<html lang="zh\_CN">  
<head>  
 <meta http-equiv="Content-Type" content="text/html;charset=utf-8">  
 <title>数据库分页测试</title>  
</head>  
<style>  
 body{  
 font-size: 12px;  
 font-family: Verdana, serif;  
 background-color: beige;  
 }  
 .container{  
 display: flex;  
 width: 100%;  
 }  
 .left{  
 width: 150px;  
 margin-left: 20px;  
 background-color: antiquewhite;  
 }  
 .nav{  
 margin-top: 20px;  
 height: 30px;  
 font-size: larger;  
 text-align: center;  
 }  
 .right{  
 flex: 1;  
 width: 100%;  
 height: 90%;  
 background-color: bisque;  
 }  
 h1{  
 text-align: center;  
 }  
 div.content{  
 height: 95%;  
 }  
 div.page{  
 height: 10%;  
 text-align: center;  
 padding-top: 20px;  
 }  
 div.page a{  
 border: #808080 1px solid;text-decoration: none;padding: 2px 5px 2px 5px;margin: 5px;  
 }  
 div.page span.current{  
 border: cadetblue 1px solid;background-color: cadetblue;padding:3px 6px 3px 6px;margin: 5px;color: #fff;  
 font-weight: bold;  
 }  
 div.page span.disable{  
 border: grey 1px solid;padding: 2px 5px 2px 5px;margin: 5px;color: grey;  
 }  
 div.page form{  
 display: inline;  
 }  
 table {  
 border: 1px solid;  
 width: 100%;  
 cellspacing: 0;  
 align: center;  
 }  
 tr td{  
 text-align: center;  
 border: 1px solid;  
 }  
 tr{  
 border: 1px solid;  
 }  
 td{  
 font-size: small;  
 }  
</style>  
<body>  
<?php  
require\_once './config/db.php';  
require\_once './config/profile.php';  
echo "<h1>MariaDB数据库浏览——传感器数据</h1>";  
echo "<div class='container'>";  
echo "<div class='left'>";  
echo "<div class='nav'>";  
 echo "<a href='layout/component/node.html'>物端列表</a>";  
echo "</div>";  
echo "<div class='nav'>";  
 echo "<a href='layout/component/sensor.html'>喷头状态</a>";  
echo "</div>";  
echo "<div class='nav'>";  
 echo "<a href='manualcontrol.php'>手动控制</a>";  
echo "</div>";  
echo "<div class='nav'>";  
 echo "<a href='experiment.php'>实验测试</a>";  
echo "</div>";  
echo "</div>";  
echo "<div class='right'>";  
$page = $\_GET['p'];  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
mysqli\_select\_db($\_db,DBNAME);  
$page\_size = 45;  
$sql = "SELECT \* FROM `bak`.sensordata LIMIT " . ($page-1) \* $page\_size ." ,$page\_size";  
echo "<div class='content'>";  
$result = mysqli\_query($\_db,$sql);  
echo "<table>";  
echo "<tr style='font-weight: bold;background-color: #313335;color: #f2f2f2'><td>id</td><td>data</td><td>sensor</td><td>temperature</td><td>humidity</td><td>probetime</td><td>verify</td></tr>";  
while ($row = mysqli\_fetch\_assoc($result)){  
 echo "<tr>";  
 echo "<td>{$row['id']}</td>";  
 echo "<td>{$row['sensor']}</td>";  
 echo "<td>{$row['coords']}</td>";  
 echo "<td>{$row['temperature']}</td>";  
 echo "<td>{$row['humidity']}</td>";  
 echo "<td>{$row['probetime']}</td>";  
 echo "<td>{$row['verify']}</td>";  
 echo "<tr>";  
}  
echo "</table>";  
echo "</div>";  
mysqli\_free\_result($result);  
$total\_sql = "select count(\*) from `bak`.sensordata";  
$total\_result = mysqli\_fetch\_array(mysqli\_query($\_db,$total\_sql));  
$total = $total\_result[0];  
$total\_pages = ceil($total/$page\_size);  
mysqli\_close($\_db);  
$page\_banner = '';  
$show\_page = 5;  
$page\_offset = ($show\_page-1)/2;  
$start\_page = 1;  
$end\_page = $total\_pages;  
$page\_banner = "<div class='page'>";  
if ($page>1){  
 $page\_banner .= "<a href='".$\_SERVER['PHP\_SELF']."?p=".(1)."'>首页</a>";  
 $page\_banner .= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($page-1)."'><上一页</a>";  
}else{  
 $page\_banner .= "<span class='disable'>首页</span>";  
 $page\_banner .= "<span class='disable'>第一页</span>";  
}  
if ($total\_pages>$show\_page){  
 if ($page>$page\_offset+1){  
 $page\_banner .= '...';  
 }  
 if ($page>$page\_offset){  
 $start\_page = $page-$page\_offset;  
 $end\_page = $total\_pages > $page+$page\_offset?$page+$page\_offset:$total\_pages;  
 }else{  
 $start\_page=1;  
 $end\_page = $total\_pages>$show\_page?$show\_page:$total\_pages;  
 }  
 if ($page+$page\_offset>$total\_pages){  
 $start\_page = $start\_page-($page+$page\_offset-$end\_page);  
 }  
}  
for ($i = $start\_page;$i<=$end\_page;$i++){  
 if ($page==$i){  
 $page\_banner.="<span class='current'>{$i}</span>";//当前页不用点击所以不用添加其他的。  
 }else{  
 $page\_banner.= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($i)."'>{$i}</a>";  
 }  
}  
if ($page<$total\_pages){  
 $page\_banner .= '...';  
 $page\_banner.= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($page+1)."'>下一页></a>";  
 $page\_banner.= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($total\_pages)."'>尾页</a>";  
}  
if ($total\_pages>$show\_page&&$total\_pages>$page+$page\_offset){  
 $page\_banner.= " 共{$total\_pages}页 ";  
}else{  
 $page\_banner .= "<span class='disable'>下一页</span>";  
 $page\_banner .= "<span class='disable'>尾页</span>";  
}  
$page\_banner .= "<form action='index.php' method='get'>";  
$page\_banner .= "到第 <input type='text' size='2' name='p'> 页 ";  
$page\_banner .= "<input type=submit value='确定'>";  
$page\_banner .= "</form>";  
$page\_banner .= "</div>";  
$page\_banner .= "</div>";  
$page\_banner .= "</div>";  
echo $page\_banner;  
?>  
</body>  
</html><?php  
header("Content-type:application/x-www-form-urlencoded");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
$\_db = connectDatabase(HOST,USERNAME,PASSWORD,DBNAME);  
$res = [];  
$banKeywords = ['delete','drop'];  
if(isset($\_POST['sql'])){  
 $sql = $\_POST['sql'];  
 $isAllow = true;  
 foreach ($banKeywords as $keyword){  
 if(str\_contains($sql, $keyword)){  
 $isAllow = false;  
 }  
 }  
 if($isAllow){  
 $result = mysqli\_query($\_db,$sql);  
 $res['result']=mysqli\_fetch\_all($result);  
 $res['message']='Execute successfully';  
 $res['error'] = false;  
 }  
 else{  
 $res['error']=true;  
 $res['message']='The SQL contains forbid keywords';  
 }  
}  
else{  
 $res['error']='A SQL command is expected';  
}  
echo json\_encode($res);  
<?php  
header("Content-type:application/json");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
require\_once '../utils/tools.php';  
require\_once '../utils/log.php';  
require\_once '../utils/control.php';  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
$res = array();  
$action = $\_GET['action'] ?? 'query';  
if ($action == 'query') {  
 $model = $\_GET['model'] ?? null;  
 $node = $\_GET['node'] ?? null;  
 $page = $\_GET['p'] ?? 1;  
 $pageSize = $\_GET['pageSize'] ?? 20;  
 if (isset($\_GET['p']) && isset($\_GET['pageSize']) && $model=='') {  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db, 'select count(1) total from esp.data'));  
 $sql = "SELECT \* FROM `esp`.data order by id desc LIMIT " . ($page - 1) \* $pageSize . " ,$pageSize";  
 $res['total'] = $total['total'];  
 $res['pageNum'] = $page;  
 $res['pageSize'] = $pageSize;  
 } elseif ($model<>'') {  
 $sql = "select \* from esp.data where sensor='$model' order by id desc limit " . ($page-1)\*$pageSize . ",$pageSize";  
 $total\_sql = "select count(\*) total from esp.data where sensor='$model' order by id desc";  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db, $total\_sql));  
 $res['total'] = $total['total'];  
 $res['pageNum'] = $page;  
 $res['pageSize'] = $pageSize;  
 } else {  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db, 'select count(1) total from esp.data'));  
 $res['status'] = 'error';  
 $res['total'] = $total['total'];  
 $res['message'] = "查询数据过多，请提供参数查询";  
 die(var\_export($res, false));  
 }  
 $result = mysqli\_query($\_db, $sql);  
 $res['data'] = mysqli\_fetch\_all($result, mode: MYSQLI\_ASSOC);  
} // 插入数据  
elseif ($action == 'insert') {  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 var\_dump($data);  
 foreach ($data as $item) {  
 $value = $item['value'];  
 $unit = $item['unit'];  
 $sensor = $item['sensor'];  
 $raw = $item['raw'];  
 $verify = $item['verify'];  
 $sql = "INSERT INTO esp.data (value, unit, sensor, time, `raw`, verify) VALUES ($value, '$unit','$sensor', DEFAULT, '$raw', '$verify')";  
 $result = mysqli\_query($\_db, $sql);  
 if ($unit == '℃') {  
 $res['control'] = control($value, $sensor);  
 }  
 if ($result) {  
 $res["message"] = "Insert successfully";  
 } else {  
 $res["error"] = true;  
 $res["message"] = "Insert failed";  
 }  
 }  
} // 删除数据，为安全起见不允许从客户端删除数据  
elseif ($action == 'delete') {  
 die("Not allow delete data");  
} // 更新数据功能，为确保数据真实性，不允许修改数据  
elseif ($action == 'update') {  
 die("Not allow modify data");  
}  
echo json\_encode($res);  
<?php  
header("Content-type:application/json");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
$action = $\_GET['action'] ?? 'preview';  
$table = $\_GET['table'] ?? null;  
$page = $\_GET['p'] ?? 1;  
$pageSize = $\_GET['pageSize'] ?? 15;  
$filter = $\_GET['filter'] ?? null;  
$time = $\_GET['date'] ?? null;  
$res = [];  
$banKeywords = ['delete', 'drop'];  
$isAllow = true;  
foreach ($banKeywords as $keyword) {  
 if (str\_contains($action, $keyword)) {  
 $isAllow = false;  
 }  
}  
if ($isAllow) {  
 if ($table) {  
 if ($filter && $time) {  
 $filter = 'where ' . $filter . ",time like '$time%'";  
 } elseif ($filter && !$time) {  
 $filter = 'where ' . $filter;  
 } elseif (!$filter && $time) {  
 $filter = 'where ' . "time like '$time%'";  
 } else {  
 $filter = '';  
 }  
 if ($action == 'preview') {  
 $sql = "select \* from $table $filter limit " . ($page - 1) \* $pageSize . ",$pageSize";  
 } elseif ($action == 'export') {  
 $sql = "select \* from $table $filter";  
 } else {  
 die("action not valid");  
 }  
 $total\_sql = "select count(\*) total from $table $filter";  
 $result = mysqli\_query($\_db, $sql);  
 $res['sql'] = $sql;  
 $res['pageNum'] = $page;  
 $res['pageSize'] = $pageSize;  
 $res['data'] = mysqli\_fetch\_all($result, mode: MYSQLI\_ASSOC);  
 $res['total'] = mysqli\_fetch\_assoc(mysqli\_query($\_db, $total\_sql))['total'];  
 $res['message'] = 'Execute successfully';  
 $res['error'] = false;  
 } else {  
 $res['error'] = true;  
 $res['message'] = 'The SQL contains forbid keywords';  
 }  
} else {  
 $res['error'] = '参数不完整';  
}  
echo json\_encode($res);  
<?php  
header("Content-type:application/json");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
require\_once '../utils/log.php';  
$logger = new log();  
$\_db = connectDatabase(HOST,USERNAME,PASSWORD,DBNAME);  
$res = [];  
$action = $\_GET['action'] ?? 'query';  
$event = $\_GET['event'] ?? null;  
$page = $\_GET['p'] ?? 1;  
$pageSize = $\_GET['pageSize'] ?? 20;  
if ($action=='query'){  
 if ($event==''){  
 $sql = "select \* from esp.log order by id desc limit ".($page-1)\*$pageSize.", $pageSize";  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db, 'select count(1) total from esp.log'));  
 }  
 else{  
 $sql = "select \* from esp.log where event='$event' order by id desc limit ".($page-1)\*$pageSize.", $pageSize";  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db, "select count(1) total from esp.log where event='$event'"));  
 }  
 $res['total'] = $total['total'];  
 $res['pageNum'] = $page;  
 $res['pageSize'] = $pageSize;  
 $result = mysqli\_query($\_db,$sql);  
 $res['data']=mysqli\_fetch\_all($result,mode: MYSQLI\_ASSOC);  
}  
elseif ($action='insert'){  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 var\_dump($data);  
 $details = $data['details'];  
 $raw = $data['raw'];  
 $logger::debug($details,$raw,true);  
 $res['status'] = 'Done';  
}  
if (realpath(\_\_FILE\_\_)==realpath($\_SERVER['SCRIPT\_FILENAME'])){  
 echo json\_encode($res);  
}  
<?php  
header("Content-type:application/x-www-form-urlencoded");  
header("Content-type:application/json");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
$\_db = connectDatabase(HOST,USERNAME,PASSWORD,DBNAME);  
$opj\_table = "node"; //本文件主要操作esp.node表  
$sql = "";  
$res = array();  
$action = $\_GET['action'] ?? 'query';  
$page = $\_GET['p'] ?? -1;  
$pageSize = $\_GET['pageSize'] ?? -1;  
$coords = $\_GET['coords'] ?? 0;  
if ($action=='query'){  
 if ($page<>-1 && $pageSize <> -1){  
 $sql = "SELECT \* FROM `esp`.node LIMIT " . ($page-1) \* $pageSize ." ,$pageSize";  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db,"SELECT count(1) total FROM `esp`.node"));  
 $res['total'] = $total['total'];  
 $res['pageNum'] = $page;  
 $res['pageSize'] = $pageSize;  
 }elseif ($coords){  
 $sql = "SELECT \* FROM `esp`.node WHERE coords='$coords'";  
 }else{  
 $sql = "SELECT \* total FROM `esp`.node";  
 }  
 $result = mysqli\_query($\_db,$sql);  
 $row = mysqli\_fetch\_all($result,mode: MYSQLI\_ASSOC);  
 $res['data'] = $row;  
}  
elseif ($action=='insert'){  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 $coords =$data['coords'];  
 $optocouple =$data['optocouple'] ?? 0;  
 $response\_level =$data['response\_level'] ?? 0;  
 $sql = "INSERT INTO esp.node (coords, optocouple, response\_level) VALUES ('$coords', '$optocouple','$response\_level')";  
 echo $sql;  
 $result = mysqli\_query($\_db,$sql);  
 if ($result){  
 $res["message"] = "insert successfully";  
 }else{  
 $res["error"]=true;  
 $res["message"]="insert failed";  
 }  
}  
elseif ($action=='delete'){  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 $coords =$data['coords'];  
 $optocouple =$data['optocouple'] ?? 0;  
 $response\_level =$data['response\_level'] ?? 0;  
 $sql = "DELETE FROM esp.node WHERE `coords`='$coords'";  
 $result = mysqli\_query($\_db,$sql);  
 if ($result==1){  
 $res["message"] = "delete successfully";  
 }else{  
 $res["error"]=true;  
 $res["message"]="delete failed";  
 }  
}  
elseif ($action=='update'){  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 var\_dump($data);  
 $coords =$data['coords'];  
 $optocouple =$data['optocouple'] ?? 0;  
 $response\_level =$data['response\_level'] ?? 0;  
 $sql = "select \* from esp.node where coords='$coords'";  
 $result = mysqli\_query($\_db,$sql);  
 $oldParams = mysqli\_fetch\_assoc($result);  
 if (empty($oldParams)){  
 die("The coords($coords) doesn't exist.");  
 }  
 $sql = "UPDATE `esp`.node SET optocouple='$optocouple',response\_level='$response\_level' WHERE `coords`='$coords'";  
 echo $sql;  
 $result = mysqli\_query($\_db,$sql);  
 if ($result){  
 $res["message"] = "update successfully";  
 }else{  
 $res["error"]=true;  
 $res["message"]="update failed";  
 }  
}  
mysqli\_close($\_db);  
echo json\_encode($res);  
die();  
<?php  
header("Content-type:application/x-www-form-urlencoded");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
function generateArray(int $idx\_floor, int $idx\_room): array  
{  
 $nodes = array();  
 for ($f = 1; $f <= $idx\_floor; $f++) {  
 for ($r = 1; $r <= $idx\_room; $r++) {  
 if ($r % 2 == 1) {  
 $nodes[$f][0][] = $r;  
 } else {  
 $nodes[$f][1][] = $r;  
 }  
 }  
 }  
 return $nodes;  
};  
function monitor(): void  
{  
 global $\_db;  
 $sql = "select \*,MAX(id) from data where sensor like 'thermocouple%' group by sensor"; // 从data中查询数据库  
 $sql = "select \*,MAX(d.id) from data d inner join sensor s on d.sensor = s.model inner join node n on s.node = n.id where d.sensor like 'thermocouple%' group by sensor";  
 $sql = "select \* from esp.data where value>70";  
 $result = mysqli\_query($\_db, $sql);  
 while ($row = mysqli\_fetch\_assoc($result)) {  
 print\_r($row);  
 }  
};  
function analysis(string $ignite\_location, int $pre\_level): array  
{  
 $chars = preg\_split('/[frct]/', $ignite\_location);  
 $i = $chars[1];  
 $j = $chars[2] % 2 ? 0 : 1;  
 $k = $chars[2]/($j+1)-1;  
 $coords = array($i,$j,$k,$pre\_level);  
 print\_r($chars);  
 print\_r($coords);  
 return $coords;  
};  
analysis('f2r4c2', 1);  
function controlMethod(string $method='normal'):array  
{  
 global $\_db;  
 if ($method=='normal'){  
 $control\_vex = array();  
 }  
 return $control\_vex;  
};  
$execAction = function (int $ignite\_location, $control\_vex) {  
 foreach ($control\_vex as $offset) {  
 continue;  
 }  
};  
function reset\_opt(int $flag = 0):void  
{  
 global $\_db;  
 if ($flag) {  
 $sql = "update esp.node n set n.optocouple=1 where n.optocouple is not null";  
 $result = mysqli\_query($\_db, $sql);  
 echo "全部光耦状态已置1";  
 } else {  
 $sql = "update esp.node n set n.optocouple=0 where n.optocouple is not null";  
 $result = mysqli\_query($\_db, $sql);  
 echo "全部光耦状态已置0";  
 }  
};  
function run(): void  
{  
 $nodes = generateArray(10, 10); //生成node数组  
 var\_dump($nodes);  
 while (true){  
 sleep(3);  
 monitor();  
 }  
};  
run();  
<?php  
header("Content-type:application/json");  
header("Access-Control-Allow-Origin: \*");  
header("Access-Control-Allow-Methods:GET, POST, OPTIONS, DELETE");  
header("Access-Control-Allow-Headers:x-requested-with, Referer,content-type,token,DNT,X-Mx-ReqToken,Keep-Alive,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type, Accept-Language, Origin, Accept-Encoding");  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
require\_once '../utils/log.php';  
$logger = new log();  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
$opj\_db = 'esp';  
$opj\_table = "sensor"; //本文件主要操作esp.sensor表  
$res = array();  
$action = $\_GET['action'] ?? 'query';  
if ($action == 'query') {  
 $model = $\_GET['model'] ?? null;  
 $node = $\_GET['node'] ?? null;  
 $page = $\_GET['p'] ?? -1;  
 $pageSize = $\_GET['pageSize'] ?? -1;  
 if ($page > 0) {  
 $sql = "SELECT \* FROM `$opj\_db`.$opj\_table LIMIT " . ($page - 1) \* $pageSize . " ,$pageSize";  
 $total = mysqli\_fetch\_assoc(mysqli\_query($\_db, "SELECT count(1) total FROM `esp`.sensor"));  
 $res['total'] = $total['total'];  
 $res['pageNum'] = $page;  
 $res['pageSize'] = $pageSize;  
 } elseif ($model == 'all') {  
 $sql = $sql = "SELECT \* FROM `$opj\_db`.$opj\_table";  
 } else {  
 $sql = "SELECT \* FROM `$opj\_db`.$opj\_table WHERE model='$model'";  
 }  
 $result = mysqli\_query($\_db, $sql);  
 $res['status'] = true;  
 $res['data'] = mysqli\_fetch\_all($result, mode: MYSQLI\_ASSOC);  
} // 插入数据  
elseif ($action == 'insert') {  
 $allData = json\_decode(file\_get\_contents("php://input"), true);  
 var\_dump($allData);  
 foreach ($allData as $data) {  
 $node = $data['node'];  
 $model = $data['model'];  
 $parameter = $data['parameter'] ?? null;  
 $upload = $data['upload'] ?? 1;  
 $sql = "INSERT INTO $opj\_db.$opj\_table (node, model, parameter, upload) VALUES ('$node', '$model','$parameter','$upload')";  
 try {  
 mysqli\_query($\_db, $sql);  
 $logger::info("新增传感器", $model);  
 $res["status"] = true;  
 } catch (Exception $e) {  
 $res["error"] = false;  
 $res["message"] = $e->getMessage();  
 }  
 }  
} // 删除数据  
elseif ($action == 'delete') {  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 $model = $data['model'];  
 $sql = "select \* from esp.sensor where model='$model'";  
 $result = mysqli\_query($\_db, $sql);  
 if (empty(mysqli\_fetch\_assoc($result))) {  
 die("The model($model) doesn't exist");  
 }  
 $sql = "DELETE FROM $opj\_db.$opj\_table WHERE `model`='$model'";  
 $result = mysqli\_query($\_db, $sql);  
 $logger::info("删除传感器", $model);  
 if ($result == 1) {  
 $res["message"] = "execute successfully";  
 } else {  
 $res["error"] = true;  
 $res["message"] = "delete failed";  
 }  
} // 更新数据  
elseif ($action == 'update') {  
 $data = json\_decode(file\_get\_contents("php://input"), true);  
 $model = $data['model'];  
 $sql = "select \* from esp.sensor where model='$model'";  
 $result = mysqli\_query($\_db, $sql);  
 $oldParams = mysqli\_fetch\_assoc($result);  
 if (empty($oldParams)) {  
 die("The model($model) doesn't exist.");  
 }  
 $node = $oldParams['node'];  
 $model = $oldParams['model'];  
 $parameter = $oldParams['parameter'];  
 $upload = $oldParams['upload'];  
 $node = $data['node'] ?? $oldParams['node'];  
 $parameter = $data['parameter'] ?? $oldParams['parameter'];  
 $unit = $data['unit'] ?? $oldParams['unit'];  
 $range = $data['range'] ?? $oldParams['range'];  
 $upload = $data['upload'] ?? $oldParams['upload'];  
 $optocouple = $data['optocouple'] ?? $oldParams['optocouple'];  
 $sql = "UPDATE $opj\_db.$opj\_table SET node='$node',parameter='$parameter',upload='$upload' WHERE `model`='$model'";  
 $result = mysqli\_query($\_db, $sql);  
 $logger::info("更新传感器", $model);  
 if ($result) {  
 $res["message"] = "update successfully";  
 } else {  
 $res["error"] = true;  
 $res["message"] = "update failed";  
 }  
}  
mysqli\_close($\_db);  
echo json\_encode($res);  
die();  
<?php  
function connectDatabase(string $host, string $username, string $password, string $db): mysqli  
{  
 $conn = mysqli\_connect($host, $username, $password, $db);  
 if (!$conn) {  
 echo "connect fail";  
 exit;  
 }  
 mysqli\_select\_db($conn, $db);  
 return $conn;  
}  
if (realpath(\_\_FILE\_\_)==realpath($\_SERVER['SCRIPT\_FILENAME'])){  
 connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
}  
<?php  
const HOST = 'localhost';  
const USERNAME = 'root';  
const PASSWORD = '1005';  
const DBNAME = 'esp';  
const THIRD\_THRESHOLD = 800;  
const SECOND\_THRESHOLD = 300;  
const FIRST\_THRESHOLD = 70;  
const NUM\_OF\_FLOORS = 12; // 楼层数  
const NUM\_OF\_ROOMS = 10; // 每层房间数  
<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Index</title>  
 <link rel="stylesheet" href="style.css">  
</head>  
<body>  
<div class="banner">  
 banner  
</div>  
<div class="main">  
 <div class="side">  
 side  
 </div>  
 <div class="presentation">  
 <div class="content">  
 content  
 </div>  
 </div>  
</div>  
</body>  
<script>  
</script>  
</html>body {  
 margin: 0;  
 display: flex;  
 flex-direction: column;  
 width: 100%;  
 height: 100vh;  
 justify-content: space-between;  
}  
.container {  
 width: 100%;  
 height: 100%;  
 background-color: antiquewhite;  
}  
.banner {  
 height: 100px;  
 float: top;  
 background-color: #acb3b9;  
}  
.main {  
 display: flex;  
 height: 100%;  
 flex-basis: auto;  
 background-color: dodgerblue;  
}  
.side {  
 width: 200px;  
 background-color: coral;  
 float: left;  
}  
.presentation {  
 background-color: blueviolet;  
 flex: 1;  
 flex-shrink: initial;  
}  
.nav {  
 background-color: #acb3b9;  
}  
.content {  
 height: 100%;  
 width: 100%;  
 background-color: cadetblue;  
}  
<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Index</title>  
</head>  
<body>  
<h1>Index</h1>  
</body>  
</html><!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Node</title>  
</head>  
<body>  
<h1>Node</h1>  
</body>  
</html><!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Index</title>  
</head>  
<body>  
<h1>Index</h1>  
</body>  
</html><?php  
<?php  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
require\_once '../utils/tools.php';  
require\_once '../utils/log.php'; // 存在同名文件需要相对路径定位回父级目录再定位回来  
$\_db = connectDatabase(HOST,USERNAME,PASSWORD,DBNAME);  
$logger = new log();  
function control($temperature, $sensor): array  
{  
 global $\_db;  
 global $logger;  
 $result = array();  
 $response\_level = '';  
 if ($temperature > THIRD\_THRESHOLD){  
 $response\_level = 'THIRD';  
 $control\_vex = array(-10,-1,0,1,10);  
 $result['message'] = "The temperature $sensor reaches ".THIRD\_THRESHOLD.". The third level pr-response has been started.";  
 }elseif ($temperature>SECOND\_THRESHOLD){  
 $response\_level = 'SECOND';  
 $control\_vex = array(-1,0,1);  
 $result['message'] = "The temperature $sensor reaches ".SECOND\_THRESHOLD.". The second level pr-response has been started.";  
 }elseif ($temperature > FIRST\_THRESHOLD){  
 $response\_level = 'FIRST';  
 $control\_vex = array(0);  
 $result['message'] = "The temperature $sensor reaches ".SECOND\_THRESHOLD.". The first level pr-response has been started.";  
 }else{  
 $control\_vex = array();  
 $result['message'] = "Everything's fine, Continuous monitoring...";  
 }  
 if ($response\_level<>''){  
 $sql = "select sensor.node from esp.sensor where model='$sensor'";  
 $node = mysqli\_fetch\_assoc(mysqli\_query($\_db,$sql))['node'];  
 $result['sensor'] = $sensor;  
 $result['status'] = 200;  
 $result['ignite node'] = $node;  
 foreach ($control\_vex as $offset){  
 $nodeId = nodeIdConvert($node)+$offset; // int id 进行offset  
 $nodeId = nodeIdConvert($nodeId); // offset 后的 id 转换回 string id  
 $sql = "update node set optocouple=1 where coords='$nodeId'";  
 mysqli\_query($\_db, $sql);  
 $result['action'][] = $nodeId;  
 }  
 $logger::warn(" $node 预响应启动",json\_encode($result));  
 }  
 return $result;  
}  
if (realpath(\_\_FILE\_\_)==realpath($\_SERVER['SCRIPT\_FILENAME'])){  
 $result = control(330,'testsensor-3');  
 var\_dump($result);  
}  
<?php  
echo "404";<?php  
require\_once '../config/profile.php';  
require\_once '../config/db.php';  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
function addNode(): void  
{  
 global $\_db;  
 for ($f = 1; $f <= 12; $f++) {  
 for ($r = 1; $r <= 10; $r++) {  
 $coords = "f" . "$f" . "r" . "$r";  
 $sql = "insert into esp.node (coords, optocouple) VALUES ('$coords',1)";  
 try {  
 $result = mysqli\_query($\_db, $sql);  
 } catch (Exception $e) {  
 echo $e;  
 continue;  
 }  
 }  
 }  
}  
function addSensor(): void  
{  
 global $\_db;  
 $i = 1;  
 for ($f = 1; $f <= 12; $f++) {  
 for ($r = 1; $r <= 10; $r++) {  
 $coords = "f" . "$f" . "r" . "$r";  
 $model = 'testsensor-' . "$i";  
 $old\_model = 'testsensor' . "$i";  
 $i++;  
 $sql = "update esp.sensor set model='$model' where model='$old\_model'";  
 try {  
 $result = mysqli\_query($\_db, $sql);  
 } catch (Exception $e) {  
 echo $e;  
 continue;  
 }  
 }  
 }  
}  
function addData(): void  
{  
 global $\_db;  
 for ($i = 0; $i < 5; $i++) {  
 for ($r = 1; $r <= 120; $r++) {  
 $model = "testsensor-" . "$r";  
 $value = random\_int(23, 70);  
 $sql = "insert into esp.data (value, unit, sensor, time, raw, verify) VALUES ('$value','℃','$model',DEFAULT,DEFAULT,'randomData')";  
 try {  
 $result = mysqli\_query($\_db, $sql);  
 } catch (Exception $e) {  
 echo $e;  
 continue;  
 }  
 }  
 }  
}  
try {  
 addData();  
} catch (Exception $e) {  
 echo $e;  
}<?php  
require\_once '../config/db.php';  
require\_once '../config/profile.php';  
$\_db = connectDatabase(HOST,USERNAME,PASSWORD,DBNAME);  
class log  
{  
 const LEVEL\_INFO = 'info';  
 const LEVEL\_DEBUG = 'debug';  
 const LEVEL\_ERROR = 'error';  
 const LEVEL\_WARN = 'warn';  
 const MAX\_LENGTH = '102400';  
 const WRITE\_IMMEDIATE = false;  
 const RECORD\_LEVEL = 'debug';  
 const DIR = \_\_DIR\_\_ . '/log/';  
 private static string $log = '';  
 public static function info($data, $raw, $immediate = false): void  
 {  
 self::record($data, self::LEVEL\_INFO, $raw, $immediate);  
 }  
 public static function debug($data, $raw, $immediate = false): void  
 {  
 self::record($data, self::LEVEL\_DEBUG, $raw, $immediate);  
 }  
 public static function error($data, $raw, $immediate = false): void  
 {  
 self::record($data, self::LEVEL\_ERROR, $raw, $immediate);  
 }  
 public static function warn($data, $raw, $immediate = false): void  
 {  
 self::record($data, self::LEVEL\_WARN, $raw, $immediate);  
 }  
 public static function write(): void  
 {  
 if (self::$log != '') {  
 $file\_name = self::DIR . date("Y-m-d") . ".log";  
 file\_put\_contents($file\_name, self::$log, FILE\_APPEND);  
 self::$log = '';  
 }  
 }  
 private static function record($data, $level, $raw=null, $immediate = false): void  
 {  
 if (self::isRecord($level)) {  
 $prefix = date("Y-m-d H:i:s ||") . " [$level] ||";  
 self::$log .= $prefix . $data ."||". $raw . PHP\_EOL;  
 self::insertDB(date("Y-m-d H:i:s"),$data, $level, $raw);  
 if (self::isWrite($immediate)) self::write();  
 }  
 }  
 private static function isRecord($level): bool  
 {  
 return self::compareLevel($level) >= 0;  
 }  
 private static function insertDB($time,$data, $level, $raw=null): void  
 {  
 global $\_db;  
 $sql = "insert into esp.log (time, event, details,raw) VALUES ('$time','$level','$data','$raw')";  
 $res = mysqli\_query($\_db,$sql);  
 echo "已插入";  
 }  
 private static function isWrite($immediate): bool  
 {  
 return self::WRITE\_IMMEDIATE || $immediate || strlen(self::$log) > self::MAX\_LENGTH;  
 }  
 private static function compareLevel($level)  
 {  
 $debug = 1;  
 $info = 2;  
 $warn = 3;  
 $error = 4;  
 $writeLevel = self::RECORD\_LEVEL;  
 return $$level - $$writeLevel;  
 }  
}  
register\_shutdown\_function(function () {  
 log::write();  
});  
if (realpath(\_\_FILE\_\_) == realpath($\_SERVER['SCRIPT\_FILENAME'])) {  
 log::error("测试","raw",true);  
}<html lang="zh\_CN">  
<head>  
 <meta http-equiv="Content-Type" content="text/html;charset=utf-8">  
 <title>数据库分页测试</title>  
</head>  
<style>  
 body{  
 font-size: 12px;  
 font-family: Verdana, serif;  
 }  
 h1{  
 text-align: center;  
 }  
 div.page{  
 text-align: center;  
 }  
 div.content{  
 height: 80%;  
 }  
 div.page a{  
 border: #808080 1px solid;text-decoration: none;padding: 2px 5px 2px 5px;margin: 5px;  
 }  
 div.page span.current{  
 border: cadetblue 1px solid;background-color: cadetblue;padding:3px 6px 3px 6px;margin: 5px;color: #fff;  
 font-weight: bold;  
 }  
 div.page span.disable{  
 border: grey 1px solid;padding: 2px 5px 2px 5px;margin: 5px;color: grey;  
 }  
 div.page form{  
 display: inline;  
 }  
</style>  
<body>  
<?php  
require\_once '../config/db.php';  
require\_once '../config/profile.php';  
header('Access-Control-Allow-Origin:\*');  
header('Access-Control-Allow-Headers:content-type');  
header('Access-Control-Request-Method:GET,POST');  
echo "<h1>数据库分页测试</h1>";  
$page = $\_GET['p'];  
$\_db = connectDatabase(HOST, USERNAME, PASSWORD, DBNAME);  
mysqli\_select\_db($\_db,'learn');  
$page\_size = 20;  
$sql = "SELECT \* FROM page LIMIT " . ($page-1) \* $page\_size ." ,$page\_size";  
echo "<div class='content'>";  
$result = mysqli\_query($\_db,$sql);  
echo "<table border='1' width='40%' cellspacing='0' align='center'>";  
echo "<tr><td>id</td><td>data</td></tr>";  
while ($row = mysqli\_fetch\_assoc($result)){  
 echo "<tr>";  
 echo "<td>{$row['id']}</td>";  
 echo "<td>{$row['data']}</td>";  
 echo "<tr>";  
}  
echo "</table>";  
echo "</div>";  
mysqli\_free\_result($result);  
$total\_sql = "select count(\*) from page";  
$total\_result = mysqli\_fetch\_array(mysqli\_query($\_db,$total\_sql));  
$total = $total\_result[0];  
$total\_pages = ceil($total/$page\_size);  
mysqli\_close($\_db);  
$page\_banner = '';  
$show\_page = 5;  
$page\_offset = ($show\_page-1)/2;  
$start\_page = 1;  
$end\_page = $total\_pages;  
$page\_banner = "<div class='page'>";  
if ($page>1){  
 $page\_banner .= "<a href='".$\_SERVER['PHP\_SELF']."?p=".(1)."'>首页</a>";  
 $page\_banner .= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($page-1)."'><上一页</a>";  
}else{  
 $page\_banner .= "<span class='disable'>首页</span>";  
 $page\_banner .= "<span class='disable'>第一页</span>";  
}  
if ($total\_pages>$show\_page){  
 if ($page>$page\_offset+1){  
 $page\_banner .= '...';  
 }  
 if ($page>$page\_offset){  
 $start\_page = $page-$page\_offset;  
 $end\_page = $total\_pages > $page+$page\_offset?$page+$page\_offset:$total\_pages;  
 }else{  
 $start\_page=1;  
 $end\_page = $total\_pages>$show\_page?$show\_page:$total\_pages;  
 }  
 if ($page+$page\_offset>$total\_pages){  
 $start\_page = $start\_page-($page+$page\_offset-$end\_page);  
 }  
}  
for ($i = $start\_page;$i<=$end\_page;$i++){  
 if ($page==$i){  
 $page\_banner.="<span class='current'>{$i}</span>";//当前页不用点击所以不用添加其他的。  
 }else{  
 $page\_banner.= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($i)."'>{$i}</a>";  
 }  
}  
if ($page<$total\_pages){  
 $page\_banner.= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($page+1)."'>下一页></a>";  
 $page\_banner.= "<a href='".$\_SERVER['PHP\_SELF']."?p=".($total\_pages)."'>尾页</a>";  
}  
if ($total\_pages>$show\_page&&$total\_pages>$page+$page\_offset){  
 $page\_banner .= '...';  
 $page\_banner.= "共{$total\_pages}页";  
}else{  
 $page\_banner .= "<span class='disable'>下一页</span>";  
 $page\_banner .= "<span class='disable'>尾页</span>";  
}  
$page\_banner .= "<form action=mypage.php method='get'>";  
$page\_banner .= "到第<input type='text' size='2' name='p'>页";  
$page\_banner .= "<input type=submit value='确定'>";  
$page\_banner .= "</form>";  
$page\_banner .= "</div>";  
echo $page\_banner;  
?>  
</body>  
</html><?php  
require\_once "../config/profile.php";  
function nodeIdConvert(string|int $ignite\_location ): int|string  
{  
 if (is\_string($ignite\_location)){  
 $chars = preg\_split('/[frct]/', $ignite\_location);  
 return $chars[1]\*NUM\_OF\_FLOORS+$chars[2];  
 }else{  
 $n =intval($ignite\_location/NUM\_OF\_ROOMS);  
 $m = $ignite\_location%NUM\_OF\_ROOMS;  
 return "f".$n."r".$m;  
 }  
}  
function generateArray(int $idx\_floor, int $idx\_room): array  
{  
 $nodes = array();  
 for ($f = 1; $f <= $idx\_floor; $f++) {  
 for ($r = 1; $r <= $idx\_room; $r++) {  
 if ($r % 2 == 1) {  
 $nodes[$f][0][] = $r;  
 } else {  
 $nodes[$f][1][] = $r;  
 }  
 }  
 }  
 return $nodes;  
};