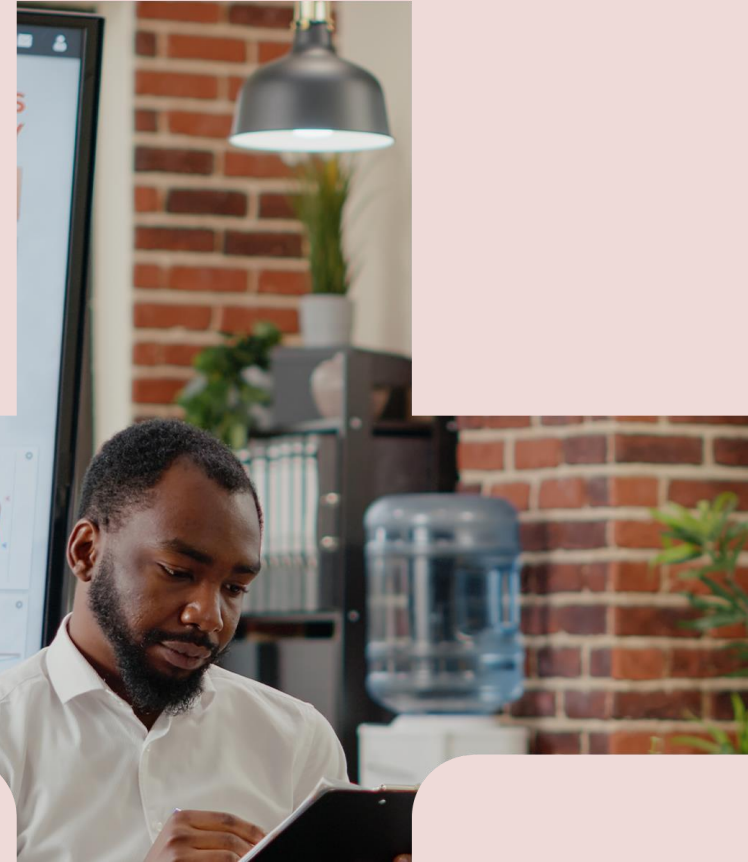




---

# Material UI





# MUI

Adentramos agora na área de sistemas de design, essa é uma biblioteca que provê um sistema de design para a aplicação que for utilizá-la, desta forma podemos aproveitar um estilo padrão para apresentar componente e também podendo extender conforme necessidade.

Baseado no sistema de design da Google.

## Move faster with intuitive React UI tools

MUI offers a comprehensive suite of UI tools to help you ship new features faster. Start with Material UI, our fully-loaded component library, or bring your own design system to our production-ready components.

[Get started >](#)`npm install @mui/material @emotion...`

<https://mui.com/>



# Design System

Define as estruturas básicas que um componente deve ter.

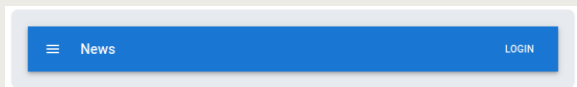
Padrões de espaçamentos, tamanhos, sombreamentos, fontes...





# App Bar

<https://mui.com/material-ui/react-app-bar/>



```
import * as React from 'react';
import AppBar from '@mui/material/AppBar';
import Box from '@mui/material/Box';
import Toolbar from '@mui/material/Toolbar';
import Typography from '@mui/material/Typography';
import Button from '@mui/material/Button';
import IconButton from '@mui/material/IconButton';
import MenuIcon from '@mui/icons-material/Menu';

export default function ButtonAppBar() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <AppBar position="static">
        <Toolbar>
          <IconButton
            size="large"
            edge="start"
            color="inherit"
            aria-label="menu"
            sx={{ mr: 2 }}
          >
            <MenuIcon />
          </IconButton>
          <Typography variant="h6" component="div" sx={{ flexGrow: 1 }}>
            News
          </Typography>
          <Button color="inherit">Login</Button>
        </Toolbar>
      </AppBar>
    </Box>
  );
}
```



# Data Grid

<https://mui.com/x/react-data-grid/>

<input type="checkbox"/>	ID	First name	Last name	Age	Full name
<input type="checkbox"/>	1	Jon	Snow	35	Jon Snow
<input type="checkbox"/>	2	Cersei	Lannister	42	Cersei Lannister
<input type="checkbox"/>	3	Jaime	Lannister	45	Jaime Lannister
<input type="checkbox"/>	4	Arya	Stark	16	Arya Stark
<input type="checkbox"/>	5	Daenerys	Targaryen		Daenerys Targaryen
1~5 of 9 < >					

```
import Box from '@mui/material/Box';
import { DataGrid, GridColDef, GridValueGetterParams } from '@mui/x-data-grid';

const columns: GridColDef[] = [
  { field: 'id', headerName: 'ID', width: 90 },
  {
    field: 'firstName',
    headerName: 'First name',
    width: 150,
    editable: true,
  },
  {
    field: 'lastName',
    headerName: 'Last name',
    width: 150,
    editable: true,
  },
  {
    field: 'age',
    headerName: 'Age',
    type: 'number',
    width: 110,
    editable: true,
  },
  {
    field: 'fullName',
    headerName: 'Full name',
    description: 'This column has a value getter and is not sortable.',
    sortable: false,
    width: 160,
    valueGetter: (params: GridValueGetterParams) =>
      `${params.row.firstName || ''} ${params.row.lastName || ''}`,
  },
];
```



# Data Grid

<https://mui.com/x/react-data-grid/>

<input type="checkbox"/>	ID	First name	Last name	Age	Full name
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<input type="checkbox"/>	3	Jaime	Lannister	45	Jaime Lannister
<input type="checkbox"/>	4	Arya	Stark	16	Arya Stark
<input type="checkbox"/>	5	Daenerys	Targaryen		Daenerys Targaryen
1-5 of 9 < >					

```
];

const rows = [
  { id: 1, lastName: 'Snow', firstName: 'Jon', age: 35 },
  { id: 2, lastName: 'Lannister', firstName: 'Cersei', age: 42 },
  { id: 3, lastName: 'Lannister', firstName: 'Jaime', age: 45 },
  { id: 4, lastName: 'Stark', firstName: 'Arya', age: 16 },
  { id: 5, lastName: 'Targaryen', firstName: 'Daenerys', age: null },
  { id: 6, lastName: 'Melisandre', firstName: null, age: 150 },
  { id: 7, lastName: 'Clifford', firstName: 'Ferrara', age: 44 },
  { id: 8, lastName: 'Frances', firstName: 'Rossini', age: 36 },
  { id: 9, lastName: 'Roxie', firstName: 'Harvey', age: 65 },
];

export default function DataGridDemo() {
  return (
    <Box sx={{ height: 400, width: '100%' }}>
      <DataGrid
        rows={rows}
        columns={columns}
        initialState={{
          pagination: {
            paginationModel: {
              pageSize: 5,
            },
          },
        }}
        pageSizeOptions={[5]}
        checkboxSelection
        disableRowSelectionOnClick
      />
    </Box>
  );
}
```



# Text Field

<https://mui.com/material-ui/react-text-field/>

The image displays three text field variants side-by-side. The first, labeled 'Outlined', has a thin black border and the text 'Outlined' inside. The second, labeled 'Filled', has a solid light gray background and the text 'Filled' inside. The third, labeled 'Standard', has a thin black border and the text 'Standard' inside.

```
<TextField id="outlined-basic" label="Outlined" variant="outlined" />  
<TextField id="filled-basic" label="Filled" variant="filled" />  
<TextField id="standard-basic" label="Standard" variant="standard" />
```



# Prática

Alterar nossa aplicação de usuários para utilizar o  
Material UI





# Exercícios

## :D

# Aplicação de passageiros

Alterar a aplicação de passageiros para que passe a utilizar o Material UI



# Obrigado!

**pulsati<sup>+</sup>**

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[pulsati.com.br](https://pulsati.com.br)