

```

<?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+058RXPxPg6fy4IWvTNh0E263XmFcJISAwigGFAW/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>

<?php endforeach ?>

</tbody>

</table>

</div>

</div>

<script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-
KJ3o2DKtIkVYIK3UENzmM7KChRr/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/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYI"
crossorigin="anonymous"></script>

</body>

</html>

```