

## LAMPIRAN (PROGRAM)

### 1. Listing Python 3

```
import RPi.GPIO as GPIO
from mfrc522 import SimpleMFRC522
import time
from Adafruit_IO import Client, Feed, Data
aio = Client('randirh','d67e19a1059e4a4da6d4facd1a0857d1')
GPIO.setmode(GPIO.BOARD)
GPIO.setwarnings(False)
GPIO.setup(11, GPIO.IN)
GPIO.setup(40, GPIO.OUT)
GPIO.setup(38, GPIO.OUT)
GPIO.output(38,GPIO.HIGH)
reader = SimpleMFRC522()
GPIO.output(40, 0)

def pir() :
    i=GPIO.input(11)
    y = 1
    z = 0
    while True:

        if i==0:
            print ("No intruders")
            aio.send_data('device01',0)
            time.sleep(1)
            if(z == 10):
                print(z)
                break

            z += 1

        elif i==1:
            print ("Intruder detected")
            aio.send_data('device01',1)
            time.sleep(1)
            if(y == 10):
                GPIO.output(40, 1)
                time.sleep(0.3)
                GPIO.output(40, 0)
```

```

        print(y)
        break

    y += 1

try :
    relayHigh = 'HIGH'
    while True:
        nomor_tag, isi_teks = reader.read()
        time.sleep(1)
        id_masuk = nomor_tag
        print (id_masuk)
        a = relayHigh

        if id_masuk == 956692687323 and a == 'HIGH':
            GPIO.output(38,GPIO.LOW);
            relayHigh = 'LOW'
            pir()

        elif id_masuk == 956692687323 and a == "LOW":
            GPIO.output(38,GPIO.HIGH)
            relayHigh = 'HIGH'

    else :
        print ('id not initialized')

except KeyboardInterrupt :
    GPIO.cleanup()

```

## 2. Websocket

```

<!doctype html>
<html>
<head>

```

```
<script src="library/lib/mqtt.js" type="text/javascript"></script>
<script src="library/lib/jquery.js" type="text/javascript"></script>
<script src="AjaxSendRequest.js" type="text/javascript"></script>
<script type="text/javascript">
```

```
var url = 'wss://io.adafruit.com:443/mqtt/',
    username = 'randirh',
    aio_key = 'd67e19a1059e4a4da6d4facd1a0857d1',
    topic = username + '/feeds/device01',
    counter = 0;
```

```
var client = mqtt.connect(url, {
  username: username,
  password: aio_key
});
```

```
client.on('connect', function() {
```

```
  client.subscribe(topic);
  console.log('connect to adafruit');
```

```
});
```

```
// var testData;
client.on('error', function(e) {
  $('pre').append('ERROR: ' + e + '\n');
```

```
  console.log('ERROR: ' + e + '\n');
});
```

```
client.on('message', function(topic, payload) {
  $('pre').append('RECEIVED: ' + payload + '\n');
  $('p').text('Hasil ' + payload);
  sendAjax(topic,payload);
  console.log(topic);
```

```
});
```

```
function sendAjax(topic,payload){
  sendTopic(topic,payload);
}
```

```
</script>
```

```
</head>
```

```

<body>

  <h1>SECURITY SYSTEM</h1>
  <p></p>
  <pre></pre>

</body>
</html>

```

### 3. Ajaxsendrequest.js

```

var xmlhttp;

function sendTopic(topic, payload) {

  if (window.XMLHttpRequest) {
    // code for IE7+, Firefox, Chrome, Opera, Safari
    xmlhttp = new XMLHttpRequest();
  } else {
    // code for IE6, IE5
    xmlhttp = new ActiveXObject("Microsoft.XMLHTTP");
  }

  xmlhttp.onreadystatechange = function() {
    if (this.readyState == 4 && this.status == 200) {
      console.log("Ready Statte "+topic+" dengan value "+payload);
    }
  };

  var url = "nilai_pir.php?device="+topic+"&status="+payload;
  xmlhttp.open("GET",url,true);
  xmlhttp.send();

  console.log("Hasilnya keambil "+topic+" dengan value "+payload);
}

```

### 4. Index.html (Dashboard Menu)

```

<!doctype html>

<html class="no-js" lang="en">

<head>

```

```
<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<title>IoT Security System</title>
<meta name="description" content="IOTSS">
<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="apple-touch-icon" href="apple-icon.png">
<link rel="shortcut icon" href="favicon.ico">

<link rel="stylesheet" href="vendors/bootstrap/dist/css/bootstrap.min.css">
<link rel="stylesheet" href="vendors/font-awesome/css/font-
awesome.min.css">
<link rel="stylesheet" href="vendors/themify-icons/css/themify-
icons.css">
<link rel="stylesheet" href="vendors/flag-icon-css/css/flag-icon.min.css">
<link rel="stylesheet" href="vendors/selectFX/css/cs-skin-elastic.css">
<link rel="stylesheet" href="vendors/jqvmmap/dist/jqvmmap.min.css">

<link rel="stylesheet" href="assets/css/style.css">

<link
href='https://fonts.googleapis.com/css?family=Open+Sans:400,600,700,800'
rel='stylesheet' type='text/css'>
```

```
<script type="text/javascript">
```

```
var intervalID;
```

```
function onConsole(){
    console.log("status ON");
```

```

    intervalID = setInterval(activeConsole,3000);
}

function offConsole(){
    console.log("status OFF");
    clearInterval(intervalID);
}

function activeConsole(){
    if (window.XMLHttpRequest) {
        // code for IE7+, Firefox, Chrome, Opera, Safari
        xmlhttp = new XMLHttpRequest();
    } else {
        // code for IE6, IE5
        xmlhttp = new ActiveXObject("Microsoft.XMLHTTP");
    }

    xmlhttp.onreadystatechange = function() {
        if (this.readyState == 4 && this.status == 200) {
            console.log("Ready Statte "+topic+" dengan value "+payload);
        }
    };

    var url = "nilai_pir.php?device="+topic+"&status="+payload;
    xmlhttp.open("GET",url,true);
    xmlhttp.send();

    console.log("Hasilnya keambil "+topic+" dengan value "+payload);
}

```

```

    }
</script>

</head>

<body>

<!-- Left Panel -->

<aside id="left-panel" class="left-panel">
    <nav class="navbar navbar-expand-sm navbar-default">

        <div class="navbar-header">
            <button class="navbar-toggler" type="button" data-
toggle="collapse" data-target="#main-menu" aria-controls="main-menu"
aria-expanded="false" aria-label="Toggle navigation">
                <i class="fa fa-bars"></i>
            </button>
            <a class="navbar-brand" href="."></a>
            <a class="navbar-brand hidden" href="."></a>
        </div>

        <div id="main-menu" class="main-menu collapse navbar-collapse">
            <ul class="nav navbar-nav">
                <li class="active">
                    <a href="index.html"> <i class="menu-icon fa fa-
laptop"></i>Dashboard </a>

```

```

                <a href="form_register.html"> <i
class="menu-icon fa fa-plus"></i>Devices Register </a>
            </li>
        </ul>
    </div><!-- /.navbar-collapse -->
</nav>
</aside><!-- /#left-panel -->

<!-- Left Panel -->

<!-- Right Panel -->

<div id="right-panel" class="right-panel">

    <!-- Header-->
    <header id="header" class="header">

        <div class="header-menu">

            <div class="col-sm-5">

                <div class="user-area dropdown float-right">
                    <a href="#" class="dropdown-toggle" data-
toggle="dropdown" aria-haspopup="true" aria-expanded="false">
                        
                    </a>

                    <div class="user-menu dropdown-menu">
                        <a class="nav-link" href="page_login.html"><i class="fa
fa-power-off"></i> Logout</a>
                    </div>
                </div>
            </div>
        </div>
    </div>

```



```
</div>
```

```
</div>
```

```
</div>
```

```
</header><!-- /header -->
```

```
<!-- Header-->
```

```
<div class="breadcrumbs">
```

```
<div class="col-sm-4">
```

```
<div class="page-header float-left">
```

```
<div class="page-title">
```

```
<h1>IOTSS Dashboard</h1>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="content mt-3">
```

```
<div class="col-lg-6">
```

```
<div class="card">
```

```
<div class="card-header">
```

```
<strong class="card-title">TABLE DATA</strong>
```

```
</div>
```

```
<div class="card-body">
```

```

        <?php
        include
("Model_register.php");

        $db= new Model_register();
        $data= $db->tampildata();
        $no=1;

        ?>
<table class="table">
  <thead class="thead-dark">
    <tr>
      <th scope="col">NO</th>
      <th scope="col">DEVICE</th>
      <th scope="col">ID TAG</th>
      <th scope="col">STATUS</th>
      <th scope="col">ALERT</th>
    </tr>
  </thead>
  <tbody>
        <?php
        while
($stampil = $data->fetch_array()){
        ?>
    <tr>
      <td> <?php echo $no; ?></td>
      <td><?php echo $stampil['devices']; ?> </td>
      <td><?php echo $stampil['idtag']; ?> </td>
      <td><div class="text-center"><?php echo
$stampil['status']; ?></td> </div>

```

```
<td><?php if($stampil['status'] == "ON"){ ?>
    <blink
style="color:red;">Warning</blink>
    <audio controls autoplay hidden="Yes">
    <source src="alarm.mp3"
type="audio/mpeg">
    </audio>
```

```
<?php } ?>
```

```
</td>
```

```
</tr>
```

```

                                                                    <?php
$no++;} ?>
```

```
</table>
```

```
</div>
```

```
</div>
```

```
<footer>
```

```
<div class="row">
```

```
<div
```

```
class="col-sm-6 text-center">
```

Copyright &copy; SufeeAdmin

```
</div>
```

```
<div
```

```
class="col-sm-6 text-center">
```

Designed by <a href="https://colorlib.com">Colorlib</a>

```
</div>
```

```

</div>
</footer>
</div>
</div> <!-- .content -->
</div><!-- #right-panel -->

<!-- Right Panel -->

<script src="vendors/jquery/dist/jquery.min.js"></script>
<script src="vendors/popper.js/dist/umd/popper.min.js"></script>
<script src="vendors/bootstrap/dist/js/bootstrap.min.js"></script>
<script src="assets/js/main.js"></script>

<script src="vendors/chart.js/dist/Chart.bundle.min.js"></script>
<script src="assets/js/dashboard.js"></script>
<script src="assets/js/widgets.js"></script>
<script src="vendors/jqvmmap/dist/jquery.vmap.min.js"></script>
<script
src="vendors/jqvmmap/examples/js/jquery.vmap.sampledata.js"></script>
<script src="vendors/jqvmmap/dist/maps/jquery.vmap.world.js"></script>
<script>
    (function($) {
        "use strict";

        jQuery('#vmap').vectorMap({
            map: 'world_en',
            backgroundColor: null,
            color: '#ffffff',
            hoverOpacity: 0.7,

```

```
        selectedColor: '#1de9b6',
        enableZoom: true,
        showTooltip: true,
        values: sample_data,
        scaleColors: ['#1de9b6', '#03a9f5'],
        normalizeFunction: 'polynomial'
    });
})(jQuery);
</script>
```

```
</body>
```

```
</html>
```

## 5. Page\_login.html

```
<!doctype html>
<html class="no-js" lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <title>Login_IoTSS</title>
  <meta name="description" content="Login_IoTSS">
  <meta name="viewport" content="width=device-width, initial-scale=1">

  <link rel="apple-touch-icon" href="apple-icon.png">
  <link rel="shortcut icon" href="favicon.ico">

  <link rel="stylesheet" href="vendors/bootstrap/dist/css/bootstrap.min.css">
  <link rel="stylesheet" href="vendors/font-awesome/css/font-
awesome.min.css">
  <link rel="stylesheet" href="vendors/themify-icons/css/themify-
icons.css">
  <link rel="stylesheet" href="vendors/flag-icon-css/css/flag-icon.min.css">
  <link rel="stylesheet" href="vendors/selectFX/css/cs-skin-elastic.css">
```

```

<link rel="stylesheet" href="assets/css/style.css">

<link
href='https://fonts.googleapis.com/css?family=Open+Sans:400,600,700,800'
rel='stylesheet' type='text/css'>

</head>

<body class="bg-dark">

<div class="sufee-login d-flex align-content-center flex-wrap">
  <div class="container">
    <div class="login-content">
      <div class="login-logo">
        <a href="index.html">
          
        </a>
      </div>
      <div class="login-form">
        <form name="formLogin" action="login.php" method="post">
          <div class="form-group">
            <label>Username</label>
            <input type="text" name="username" class="form-control"
placeholder="Username">
          </div>
          <div class="form-group">
            <label>Password</label>
            <input type="password" name="password" class="form-
control" placeholder="Password">
          </div>
          <button type="submit" class="btn btn-success btn-flat m-
b-30 m-t-30">Sign in</button>
        </form>
      </div>
    </div>
  </div>
</div>

<script src="vendors/jquery/dist/jquery.min.js"></script>
<script src="vendors/popper.js/dist/umd/popper.min.js"></script>
<script src="vendors/bootstrap/dist/js/bootstrap.min.js"></script>

```

```
<script src="assets/js/main.js"></script>
```

```
</body>
```

```
</html>
```

## 6. Form\_Register.html

```
<!doctype html>
```

```
<html class="no-js" lang="en">
```

```
<head>
```

```
  <meta charset="utf-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
  <title>IoT Security System</title>
```

```
  <meta name="description" content="IOTSS">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1">
```

```
  <link rel="apple-touch-icon" href="apple-icon.png">
```

```
  <link rel="shortcut icon" href="favicon.ico">
```

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

```
  <link rel="stylesheet" href="vendors/font-awesome/css/font-  
awesome.min.css">
```

```
  <link rel="stylesheet" href="vendors/themify-icons/css/themify-  
icons.css">
```

```
  <link rel="stylesheet" href="vendors/flag-icon-css/css/flag-icon.min.css">
```

```
  <link rel="stylesheet" href="vendors/selectFX/css/cs-skin-elastic.css">
```

```
  <link rel="stylesheet" href="vendors/jqvmap/dist/jqvmap.min.css">
```

```
<link rel="stylesheet" href="assets/css/style.css">
```

```
<link  
href='https://fonts.googleapis.com/css?family=Open+Sans:400,600,700,800'  
rel='stylesheet' type='text/css'>
```

```
</head>
```

```
<body>
```

```
<!-- Left Panel -->
```

```
<aside id="left-panel" class="left-panel">
```

```
<nav class="navbar navbar-expand-sm navbar-default">
```

```
<div class="navbar-header">
```

```
<button class="navbar-toggler" type="button" data-  
toggle="collapse" data-target="#main-menu" aria-controls="main-menu"  
aria-expanded="false" aria-label="Toggle navigation">
```

```
<i class="fa fa-bars"></i>
```

```
</button>
```

```
<a class="navbar-brand" href="."></a>
```

```
<a class="navbar-brand hidden" href="."></a>
```

```
</div>
```

```
<div id="main-menu" class="main-menu collapse navbar-collapse">
```

```
<ul class="nav navbar-nav">
```

```
<li class="active">
```



```

        <a href="index.html"> <i class="menu-icon fa fa-
laptop"></i>Dashboard </a>
                                <a href="form_register.html"> <i
class="menu-icon fa fa-plus"></i>Devices Register </a>
        </li>
    </ul>
</div><!-- /.navbar-collapse -->
</nav>
</aside><!-- /#left-panel -->

<!-- Left Panel -->

<!-- Right Panel -->

<div id="right-panel" class="right-panel">

    <!-- Header-->
    <header id="header" class="header">

        <div class="header-menu">

            <div class="col-sm-5">

                <div class="user-area dropdown float-right">
                    <a href="#" class="dropdown-toggle" data-
toggle="dropdown" aria-haspopup="true" aria-expanded="false">
                        
                    </a>

                    <div class="user-menu dropdown-menu">

```

```
        <a class="nav-link" href="page_login.html"><i class="fa
fa-power-off"></i> Logout</a>
```

```
    </div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</header><!-- /header -->
```

```
<!-- Header-->
```

```
<div class="breadcrumbs">
```

```
    <div class="col-sm-4">
```

```
        <div class="page-header float-left">
```

```
            <div class="page-title">
```

```
                <h1>IOTSS Dashboard</h1>
```

```
            </div>
```

```
        </div>
```

```
    </div>
```

```
</div>
```

```
<div class="content mt-3">
```

```
    <div class="col-lg-6">
```

```
        <div class="card">
```

```
            <div class="card-header">
```

```
                <strong class="card-title">DEVICES
REGISTER</strong>
```

```

        </div>
        <form action="form_register.php"
method="post" class="form-horizontal">
        <div class="card-body card-block">

                <div
class="row form-group">

                        <div
class="col col-md-3"><label for="text-input" class=" form-control-
label">Device</label></div>

                        <div
class="col-12 col-md-9"><input type="text" id="device" name="device"
placeholder="please input name device" class="form-control"></div>

                        </div>

                <div
class="row form-group">

                        <div
class="col col-md-3"><label for="text-input" class=" form-control-label">ID
Tag</label></div>

                        <div
class="col-12 col-md-9"><input type="text" id="idtag" name="idtag"
placeholder="please input id tag" class="form-control"></div>

                        </div>

                </div>

                <div class="card-footer">

                        <button
type="submit" class="btn btn-primary btn-sm">

                                <i class="fa
fa-dot-circle-o"></i> Submit

                        </button>

                        <button type="reset"
class="btn btn-danger btn-sm">

                                <i class="fa
fa-ban"></i> Reset

```

```

        </button>
    </div>
</form>

</div><!-- /#right-panel -->
<footer>
    <div class="row">
        <div class="col-sm-6 text-center">
            Copyright &copy; SufeeAdmin
        </div>
        <div class="col-sm-6 text-center">
            Designed by <a href="https://colorlib.com">Colorlib</a>
        </div>
    </div>
</footer>

<!-- Right Panel -->

<script src="vendors/jquery/dist/jquery.min.js"></script>
<script src="vendors/popper.js/dist/umd/popper.min.js"></script>
<script src="vendors/bootstrap/dist/js/bootstrap.min.js"></script>
<script src="assets/js/main.js"></script>

<script src="vendors/chart.js/dist/Chart.bundle.min.js"></script>
<script src="assets/js/dashboard.js"></script>
<script src="assets/js/widgets.js"></script>
<script src="vendors/jqvmap/dist/jquery.vmap.min.js"></script>
<script
src="vendors/jqvmap/examples/js/jquery.vmap.sampledata.js"></script>

```

```
<script src="vendors/jqvmmap/dist/maps/jquery.vmap.world.js"></script>
<script>
    (function($) {
        "use strict";

        jQuery('#vmap').vectorMap({
            map: 'world_en',
            backgroundColor: null,
            color: '#ffffff',
            hoverOpacity: 0.7,
            selectedColor: '#1de9b6',
            enableZoom: true,
            showTooltip: true,
            values: sample_data,
            scaleColors: ['#1de9b6', '#03a9f5'],
            normalizeFunction: 'polynomial'
        });
    })(jQuery);
</script>
```

```
</body>
```

```
</html>
```

## 7. Form\_Register.php

```
<?php
```

```
require_once 'Model_register.php';
```

```

$response = array();

if($_SERVER['REQUEST_METHOD'] == 'POST'){

    if(
        isset($_POST['device']) and
        isset($_POST['idtag'])
    ){
        $db = new Model_register();

        if($db->insertData(
                                                    $_POST['device'],
                                                    $_POST['idtag']
        )){
            header("Location: index.html");
        }else{
            $response['error'] = true;
            $response['message'] = 'Insert Data Failed, Check
Again';
        }

    }else{
        $response['error'] = true;
        $response['message'] = 'Data not completed';
    }
}else{

```

```
        $response['error'] = true;
        $response['message'] = 'Invalid Request Please Check Again';
    }
}
```

## 8. Model\_Register.php

```
<?php

/**
 *
 */

class Model_register
{
    private $con;

    function __construct()
    {
        require_once
dirname(__FILE__).'/conf/DbConnection.php';

        $db = new DbConnection();

        $this->con = $db->connect();
    }

    public function insertData($device,$idtag){
        $stmt = $this->con->prepare("insert into
iddevices(id,devices,idtag) values (NULL,?,?);");
        $stmt->bind_param("ss",$device,$idtag);
    }
}
```

```

        if($stmt->execute()){
            return true;
        }else{
            return false;
        }
    }

    public function tampildata(){
        $stmt = $this->con->prepare("select devices,idtag, case
when status = 1 then 'ON' else 'OFF' end as status from iddevices");
        $stmt->execute();
        return $stmt->get_result();
    }

}

```

## 9. Login.php

```

<?php

require_once 'ModelLogin.php';

$response = array();

if($_SERVER['REQUEST_METHOD'] == 'POST'){
    echo "1";

    if(
        isset($_POST['username']) and

```



```

        isset($_POST['password'])
    ){
        echo "2";
        $db = new ModelLogin();

        if($db->checkData($_POST['username'],
$_POST['password'])){
            echo "3";
            $username = $db->getData($_POST['username']);

            header("Location: index.html");
        }else{
            echo "4";
            $response['error'] = true;
            $response['message'] = 'Insert Data Failed, Check
Again';
        }

    }else{
        echo "5";
        $response['error'] = true;
        $response['message'] = 'Data not completed';
    }

}else{
    echo "6";
    $response['error'] = true;
    $response['message'] = 'Invalid Request Please Check Again';
}
}

```

## 10. Model\_Login.php

```
<?php

/**
 * paramter username, password
 */
class ModelLogin{

    private $con;

    function __construct()
    {
        require_once
dirname(__FILE__).'/conf/DbConnection.php';

        $db = new DbConnection();

        $this->con = $db->connect();
    }

    public function checkData($username,$password){

        $stmt = $this->con->prepare("select * from users where
username = ? and password = ?");
        $stmt->bind_param("ss",$username,$password);
        $stmt->execute();
        $stmt->store_result();
        return $stmt->num_rows > 0;
    }
}
```

```

    }

    public function getData($username){
        $stmt = $this->con->prepare("select * from users where
username = ? ");
        $stmt->bind_param("s",$username);
        $stmt->execute();
        return $stmt->get_result()->fetch_assoc();
    }
}

```

## 11. Nilai\_Pir.php

```

<?php

require_once 'Model_sensor.php';

$response = array();
echo "1";
if($_SERVER['REQUEST_METHOD'] == 'GET'){
    echo "2";
    if(
        isset($_GET['device']) and
        isset($_GET['status'])
    ){
        $db = new Model_sensor();

        $db->updateData(
                                                    $_GET['device'],

```

```

                                                    $_GET['status']
                                                    );
echo "3";
}else{
    $response['error'] = true;
    $response['message'] = 'Insert Data Failed, Check
Again';
    echo "4";
}

}else{
    $response['error'] = true;
    $response['message'] = 'Data not completed';
    echo "5";
}

```

## 12. Model\_Sensor.php

```

<?php
/**
 *
 */
class Model_sensor
{
    private $con;

    function __construct()
    {
        require_once
dirname(__FILE__).'/conf/DbConnection.php';

        $db = new DbConnection();

        $this->con = $db->connect();
    }
}

```

```

public function updateData($devices, $status){
    $stmt = $this->con->prepare("update iddevices set status =
?, tanggal = now() where devices= substring_index(trim(?),'',-1);");
    $stmt->bind_param("ss",$status,$devices);

    if($stmt->execute()){
        return true;
    }else{
        return false;
    }
}

public function tampildata(){
    $stmt = $this->con->prepare("select devices,idtag, case
when status = 1 then 'ON' else 'OFF' end as status from iddevices");
    $stmt->execute();
    return $stmt->get_result();
}

}

```