color:
white; }
::webkit-selection{ background-color: #E13300;
color: white; }
body {
background-color: #fff;
margin: 40px;
font: 13px/20px normal Helvetica, Arial, sans-
serif;
color: #4F5155;
}
a {
color: #003399;
background-color: transparent;
font-weight: normal;
}

h1 {
color: #444;
background-color: transparent;
border-bottom: 1px solid #D0D0D0;
font-size: 19px;
font-weight: normal;
margin: 0 0 14px 0;
padding: 14px 15px 10px 15px;
}
code {
font-family: Consolas, Monaco, Courier New,
Courier, monospace;
font-size: 12px;
background-color: #f9f9f9;
border: 1px solid #D0D0D0;
color: #002166;
display: block;
margin: 14px 0 14px 0;
padding: 12px 10px 12px 10px;
}
#container {
margin: 10px;
border: 1px solid #D0D0D0;
-webkit-box-shadow: 0 0 8px #D0D0D0;
}
p {
margin: 12px 15px 12px 15px;
}

```



```
</style>
</head>
<body>
<div id="container">
<h1><?php echo $heading; ?></h1>
<?php echo $message; ?>
</div>
</body>
</html>
```

