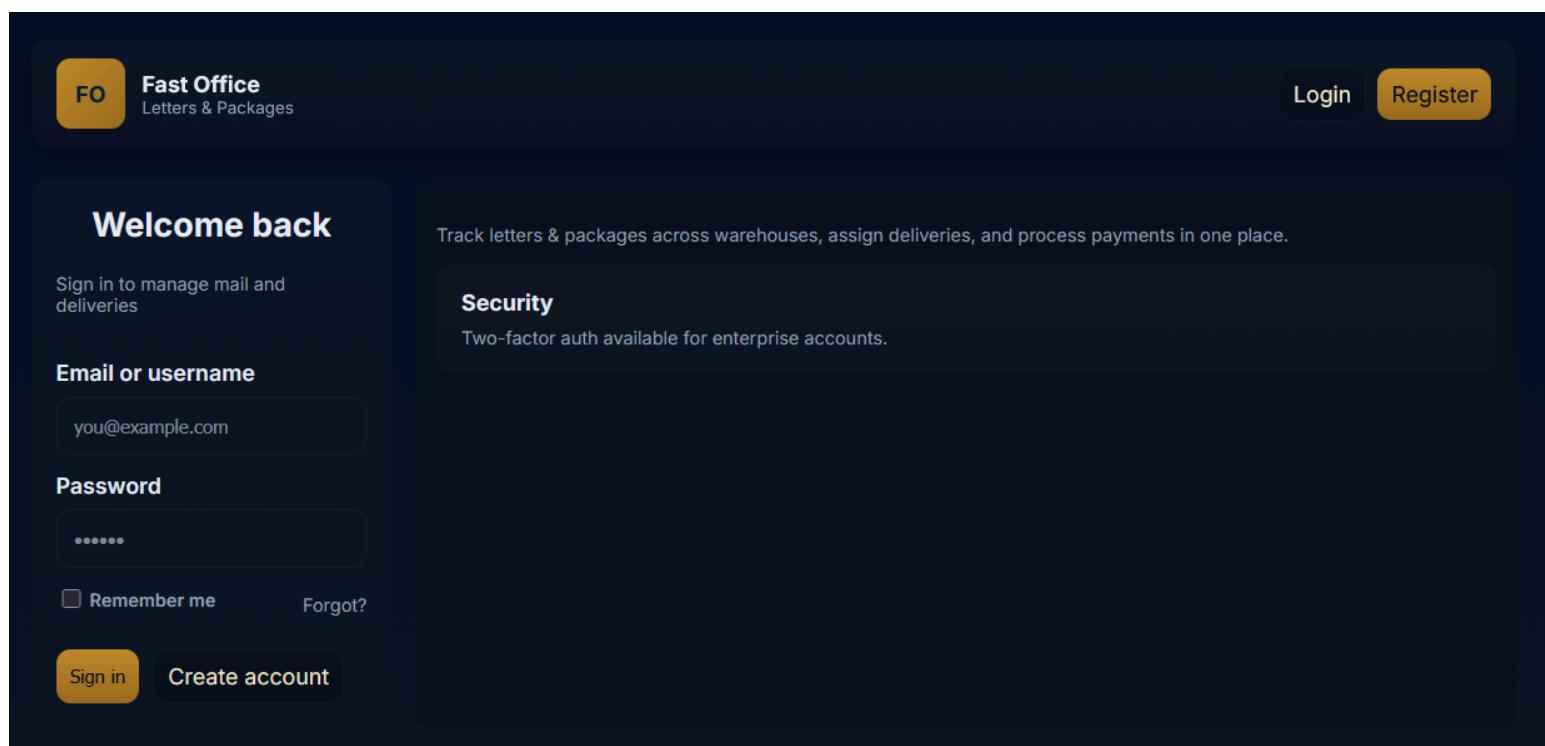


## Ficha 10 - Desenvolvimento do projeto prático

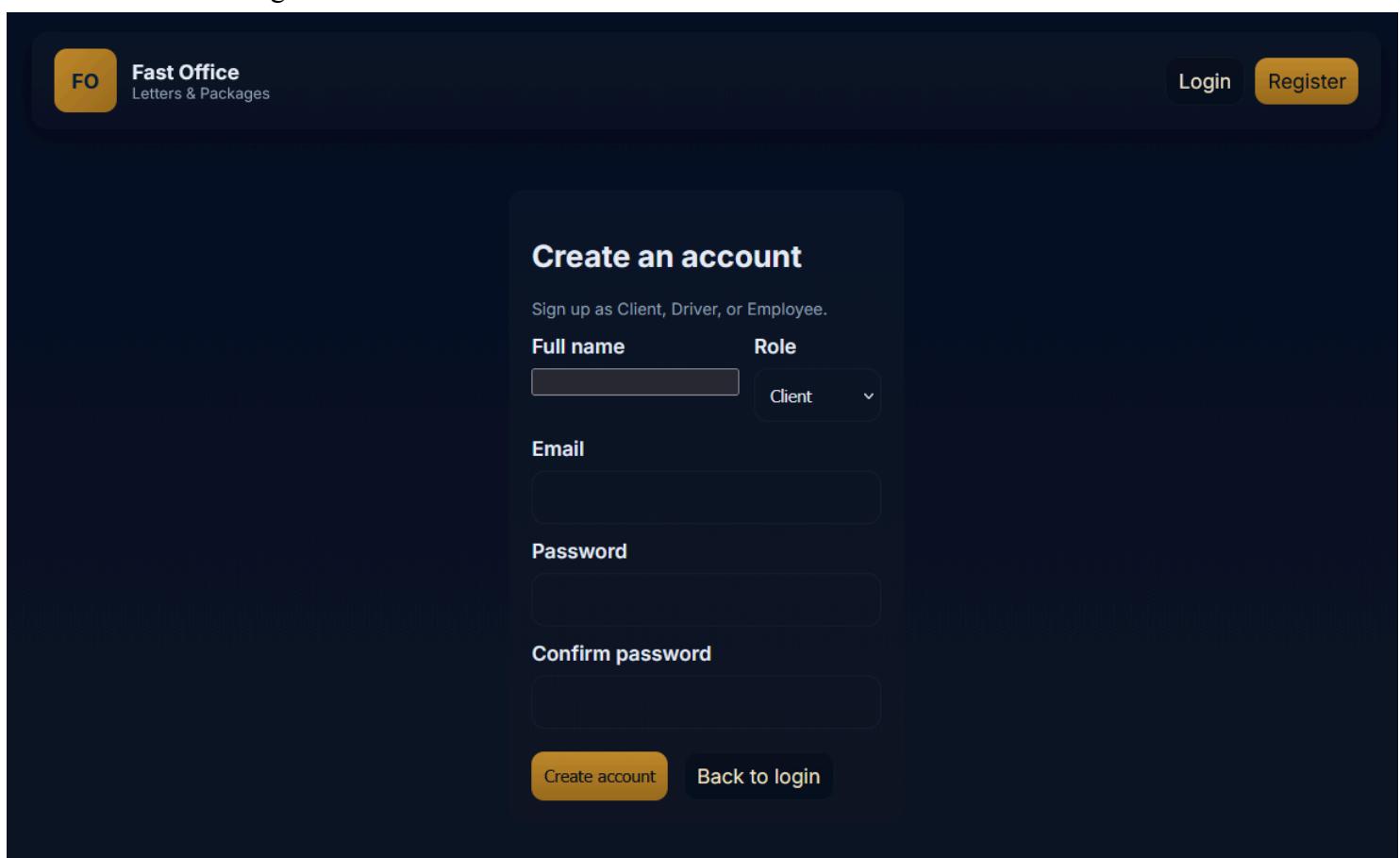
GITHUB REPO: [https://github.com/Diego-Alonso-05/Post\\_Office.git](https://github.com/Diego-Alonso-05/Post_Office.git)

- (a)** Implemente em Django o protótipo de aplicação. Nesta implementação deve ser possível navegar-se na aplicação como se esta já estivesse na totalidade implementada.

Login



## Register



The screenshot shows a registration form titled "Create an account". The form is designed for clients, drivers, or employees. It includes fields for "Full name", "Role" (set to "Client"), "Email", "Password", and "Confirm password". There are "Create account" and "Back to login" buttons at the bottom.

**Create an account**

Sign up as Client, Driver, or Employee.

**Full name** **Role**

Client

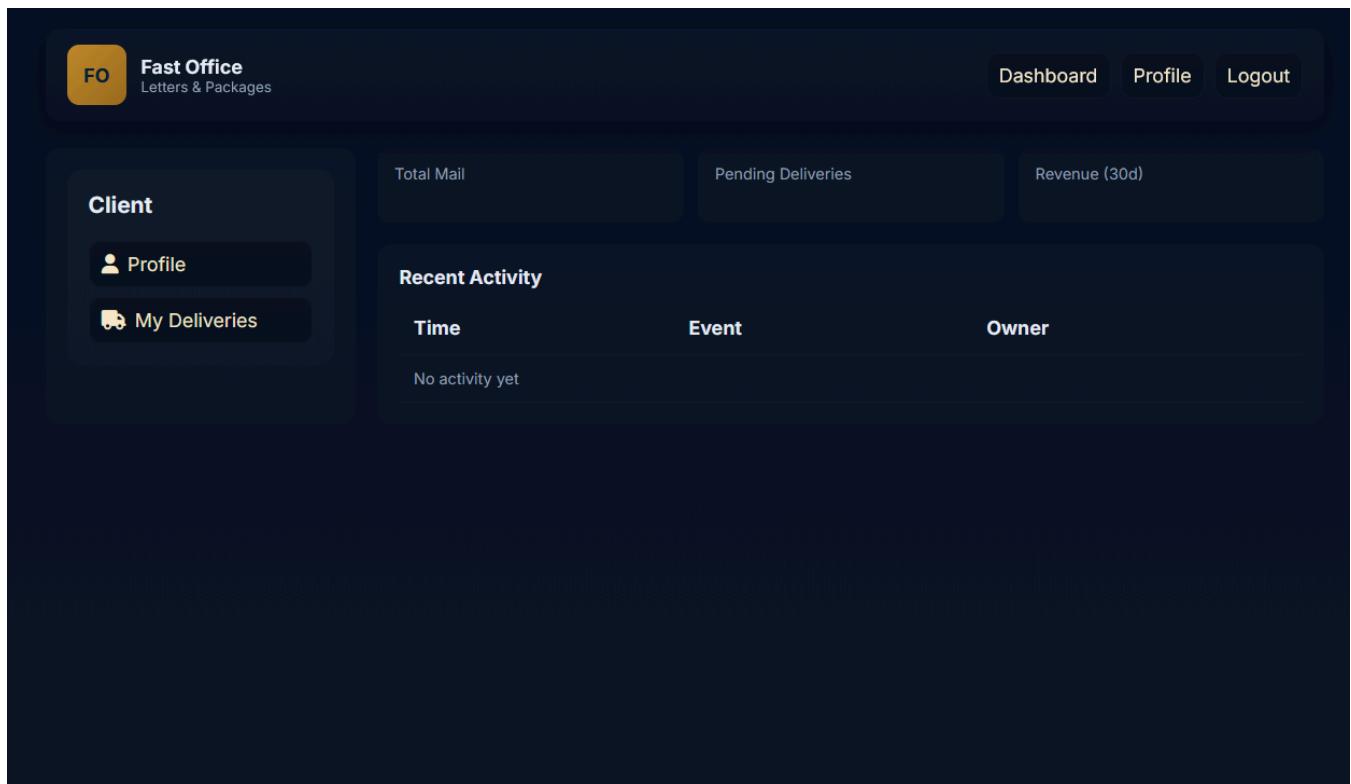
**Email**

**Password**

**Confirm password**

**Create account** **Back to login**

Logged in (dashboard)



The screenshot shows a client dashboard for "Fast Office". The top navigation bar includes links for "Dashboard", "Profile", and "Logout". On the left, a sidebar for "Client" users shows "Profile" and "My Deliveries" options. The main area displays "Total Mail", "Pending Deliveries", and "Revenue (30d)" metrics. A "Recent Activity" section shows no activity yet.

**Client**

**Profile** **My Deliveries**

Total Mail Pending Deliveries Revenue (30d)

**Recent Activity**

Time	Event	Owner
No activity yet		

## Admin (dashboard)

The screenshot shows the Admin dashboard for the Fast Office system. At the top, there's a navigation bar with links for Dashboard, Warehouses, Vehicles, Routes, Mail, Deliveries, and Logout. On the left, a sidebar titled "Admin" contains buttons for Warehouses, Mail, Vehicles, and Deliveries. The main area displays three key metrics: Total Mail (represented by a blue bar), Pending Deliveries (represented by a red bar), and Revenue (30d) (represented by a green bar). Below these metrics is a "Recent Activity" section with columns for Time, Event, and Owner, which currently shows "No activity yet".

## Admin - Vehicle Management

The screenshot shows the Admin - Vehicle Management page. The top navigation bar includes links for Dashboard, Warehouses, Vehicles, Routes, Mail, Deliveries, and Logout. A "Vehicles" section lists one vehicle entry: AB-12-CD (Plate), Transit (Model), Ford (Brand), and Available (Status). There are "Edit" and "Delete" buttons next to the entry. A "+ Add Vehicle" button is located in the top right corner of the vehicles section.

## Admin - Vehicle Management (add vehicle)

Fast Office  
Letters & Packages

Dashboard Warehouses Vehicles Mail Deliveries Logout

### Add Vehicle

Plate Number:

Model:

Assigned driver:

Status:

Active

Save Vehicle

## Warehouse Management (Admin)

Warehouses

+ New Warehouse

Name	Contact	Address	Opening Time	Closing Time	Max Capacity	Actions
PO1	1234	1234567890	12:30	22:40	34342	Edit Delete

## Base de Dados 2

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### Delivery Management - Deliveries List

The screenshot shows the 'Fast Office' web application interface. At the top, there is a navigation bar with links for Warehouses, Vehicles, Mail, Deliveries, Profile, Login, and Register. The 'Deliveries' link is highlighted. Below the navigation bar, there is a section titled 'Welcome,' followed by 'Your Deliveries' and 'Your Invoices'. Under 'Your Deliveries', there is a table with columns for ID, Status, and Updated At. A message indicates 'No deliveries found'. Under 'Your Invoices', there is a table with columns for Invoice ID, Amount, and Date. A message indicates 'No invoices found'.

### Delivery Management - Deliveries List

The screenshot shows a browser window with multiple tabs open. The active tab is titled 'Deliveries' and has the URL '127.0.0.1:8000/deliveries/'. The browser's address bar also shows this URL. The page content is titled 'Deliveries' and includes a 'Filter by Post Office' dropdown set to 'All'. There is a button labeled '+ New Delivery'. A table lists one delivery entry:

ID	Tracking	Status	Post Office	Recipient	Priority	Actions
3	diegowju30	Delivered	Main Office	a	high	Edit   Delete

## Delivery Management - Deliveries Create

New Delivery

Tracking number:

Description:

2a

Sender name:

a

Sender address:

a

## Delivery Management - Deliveries Edit

Edit Delivery

Tracking number:

diegowju30

Description:

2a

Sender name:

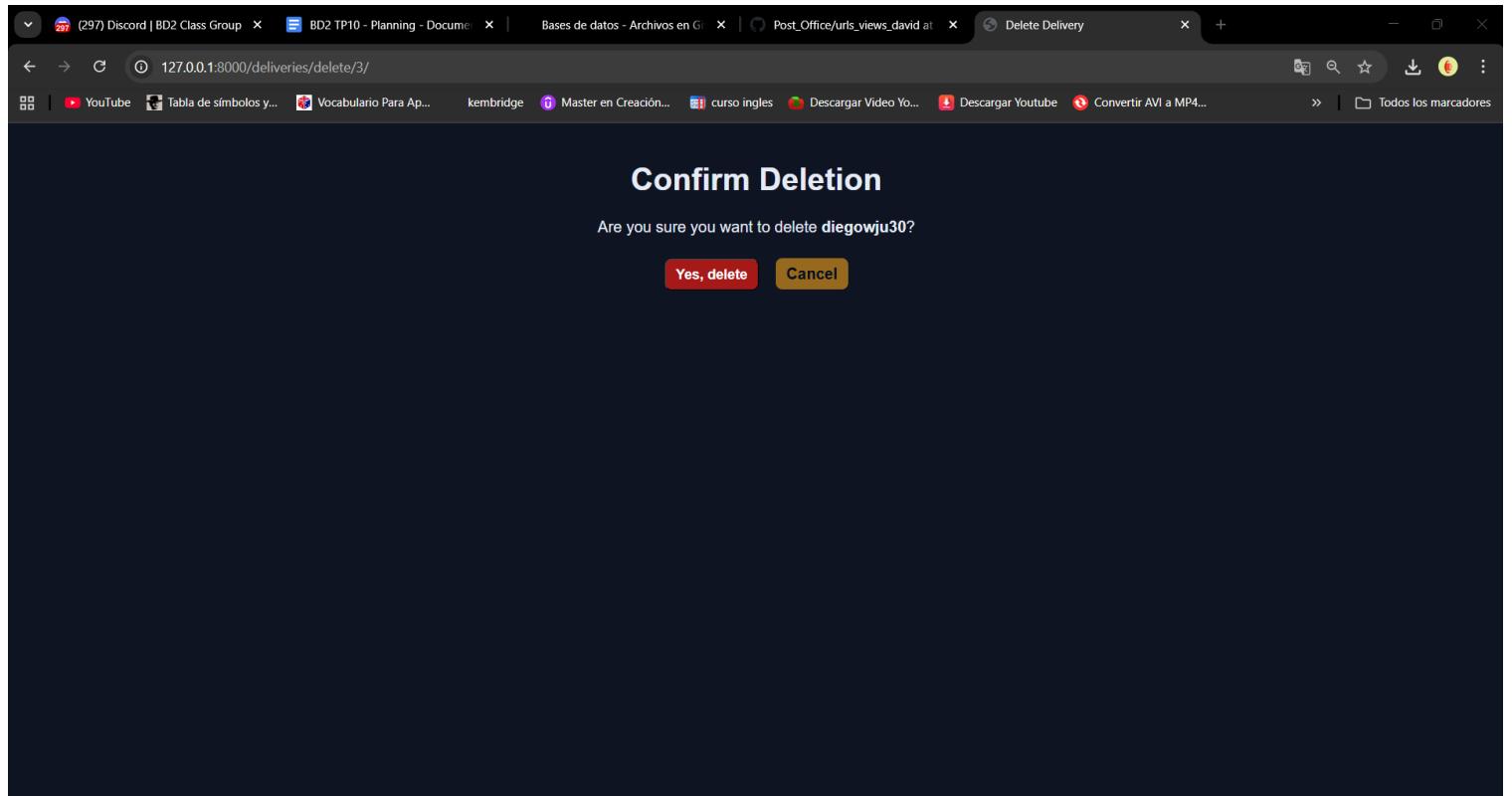
a

Sender address:

a

01/11/25

## Delivery Management - Deliveries Delete



## Routes - Admin

ID	Description	Status	Vehicle	Driver	Origin	Destination	
2001	Lisbon North deliveries	NotStarted	4001	2	Central Lisbon Post Office	North Zone Distribution Center	<a href="#">View</a>

## Client - Deliveries

The screenshot shows a dark-themed web application for managing deliveries. At the top left is a logo with 'FO' and the text 'Fast Office Letters & Packages'. On the right are links for 'Dashboard', 'Profile', and 'Logout'. Below this is a section titled 'Deliveries' with a single row of data. The columns are labeled 'Tracking', 'Driver', 'Vehicle', 'Delivery date', and 'Status'. The tracking number 'TRK123456789' is listed under 'Tracking'. To the right of the tracking number are two buttons: 'View' and 'Edit'. The rest of the page is blank.

## Client - Deliveries

This screenshot is identical to the one above, showing the same dark-themed interface for managing deliveries. It features the 'Fast Office' logo at the top, followed by 'Dashboard', 'Profile', and 'Logout' links. The 'Deliveries' section contains a single row with tracking number 'TRK123456789', and 'View' and 'Edit' buttons to its right. The page is otherwise empty.

## Invoices.html

The screenshot shows a dark-themed web application for managing invoices. At the top left is a logo with 'FO' and the text 'Fast Office Letters & Packages'. On the right are links for 'Dashboard', 'Profile', 'Invoices', and 'Logout'. Below this is a section titled 'Invoices' containing a table of data. The columns are labeled 'Date', 'Client', 'Status', 'Amount (€)', 'Payment Method', and 'Address'. The table has five rows of data. The first row shows a date of '2025-11-01 09:45', client 'admin', status 'Pending', amount '125.00', payment method 'Transfer', and address 'Rua das Flores, Braga'. The second row shows a date of '2025-10-28 10:30', client 'admin', status 'Paid', amount '32.50', payment method 'Cash', and address 'Avenida Nova, Lisbon'. The third row shows a date of '2025-10-25 14:00', client 'admin', status 'Pending', amount '45.75', payment method 'Card', and address 'Rua Central, Porto'. The fourth row shows a date of '2025-10-22 17:10', client 'admin', status 'Paid', amount '15.20', payment method 'Card', and address 'Travessa do Sol, Coimbra'.

Date	Client	Status	Amount (€)	Payment Method	Address
2025-11-01 09:45	admin	Pending	125.00	Transfer	Rua das Flores, Braga
2025-10-28 10:30	admin	Paid	32.50	Cash	Avenida Nova, Lisbon
2025-10-25 14:00	admin	Pending	45.75	Card	Rua Central, Porto
2025-10-22 17:10	admin	Paid	15.20	Card	Travessa do Sol, Coimbra

## Base de Dados 2

01/11/25

**(b)** Crie na base de dados todos os utilizadores (utilizadores do SGBD) necessários à aplicação.

localhost:27017 > PostOffice\_Proj\_MDB > users

Documents 4 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#) [Explain](#) [Reset](#) [Find](#) [Options](#)

[ADD DATA](#) [EXPORT DATA](#) [UPDATE](#) [DELETE](#) 25 1 – 4 of 4

`{  
 "_id": 1,  
 "username": "john_doe",  
 "psswd_hash": "hashed_password",  
 "name": "John Doe",  
 "contact": "+123456789",  
 "address": "123 Main St, City",  
 "email": "john@example.com",  
 "created_at": "2025-11-01T12:00:00Z",  
 "updated_at": "2025-11-01T12:00:00Z",  
 "role": "client",  
 "tax_id": "TAX123456"  
}  
  
{  
 "_id": 2,  
 "username": "driver_mike",  
 "psswd_hash": "hashed_password",  
 "name": "Mike Driver",  
 "contact": "+987654321",  
 "address": "456 Elm St, City",  
 "email": "mike@po.com",  
 "created_at": "2025-10-30T09:00:00Z",  
 "updated_at": "2025-11-01T10:00:00Z",  
 "role": "driver",  
 "employee": {  
 "position": "Driver",  
 "schedule": "08:00-16:00",  
 "wage": 15.5,  
 "is_active": true,  
 "hire_date": "2023-03-15"  
 },  
 "driver_info": {  
 "license_number": "DL-987654",  
 "license_category": "C",  
 "license_expiry_date": "2028-05-20",  
 "driving_experience_years": 7,  
 "driver_status": "Available"  
 }  
}  
  
{  
 "_id": 3,  
 "username": "admin",  
 "psswd_hash": "admin",  
 "name": "EU",  
 "contact": "+123456789",  
 "address": "123 Main St, City",  
 "email": "john@example.com",  
 "created_at": "2025-11-01T12:00:00Z",  
 "updated_at": "2025-11-01T12:00:00Z",  
 "role": "admin",  
 "tax_id": "TAX123456"  
}  
  
{  
 "_id": 4,  
 "username": "staff_joe",  
 "psswd_hash": "hashed_password",  
 "name": "Joe Staff",  
 "contact": "+911111111",  
 "address": "654 Rio Sul, City",  
 "email": "joe@po.com",  
 "created_at": "2025-10-30T09:00:00Z",  
 "updated_at": "2025-11-01T10:00:00Z",  
 "role": "staff",  
 "employee": {  
 "position": "Staff",  
 "schedule": "08:00-16:00",  
 "wage": 15.5,  
 "is_active": true,  
 "hire_date": "2023-03-15"  
 },  
 "staff_info": {  
 "department": "Customer_Service"  
 }  
}`

**(c)** Identifique e caracterize as situações em que aplicação irá importar ou exportar dados em Json

### **Exportação de Dados**

Deliveries and Invoices: INVOICE, DELIVERY, CLIENT , to accounting and external audit systems , ensure traceability and financial consistency.

Clients data: CLIENT, INVOICE , enable personalized campaigns, loyalty programs, and customer service improvement.

Operational Data: ROUTE, EMPLOYEE\_DRIVER, VEHICLE, POST\_OFFICE\_STORE . to logistics monitoring systems , support decision-making and performance optimization.

Backup and NoSQL Storage: All core entities (USER, CLIENT, INVOICE, DELIVERY, ROUTE, etc.) to NoSQL databases in JSON format ensure redundancy and flexibility for large-scale data analysis.

Performance Reports: ROUTE, VEHICLE, EMPLOYEE\_DRIVER, INVOICE , to analytics dashboards (Power BI, Tableau, Grafana) , provide productivity and service quality indicators.

Logs and Audits: USER, EMPLOYEE, INVOICE , to external JSON log files , maintain activity records and ensure legal compliance.

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