

```
<?php

class Conexao {

    public static $instance;

    private function __construct() {
        //
    }

    public static function getConexao() {
        if (!isset(self::$instance)) {

            self::$instance = new PDO('mysql:host=localhost;dbname=github', 'root', '',
array(PDO::MYSQL_ATTR_INIT_COMMAND => "SET NAMES utf8"));

            self::$instance->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);

            self::$instance->setAttribute(PDO::ATTR_ORACLE_NULLS, PDO::NULL_EMPTY_STRING);

        }

        return self::$instance;
    }
}

class Usuario{

    private $id;

    private $nome;

    private $sobrenome;

    private $idade;

    private $sexo;

    function getId() {
        return $this->id;
    }

    function setId($id) {
        $this->id = $id;
    }

}
```

```

class UsuarioDAO{

    public function create(Usuario $usuario) {

        try {

            $sql = "INSERT INTO usuario (nome,sobrenome,idade,sexo) VALUES (
            :nome,:sobrenome,:idade,:sexo)";

            $p_sql = Conexao::getConexao()->prepare($sql);

            $p_sql->bindValue(":nome", $usuario->getNome());
            $p_sql->bindValue(":sobrenome", $usuario->getSobrenome());
            $p_sql->bindValue(":idade", $usuario->getIdade());
            $p_sql->bindValue(":sexo", $usuario->getSexo());

            return $p_sql->execute();

        } catch (Exception $e) {

            print "Erro ao Inserir usuario <br>" . $e . '<br>';

        }

    }

    public function read() {

        try {

            $sql = "SELECT * FROM usuario order by nome asc";
            $result = Conexao::getConexao()->query($sql);
            $lista = $result->fetchAll(PDO::FETCH_ASSOC);
            $f_lista = array();
            foreach ($lista as $l) {
                $f_lista[] = $this->listaUsuarios($l);
            }
            return $f_lista;

        } catch (Exception $e) {

            print "Ocorreu um erro ao tentar Buscar Todos." . $e;

        }

    }

}

```

```

public function update(Usuario $usuario) {
    try {
        $sql = "UPDATE usuario set
            nome=:nome,
            sobrenome=:sobrenome,
            idade=:idade,
            sexo=:sexo WHERE id = :id";
        $p_sql = Conexao::getConexao()->prepare($sql);
        $p_sql->bindValue(":nome", $usuario->getNome());
        $p_sql->bindValue(":sobrenome", $usuario->getSobrenome());
        $p_sql->bindValue(":idade", $usuario->getIdade());
        $p_sql->bindValue(":sexo", $usuario->getSexo());
        $p_sql->bindValue(":id", $usuario->getId());
        return $p_sql->execute();
    } catch (Exception $e) {
        print "Ocorreu um erro ao tentar fazer Update<br> $e <br>";
    }
}

public function delete(Usuario $usuario) {
    try {
        $sql = "DELETE FROM usuario WHERE id = :id";
        $p_sql = Conexao::getConexao()->prepare($sql);
        $p_sql->bindValue(":id", $usuario->getId());
        return $p_sql->execute();
    } catch (Exception $e) {
        echo "Erro ao Excluir usuario<br> $e <br>";
    }
}

```

```
private function listaUsuarios($row) {  
    $usuario = new Usuario();  
    $usuario->setId($row['id']);  
    $usuario->setNome($row['nome']);  
    $usuario->setSobrenome($row['sobrenome']);  
    $usuario->setIdade($row['idade']);  
    $usuario->setSexo($row['sexo']);  
  
    return $usuario;  
}  
}  
  
?>
```

```
<?php  
include_once "../conexao/Conexao.php";  
include_once "../model/Usuario.php";  
include_once "../dao/UsuarioDAO.php";  
  
//instancia as classes  
$usuario = new Usuario();  
$usuariodao = new UsuarioDAO();  
  
//pega todos os dados passado por POST  
  
$d = filter_input_array(INPUT_POST);
```

```
//se a operação for gravar entra nessa condição  
if(isset($_POST['cadastrar'])){
```

```
$usuario->setNome($d['nome']);  
$usuario->setSobrenome($d['sobrenome']);  
$usuario->setIdade($d['idade']);  
$usuario->setSexo($d['sexo']);
```

```
$usuariodao->create($usuario);
```

```
header("Location: ../../");  
}  
// se a requisição for editar  
else if(isset($_POST['editar'])){
```

```
$usuario->setNome($d['nome']);  
$usuario->setSobrenome($d['sobrenome']);  
$usuario->setIdade($d['idade']);  
$usuario->setSexo($d['sexo']);  
$usuario->setId($d['id']);
```

```
$usuariodao->update($usuario);
```

```
header("Location: ../../");  
}  
// se a requisição for deletar  
else if(isset($_GET['del'])){
```

```
$usuario->setId($_GET['del']);
```

```
$usuariodao->delete($usuario);
```

```
header("Location: ../../");
}else{
    header("Location: ../../");
}

<?php
include_once "./app/conexao/Conexao.php";
include_once "./app/dao/UsuarioDAO.php";
include_once "./app/model/Usuario.php";

//instancia as classes
$usuario = new Usuario();
$usuariodao = new UsuarioDAO();

?>

<!DOCTYPE html>
<html lang="pt-br">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet"
        href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
        integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
        crossorigin="anonymous">
    <title>CRUD Simples PHP</title>
    <style>
        .menu,
        thead {
```

```
background-color: #bbb !important;  
}  
  
.row {  
    padding: 10px;  
}  
/  
style>  
/  
head>  
  
<body>  
  
<nav class="navbar navbar-light bg-light menu">  
    <div class="container">  
        <a class="navbar-brand" href="#">  
            CRUD PHP POO  
        </a>  
    </div>  
</nav>  
  
<div class="container">  
    <form action="app/controller/UsuarioController.php" method="POST">  
        <div class="row">  
            <div class="col-md-3">  
                <label>Nome</label>  
                <input type="text" name="nome" value="" autofocus class="form-control" require />  
            </div>  
            <div class="col-md-5">  
                <label>Sobrenome</label>  
                <input type="text" name="sobrenome" value="" class="form-control" require />  
            </div>  
            <div class="col-md-2">  
                <label>Idade</label>
```

```
<input type="number" name="idade" value="" class="form-control" require />
</div>

<div class="col-md-2">
    <label>Sexo</label>
    <select name="sexo" class="form-control">
        <option value="M">Masculino</option>
        <option value="F">Feminino</option>
    </select>
</div>

<div class="col-md-2">
    <br>
    <button class="btn btn-primary" type="submit" name="cadastrar">Cadastrar</button>
</div>
</div>
</form>
<hr>
<div class="table-responsive">
    <table class="table table-sm table-bordered table-hover">
        <thead>
            <tr>
                <th>Id</th>
                <th>Nome</th>
                <th>Sobrenome</th>
                <th>Idade</th>
                <th>Sexo</th>
                <th>Ações</th>
            </tr>
        </thead>
        <tbody>
            <?php foreach ($usuariodao->read() as $usuario) : ?>
```

```

<tr>
    <td><?= $usuario->getId() ?></td>
    <td><?= $usuario->getNome() ?></td>
    <td><?= $usuario->getSobrenome() ?></td>
    <td><?= $usuario->getIdade() ?></td>
    <td><?= $usuario->getSexo()?></td>
    <td class="text-center">
        <button class="btn btn-warning btn-sm" data-toggle="modal" data-
target="#editar"><?= $usuario->getId() ?>">
            Editar
        </button>
        <a href="app/controller/UsuarioController.php?del=<?= $usuario->getId()
?>">
            <button class="btn btn-danger btn-sm" type="button">Excluir</button>
        </a>
    </td>
</tr>
<!-- Modal -->
<div class="modal fade" id="editar"><?= $usuario->getId() ?>" tabindex="-1"
role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">
    <div class="modal-dialog modal-lg" role="document">
        <div class="modal-content">
            <div class="modal-header">
                <h5 class="modal-title" id="exampleModalLabel">Editar</h5>
                <button type="button" class="close" data-dismiss="modal" aria-
label="Close">
                    <span aria-hidden="true">&times;</span>
                </button>
            </div>
            <div class="modal-body">
                <form action="app/controller/UsuarioController.php" method="POST">
                    <div class="row">

```

```
<div class="col-md-5">
    <label>Nome</label>
    <input type="text" name="nome" value="<?= $usuario->getNome() ?>" class="form-control" require />
</div>

<div class="col-md-7">
    <label>Sobrenome</label>
    <input type="text" name="sobrenome" value="<?= $usuario->getSobrenome() ?>" class="form-control" require />
</div>

</div>
<div class="row">
    <div class="col-md-3">
        <label>Idade</label>
        <input type="number" name="idade" value="<?= $usuario->getIdade() ?>" class="form-control" require />
    </div>
    <div class="col-md-3">
        <label>Sexo</label>
        <select name="sexo" class="form-control">
            <?php if ($usuario->getSexo() == 'F') : ?>
                <option value="F">Feminino</option>
                <option value="M">Masculino</option>
            <?php else : ?>
                <option value="M">Masculino</option>
                <option value="F">Feminino</option>
            <?php endif ?>
        </select>
    </div>
</div>
<div class="row">
```

```
<div class="col-md-2">
<br>
<input type="hidden" name="id" value="<?= $usuario->getId() ?>" />
<button class="btn btn-primary" type="submit" name="editar">Cadastrar</button>
</div>
</div>
</form>
</div>

</div>
</div>
</div>
<?php endforeach ?>
</tbody>
</table>
</div>

</div>
<script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-KJ3o2DKtIkYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN" crossorigin="anonymous"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js" integrity="sha384-ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q" crossorigin="anonymous"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js" integrity="sha384-JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQxSffWpi1MquVdAyjUar5+76PVCmYI" crossorigin="anonymous"></script>
</body>

</html>
```