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## LAMPIRAN

### Program pada NodeMCU

```
#include <ESP8266WiFi.h>
#include "CTBot.h"
#include <WiFiClientSecure.h>
#include <SoftwareSerial.h>
#include <StringSplitter.h>
//konfigurasi pin nodemcu
SoftwareSerial DataSerial(12, 13); // pin 12 dan 13 atau d6 dan d7
CTBot myBot;
unsigned long previousMillis = 0;
const long interval = 3000;
//Konfigurasi WiFi dan bot telegram
String ssid = "XL-home";
String password = "pass-wifi";
String token = "1926335708:AAGt05I7QHmXpfHzSY4ZGR-MP0KFNPdAkyk";
String alamat1 = "Ada kebakaran di: Jl.Bung Perumahan Bung Permai Blok A10 No.6 ->
https://goo.gl/maps/4PnFEt83w4yUPMqQ7";
String alamat2 = "Ada kebakaran di: Jl.Bung Perumahan Bung Permai Blok A7 No.14 ->
https://goo.gl/maps/LerGbgJcibskRuVM8";
const int id1 = 1420259977;
//KONFIGURASI BOT TELEGRAM
int Bot_mtbs = 1000; //mean time between scan messages
long Bot_lasttime; //last time messages' scan has been done
String incomingByte;
String buff[4];
//IP Address Server yang terpasang XAMPP
const char *host = "bayu.vx6-ct.com";
void setup() {
  Serial.begin(9600);
  DataSerial.begin(9600);
  WiFi.mode(WIFI_AP_STA);
  WiFi.begin(ssid, password);
  Serial.println("");
  Serial.println("Starting TelegramBot...");
  myBot.wifiConnect(ssid, password);
  myBot.setTelegramToken(token);
  Serial.print("Connecting");
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }
  //Jika koneksi berhasil, maka akan muncul address di serial monitor
  Serial.println("");
  Serial.print("Connected to ");
  Serial.println(ssid);
  Serial.print("IP address: ");
  Serial.println(WiFi.localIP());
  if (myBot.testConnection()) {
    Serial.println("Koneksi Bagus");
  } else {
    Serial.println("Koneksi Jelek");
  }
  myBot.sendMessage(id1, "alarm aktif");
  Serial.println("Pesan Terkirim");
}
void Alamat1() {
  Serial.println("Starting TelegramBot...");
  myBot.sendMessage(id1, alamat1);
  Serial.println("Pesan Terkirim");
}
```

```

void Alamat2() {
  Serial.println("Starting TelegramBot...");
  myBot.sendMessage(id1, alamat2);
  Serial.println("Pesan Terkirim");
}
int value = 0;
void loop() {
  // Proses Pengiriman -----
  delay(1000);
  ++value;
  String url1 = "/rest/req.php?dev=434445";
  String url2 = "/rest/req.php?dev=287082";
  String url3 = "/rest/req.php?dev=633207";
  String data_a;
  //baca data dari arduino
  String data = ""; //data dari arduino sensor mana yang terdeteksi api
  data += char(DataSerial.read());
  data.trim();
  //data_a = data;
  WiFiClient client;
  const int httpPort = 80;
  if (!client.connect(host, httpPort)) {
    Serial.println("connection failed");
    return;
  }
  Serial.print("connecting to ");
  Serial.println(host);
  Serial.print("data dari arduino adalah : ");
  Serial.println(data);
  if (data == "1") {
    Serial.println("Api terdeteksi di sensor 1");
    Alamat1();
    client.print(String("GET ") + url1 + " HTTP/1.1\r\n" +
      "Host: " + host + "\r\n" +
      "Connection: close\r\n\r\n");
    unsigned long timeout = millis();
    while (client.available() == 0) {
      if (millis() - timeout > 1000) {
        Serial.println(">>> Client Timeout !");
        client.stop();
        return;
      }
    }
  }
  if (data == "2") {
    Serial.println("api terdeteksi di sensor 2");
    Alamat2();
    client.print(String("GET ") + url2 + " HTTP/1.1\r\n" +
      "Host: " + host + "\r\n" +
      "Connection: close\r\n\r\n");
    unsigned long timeout = millis();
    while (client.available() == 0) {
      if (millis() - timeout > 1000) {
        Serial.println(">>> Client Timeout !");
        client.stop();
        return;
      }
    }
  }
  else {
    Serial.println("tidak ada api");
  } delay(500);
  while (client.available()) {
    String line = client.readStringUntil('\r');
  }
}

```

```
Serial.print(line);
} Serial.println();
Serial.println("closing connection");
}
```

### Program pada Arduino Uno

```
int pinSensor1 = 2;
int pinSensor3 = 4;
int pinasap = 5;
int Buzzer = 12;
void setup() {
  Serial.begin(9600);
  pinMode(pinSensor1, INPUT);
  pinMode(pinSensor3, INPUT);
  pinMode(pinasap, INPUT);
  pinMode(Buzzer, OUTPUT);
}
void buzer() {
  digitalWrite(Buzzer, HIGH);
}
void loop() {
  int state1 = digitalRead(pinSensor1); //state1 adalah jika sensor satu yang mendeteksi
  int state2 = digitalRead(pinSensor3); //state2 adalah jika sensor 2 yang mendeteksi
  int state4 = digitalRead(pinasap); // jika sensor asap mendeteksi
  if (state1 == LOW) { //low karna sensor tipe low aktif
    int sensor1 = 2;
    if (sensor1 == 2) {
      Serial.println(sensor1);
      sensor1++;
    }
    buzer();
    delay(1500);
  }

  else if (state2 == LOW) { // low karna sensor tipe low aktif
    int sensor1 = 1;
    if (sensor1 == 1) {
      Serial.println(sensor1);
      sensor1++;
    }
    buzer();
    delay(1500);
  } else if (state4 == LOW) { //low karna sensor tipe low aktif
    buzer();

  } else {
    digitalWrite(Buzzer, LOW);
  }
  delay(1500);
}
```

## Program Pada Menu Login

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8" />
<link rel="shortcut icon" href="../gambar/logo.png">
<link rel="stylesheet" type="text/css" href="https://bayu.vx6-ct.com/css/style.css">
<meta http-equiv="X-UA-Compatible" content="IE=edge" />
<title>LOGIN</title>
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
</head>
<body>
<div id="card">
<div id="card-content">
<div id="card-title">
<h2>LOGIN</h2>
<div class="underline-title"></div>
</div>
<form method="post" class="form" action="cek_login.php">
<label for="user-email" style="padding-top:13px">
   Email
</label>
<input type="text" name="username" class="form-content" type="email"
name="email" autocomplete="on" required />
<div class="form-border"></div>
<label for="user-password" style="padding-top:22px">   Password
</label>
<input id="password" class="form-content" type="password" name="password"
required />
<div class="form-border"></div>
<input id="submit-btn" type="submit" name="submit" value="LOGIN"/>
</form>
</div>
</div>
</body>
</html>
```

## Program pengambilan data dari data base

```
<?php
header("Access-Control-Allow-Origin: *");
header("Content-Type: application/json; charset=UTF-8");

include_once '../config/database.php';
include_once '../class/nodemcu_log.php';
$dbase = new Database();
$db = $dbase->getConnection();
if(isset($_GET['id'])) {
    $item = new Nodemcu_log($db);
    $item->id = isset($_GET['id']) ? $_GET['id'] : die();
    $item->getSingleLogData();
    if($item->created_at != null){
        // create array
        $temp_arr = array(
            "id" => $item->id,
            "locate" => $item->locate,
            "reg" => $item->reg,
            "created_at" => $item->tgl,
        );
        http_response_code(200);
```

```

        echo json_encode($smp_arr);
    }

    else{
        http_response_code(404);
        echo json_encode("Data not found.");
    }
} else {
    $items = new Nodemcu_log($db);
    $stmt = $items->getLogData();
    $itemCount = $stmt->rowCount();
    //echo json_encode($itemCount);
    if($itemCount > 0){
        $dataArr = array();
        $dataArr["data_log"] = array();
        $dataArr["dataCount"] = $itemCount;
        while ($row = $stmt->fetch(PDO::FETCH_ASSOC)){
            extract($row);
            //$created = date("G:i ", strtotime($row["created_at"])) . " ";
            $tanggal = str_replace(" ", "<br>", $row["tgl"]);
            //$tanggal1 = str_replace(" ", "<br>", $row["histori"]);
            $his = date("F j, Y, g:i a", strtotime($row["histori"])) . " ";
            $e = array(
                "id" => $id,
                "locate" => $locate,
                "reg" => $req,
                "created_at" => $tanggal,
                "histori" => $his
            );
            array_push($dataArr["data_log"], $e);
        }
        echo json_encode($dataArr);
    }
    else{
        http_response_code(404);
        echo json_encode(
            array("message" => "No record found.")
        );
    }
}
?>

```

#### Program tampilan dasboar web

```

<!DOCTYPE html>
<head>
<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
<meta name="description" content="">
<meta name="author" content="">
<title>NodeMCU Log</title>
<link rel="icon" type="image/png" href="../data/images/icons/favicon.ico"/>
<!-- Custom fonts for this template -->
<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
<link
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,
800i,900,900i" rel="stylesheet">
<!-- Custom styles for this template -->
<link href="css/sb-admin-2.min.css" rel="stylesheet">
<!-- Custom styles for this page -->
<link href="vendor/datatables/dataTables.bootstrap4.min.css" rel="stylesheet">
</head>
<body id="page-top">
<!-- Page Wrapper -->

```

```

<div id="wrapper">
  <!-- Sidebar -->
  <ul class="navbar-nav bg-gradient-primary sidebar sidebar-dark accordion"
id="accordionSidebar">
    <!-- Sidebar - Brand -->
    <a class="sidebar-brand d-flex align-items-center justify-content-center" >
    <div class="sidebar-brand-icon rotate-n-15">
      <i class="fas fa-laugh-wink"></i>
    </div>
    <div class="sidebar-brand-text mx-3">DASBOARD</div> </a>
    <!-- Divider -->
    <hr class="sidebar-divider my-0">
    <!-- Nav Item - Dashboard -->
    <li class="nav-item">
      <a class="nav-link" href="#">
        <i class="fas fa-fw fa-tachometer-alt"></i>
        <span>Dashboard</span></a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="maps.php">
          <i class="fas fa-fw fa-tachometer-alt"></i>
          <span>Maps</span></a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="histori.php">
            <i class="fas fa-fw fa-tachometer-alt"></i>
            <span>Histori</span></a>
          </li>
          <!-- Divider -->
          <hr class="sidebar-divider d-none d-md-block">
          <!-- Sidebar Toggler (Sidebar) -->
          <div class="text-center d-none d-md-inline">
            <button class="rounded-circle border-0" id="sidebarToggle"></button>
          </div>
        </ul>
        <!-- Content Wrapper -->
        <div id="content-wrapper" class="d-flex flex-column">
          <!-- Main Content -->
          <div id="content">
            <!-- Topbar -->
            <nav class="navbar navbar-expand navbar-light bg-white topbar mb-4 static-top shadow">
              <!-- Sidebar Toggle (Topbar) -->
              <form class="form-inline">
                <button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle mr-3">
                  <i class="fa fa-bars"></i></button></form>
              <!-- Topbar Search -->
              <form class="d-none d-sm-inline-block form-inline mr-auto ml-md-3 my-2 my-md-0 mw-100
navbar-search">
                <div class="input-group">
                  <input type="text" class="form-control bg-light border-0 small" placeholder="Search for..."
aria-label="Search" aria-describedby="basic-addon2">
                  <div class="input-group-append">
                    <button class="btn btn-primary" type="button">
                      <i class="fas fa-search fa-sm"></i>
                    </button>
                  </div>
                </div>
              </form>
              <!-- Topbar Navbar -->
              <ul class="navbar-nav ml-auto">
                <!-- Nav Item - Search Dropdown (Visible Only XS) -->
                <li class="nav-item dropdown no-arrow d-sm-none">
                  <a class="nav-link dropdown-toggle" href="#" id="searchDropdown" role="button"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">

```



```

        <i class="fas fa-search fa-fw"></i>
    </a>
    <!-- Dropdown - Messages -->
    <div class="dropdown-menu dropdown-menu-right p-3 shadow animated--grow-in"
    aria-labelledby="searchDropdown">
        <form class="form-inline mr-auto w-100 navbar-search">
            <div class="input-group">
                <input type="text" class="form-control bg-light border-0 small"
                placeholder="Search for..." aria-label="Search"
                aria-describedby="basic-addon2">
                <div class="input-group-append">
                    <button class="btn btn-primary" type="button">
                        <i class="fas fa-search fa-sm"></i>
                    </button>
                </div>
            </div>
        </form>
    </div>
</li>
<div class="topbar-divider d-none d-sm-block"></div>
<!-- Nav Item - User Information -->
<li class="nav-item dropdown no-arrow">
    <a class="nav-link dropdown-toggle" href="#" id="userDropdown"
    role="button" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
        <span class="mr-2 d-none d-lg-inline text-gray-600 small">Admin</span>
        
    </a>
    <!-- Dropdown - User Information -->
    <div class="dropdown-menu dropdown-menu-right shadow animated--grow-in"
    aria-labelledby="userDropdown">
        <a class="dropdown-item" href="#" data-toggle="modal"
        data-target="#logoutModal">
            <i class="fas fa-sign-out-alt fa-sm fa-fw mr-2 text-gray-400"></i>
            Logout
        </a>
    </div>
</li>
</ul>
</nav>
<!-- Begin Page Content -->
<div class="container-fluid">
    <!-- Area table -->
    <div class="card shadow mb-4">
        <div class="card-header py-3">
            <h6 class="m-0 font-weight-bold text-primary">Data Table</h6>
        </div>
        <div class="card-body">
            <div class="table-responsive">
                <table class="table table-bordered" id="dataTable" width="100%" cellspacing="0">
                    <thead>
                        <tr>
                            <th>Alamat</th>
                            <th>Tanggal Dan Waktu</th>
                            <th>Jumlah kejadian</th>
                        </tr>
                    </thead>
                </table>
            </div>
        </div>
    </div>
    <div class="row">
        <div class="col-xl-6 col-lg-6">
            VISIT MAPS
            <li class="nav-item">

```

```

        <a class="nav-link" href="maps.php">
        <i class="fas fa-fw fa-tachometer-alt">
        </i>
        <span>LOKASI SENSOR 1</span></a></li>
        <a class="nav-link" href="maps1.php">
        <i class="fas fa-fw fa-tachometer-alt"></i>
        <span>LOKASI SENSOR 2</span></a>
    </div>
</div>
</div>
</div>
</div>
<!-- Footer -->
<footer class="sticky-footer bg-white">
    <div class="container my-auto">
        <div class="copyright text-center my-auto">
            <span>Copyright &copy; Alfandi.vx6-ct.com</span>
        </div>
    </div>
</footer>
</div>
</div>
<a class="scroll-to-top rounded" href="#page-top">
<i class="fas fa-angle-up"></i>
</a>
<!-- Logout Modal-->
<div class="modal fade" id="logoutModal" tabindex="-1" role="dialog"
aria-labelledby="exampleModalLabel" aria-hidden="true">
    <div class="modal-dialog" role="document">
        <div class="modal-content">
            <div class="modal-header">
                <h5 class="modal-title" id="exampleModalLabel">Ready to Leave?</h5>
                <button class="close" type="button"
data-dismiss="modal" aria-label="Close">
                    <span aria-hidden="true">x</span>
                </button>
            </div>
            <div class="modal-body">Klik "Logout" jika ingin keluar.
            </div>
            <div class="modal-footer">
                <button class="btn btn-secondary" type="button"
data-dismiss="modal">Cancel</button>
                <a class="btn btn-primary" href="..login.php">Logout</a>
            </div>
        </div>
    </div>
</div>
</div>
<!-- Bootstrap core JavaScript-->
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<!-- Core plugin JavaScript-->
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>
<!-- Custom scripts for all pages-->
<script src="js/sb-admin-2.min.js"></script>
<!-- Page level plugins -->
<script src="vendor/datatables/jquery.dataTables.min.js"></script>
<script src="vendor/datatables/dataTables.bootstrap4.min.js"></script>
<!-- Page level custom scripts
<script src="js/demo/datatables-demo.js"></script>
<!-- Page level plugins -->
<script src="vendor/chart.js/Chart.min.js"></script>
<script src="vendor/jquery/moment.min.js"></script>
<!-- Page level custom scripts
<script src="js/demo/chart-area-demo.js"></script> -->
<script type="text/javascript">

```

```

$(document).ready(function() {
  var table = $('#dataTable').DataTable({ajax:{url:'https://fandi.vx6-
ct.com/nodemcu_log/webapi/api/read.php',dataSrc: 'data_log'},
  columns: [{ data: null},{ data: 'locate' },{ data: 'histori' },{ data: 'reg' }],
  columnDefs: [ { searchable: false,orderable: false,targets: 0} ],
  order: [[ 1, 'asc' ]]);
  table.on( 'order.dt search.dt',function () {
    table.column(0,{search:'applied', order:'applied'}).nodes().each(function (cell, i) {
      cell.innerHTML = i+1;});
    }).draw();
  //renderDataTable()
  getChartData();
  setInterval(function () {
    table.ajax.reload();}, 600 );
  setInterval(getChartData,60000);
  setInterval(table,60000);});
  function float2dollar(value) {
    return "U$ " + (value).toFixed(2).replace(/d(?=(d{3})+\.)/g, '$&.');
  }
}
</script>
</body>
</html>

```