

Software Requirements Specifications

LOGIXPRESS

September 2024

0.- Document sheet

Date	Revision	Authors

September - 2024	Mejia Gonzalez David Vazquez Granados Eduardo Antonio Guzman Velazquez Erlin Gabriel
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1.INTRODUCTION

This document provides a detailed analysis, including project justification, scope, objectives, requirements, human and technological resources, costs and benefits. It highlights the importance of collections management and efficiency and presents an overview of how this platform can be an effective and customized solution to address these challenges.

1.1 PURPOSE OF THE PROJECT

The purpose of this document is to address one of the most common issues

LOGIXPRESS aims to solve these situations by making deliveries to the places provided by affiliated companies, optimizing resources and time.

LOGIXPRESS offers the treatment of loads, both heavy and specially treated loads, as well as fragile loads, while maintaining efficiency and punctuality.

This Software Requirements Specification (SRS) document follows the IEEE 830 standard and describes in detail the functionalities, features, and limitations of the LOGIXPRESS system. This document will serve as a guide for the development team and provide a clear basis for planning, designing, and implementing the system.

General Description System:

LOGIXPRESS is a logistics management platform designed to optimize the delivery of goods, including heavy, fragile, liquid, and gas loads, while ensuring efficiency and punctuality. The system is built to provide an end-to-end solution for delivery management, from route optimization to vehicle and resource allocation, while maintaining high standards of security and usability.

The platform enables users to manage deliveries by calculating optimal routes, assigning appropriate vehicles based on cargo type and size, and handling resource inventories such as packaging materials. LOGIXPRESS also supports vehicle maintenance tracking, employee management, and the ability to associate specific delivery locations with client accounts. Additionally, it offers features like product tagging and selection of working materials to facilitate proper loading and handling of merchandise.

Key functional areas include user registration, route optimization, vehicle management, delivery tracking, and product handling, all with the aim of improving efficiency, reducing lead times, and providing a customized logistics solution for businesses.

1.2 Scope

This document provides a detailed analysis, including project justification, scope, objectives, requirements, human and technological resources, costs and benefits. It highlights the importance of lead time management and efficiency and is presented as a general overview of how this application can effectively solve and customize to address challenges.

1.3 Personnel involved

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APPROVAL	

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APPROVAL	

1.4 Definitions, acronyms and abbreviations

Nombre	Description
User	Person who will use the system to manage the data
RF	Functional Requirement
SRS	Software Requirements Specification
NFR	Non-functional requirement

1.5 References

Document Title	Reference
Standard IEEE 830- 1998	IEEE

1.6 Overview

In the program we expect to optimize time and resources for the transportation of shipments by customers. We will implement an architecture that will help us to avoid system collapse, we will also monitor the process to ensure that it has a high reliability, and we will also put a priority focus on security. All this in order to achieve a reliable delivery agreement between us and the customer.

This document is fundamental for understanding LOGIXPRESS and will be useful to everyone involved in its development. It will clearly and structurally explain the requirements and objectives for achieving an efficient and effective development. 1.7 Functional Requirements

2.- Functional Requirements

1. Functional Requirement: User Registration

Description:

The system will allow new users to register by entering an email address, full name, phone number, and password.

Inputs:

- Full Name
- Company
- Email Address
- Phone Number
- Password

Outputs:

- Successful registration confirmation
- Error message if registration fails

2. Functional Requirement: User Login

Description:

The system will allow registered users to log in.

Inputs:

- Email Address
- Password

Outputs:

- Access if credentials are valid
- Error message if credentials are invalid

3. Functional Requirement: User Account Management

Description:

The user will be able to manage their account information, including updating data, locations, and deleting their account.

Inputs:

- Full Name
- Company
- Email Address
- Phone Number
- Password
- Locations

Outputs:

- Updated data

4. Functional Requirement: Route Optimization

Description:

The system will calculate optimal routes for a set of deliveries.

Inputs:

- Delivery Destination
- Delivery Origin
- Time Window

Outputs:

- Optimized route
- Estimated distance and time

5. Functional Requirement: Registration and Removal of Freight Vehicles

Description:

The system will allow for the registration and removal of freight vehicles.

Inputs:

- For Registration:

- Serial Number
- Select Model
- Select Brand
- Select Load Type
- Select Vehicle Category
- Mileage
- Fuel consumption per kilometer

- For Removal:

- Vehicle Number

Outputs:

- For Registration:

- Successful registration message

- For Removal:

- Successful removal message

6. Functional Requirement: Cargo Vehicle Assignment

Description:

Available vehicles will be managed for deliveries, selecting the most suitable one based on the type, weight, and size of the cargo.

Inputs:

- Vehicle Number

Outputs:

- Vehicle Number
- Vehicle Type
- License Plate
- Serial Number
- Availability
- Status

7. Functional Requirement: Delivery Management

Description:

Control and tracking of deliveries will be managed.

Inputs:

- Delivery Number
- Status
- Scheduling Window

Outputs:

- Delivery Number
- Delivery status update

8. Functional Requirement: Employee Management

Description:

Employee assignment to deliveries will be managed.

Inputs:

- Employee Number

Outputs:

- Employee Number
- First Name
- Last Name

9. Functional Requirement: Location Management

Description:

The client can associate locations with their account.

Inputs:

- Code
- Address

Outputs:

- Address

10. Functional Requirement: Product

Description:

The client will specify the approximate weight, dimensions, quantity, labeling (Fragile or General Load), and product category (Cold Cuts, Appliances, Construction Materials, etc.).

Inputs:

- Code
- Weight
- Dimensions
- Quantity
- Brand
- Status

Outputs:

- Weight
- Dimensions
- Quantity
- Brand

11. Functional Requirement: Vehicle Maintenance Management

Description:

Maintenance costs, dates, and descriptions of work performed on vehicles will be specified.

Inputs:

- Code
- Description
- Cost
- Date

Outputs:

- Description
- Cost
- Date

12. Functional Requirement: Vehicle Usage History

Description:

Displays the usage information for a specific vehicle.

Inputs:

- Vehicle Number

Outputs:

- Vehicle Number
- Employee Name

- Usage Date
- Delivery
- Mileage before trip
- Mileage after trip

3.- No Functional Requirements

RNF1: Data Security

- Description: The system must ensure the security and confidentiality of user data through end-to-end encryption and robust security measures.

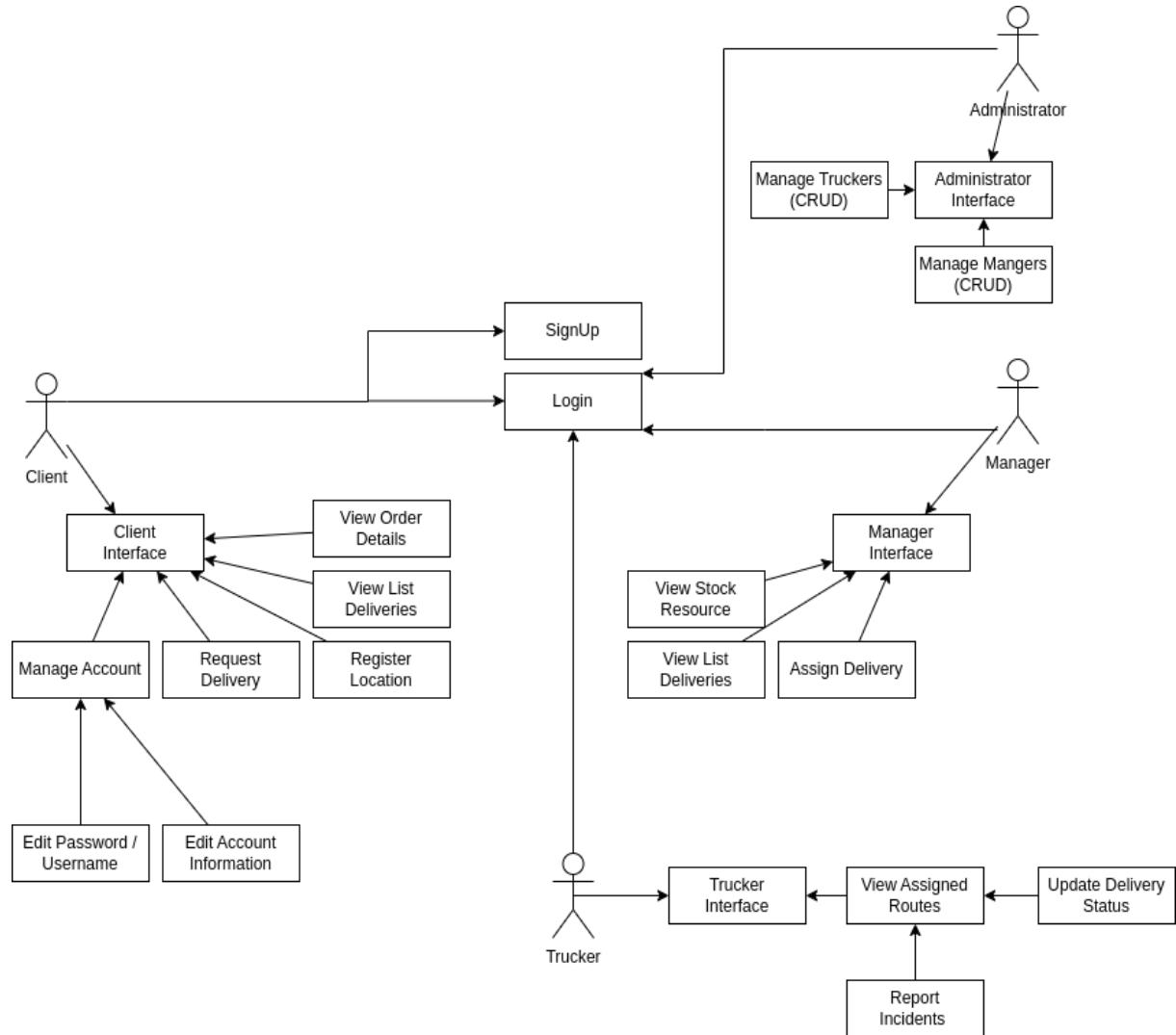
RNF2: Availability

- Description: The system must be available 24 hours a day, 7 days a week, with minimal planned downtime for maintenance.

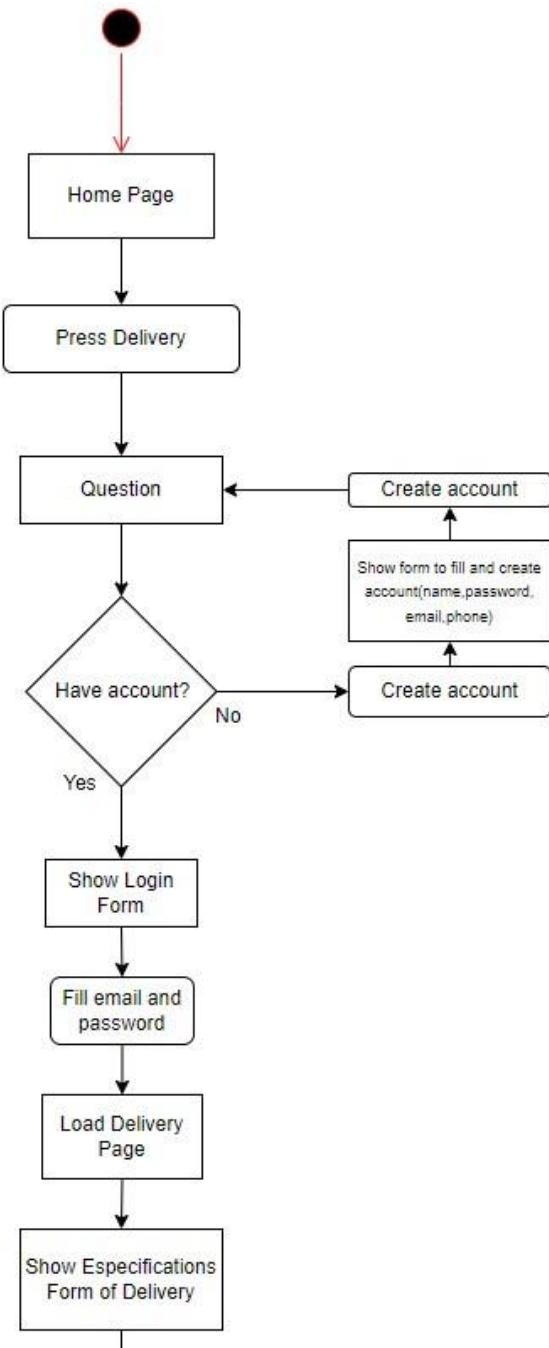
RNF3: Usability

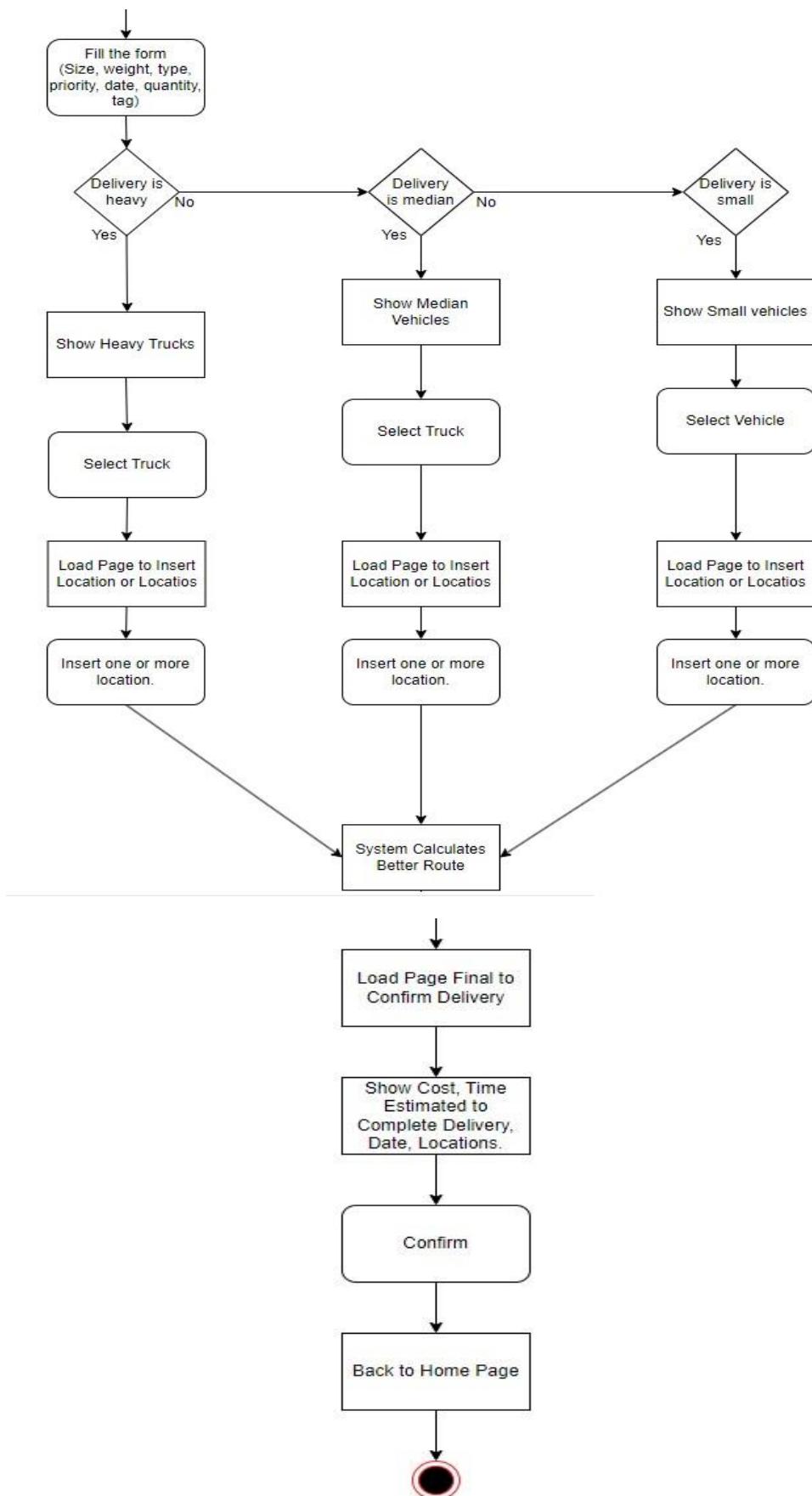
- Description: The system must have an intuitive and user-friendly interface, both on the website and the mobile application, to ensure user convenience

Use of Cases

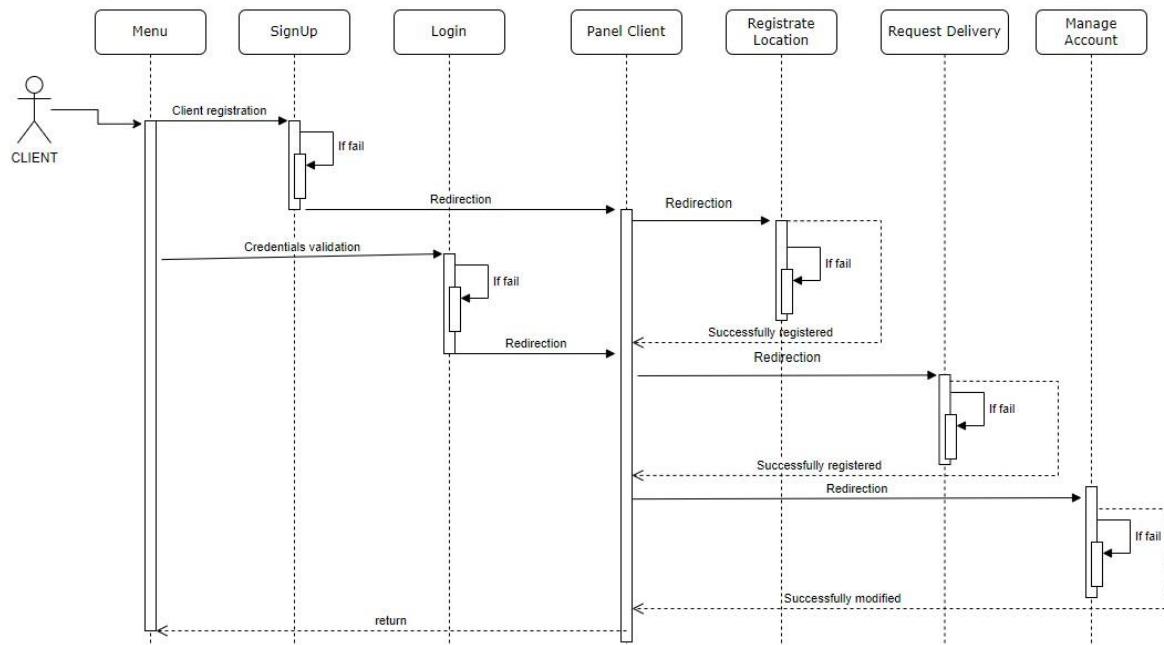


Activities

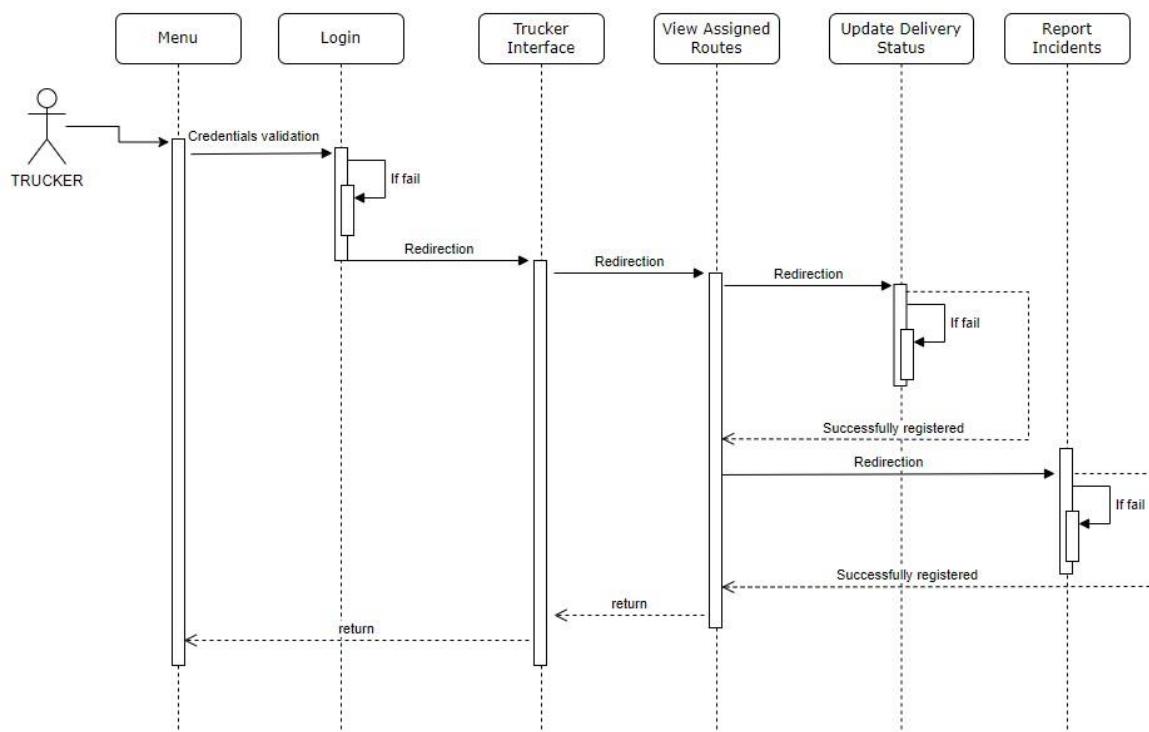




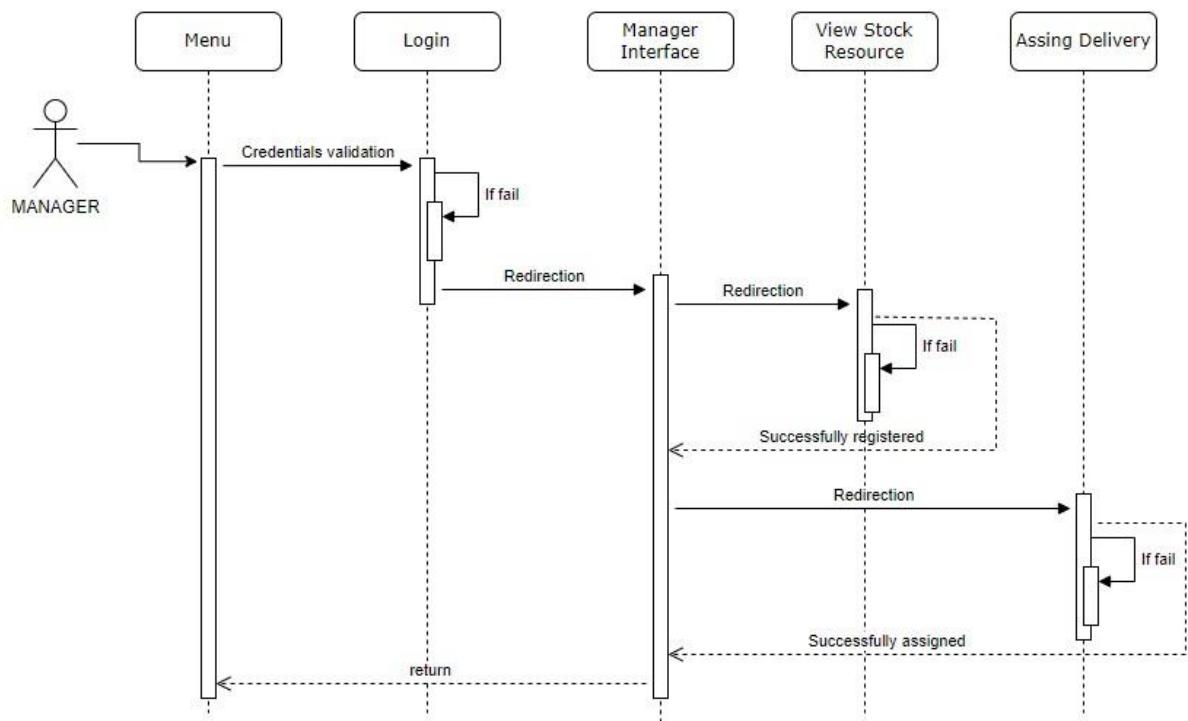
Sequence Client



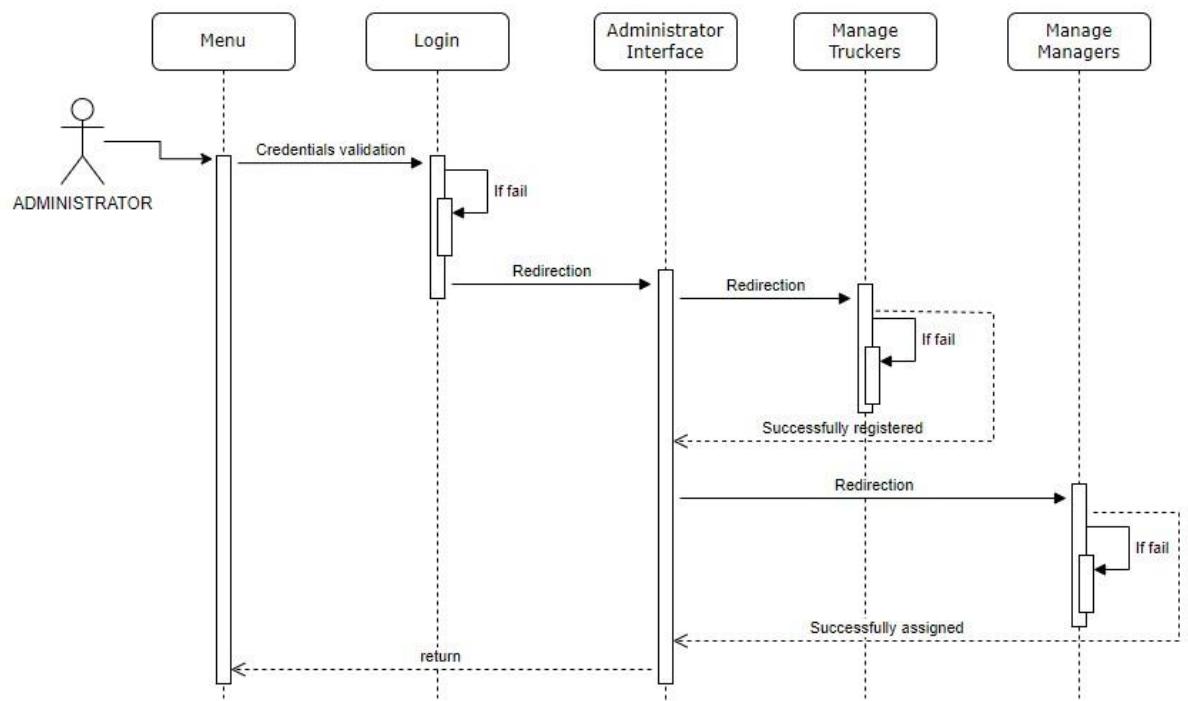
Sequence Trucker



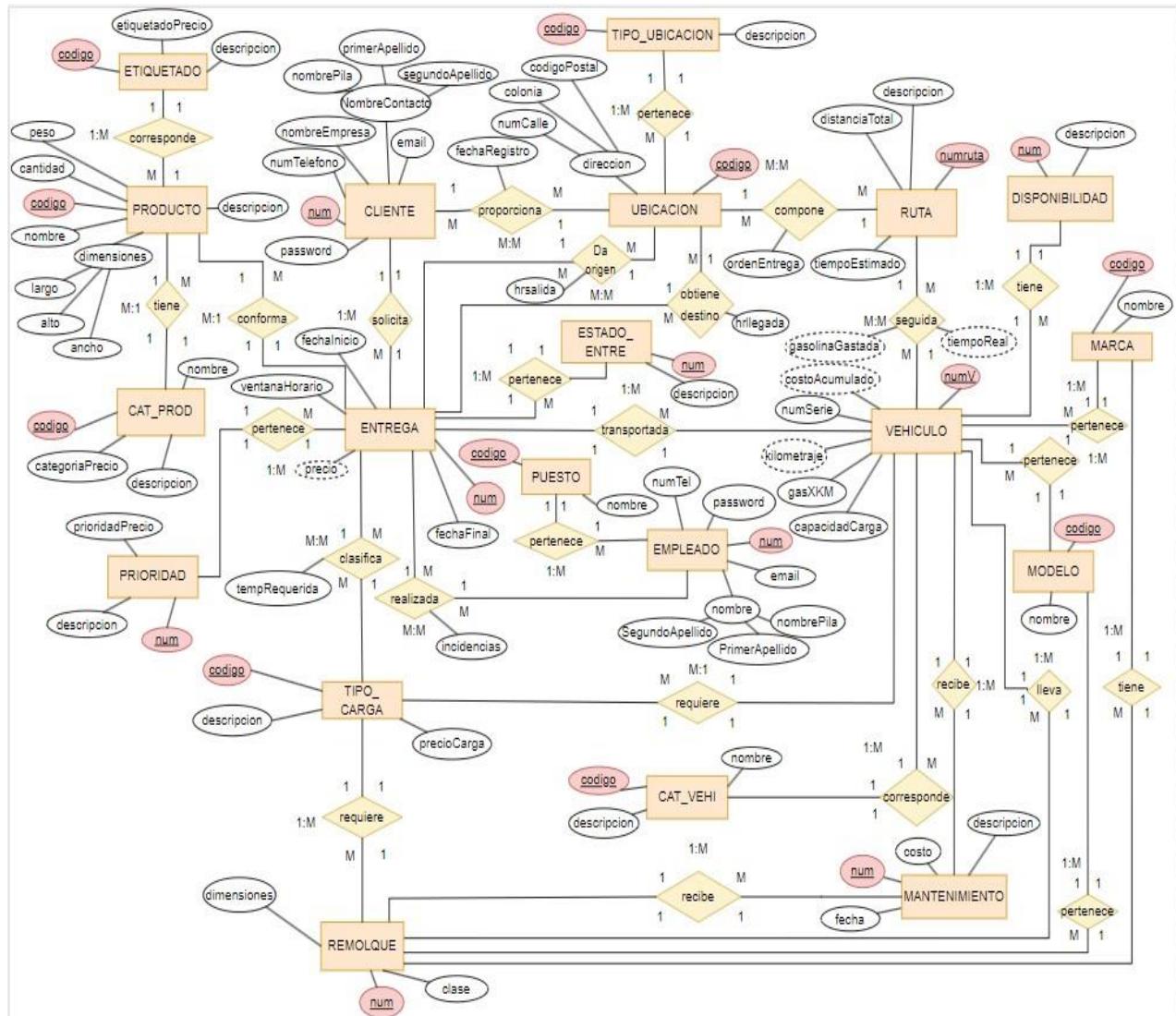
Sequence Manager



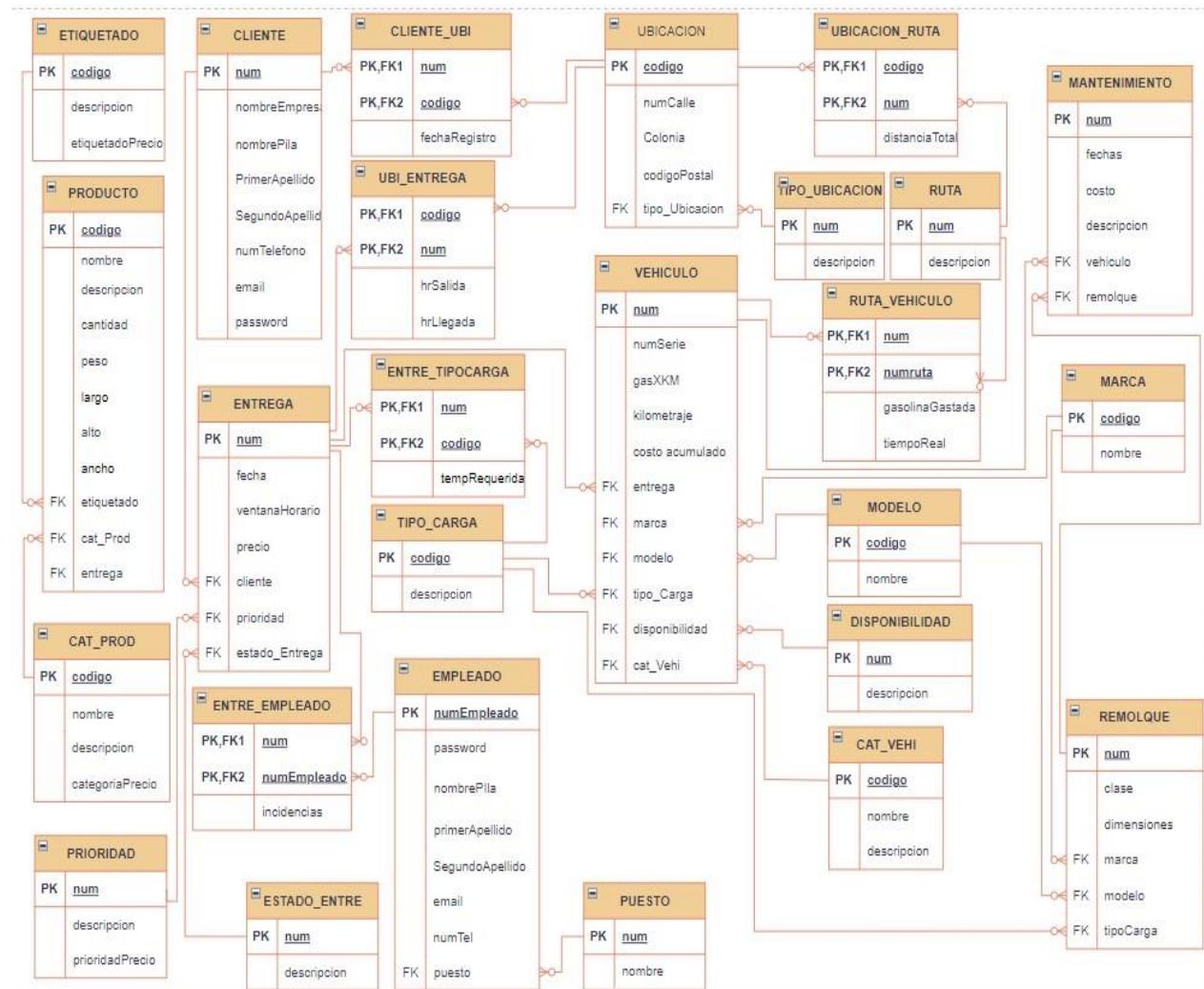
Sequency Administrator



DER



MR



4.- STAGES OF WEB PAGE CREATION

1. PRE-PROCESS

In this stage, the roles for the process of building the website are assigned, assigning who will be in charge of each process.

Mejia Gonzalez David	Creador de contenido
Vázquez Granados Eduardo Antonio	Arquitecto de la información
Mejia Gonzalez David	Pruebas
Vázquez Granados Eduardo Antonio	Diseñador grafico
Guzmán Velázquez Erlin Gabriel	Diseñador UI y UX
Guzmán Velázquez Erlin Gabriel	Front-End
Vázquez Granados Eduardo Antonio	Back-End
Mejia Gonzalez David	Supervisor de Testing

2. CONTENT STRATEGY

Website planning, development and administration

- This phase addresses content planning for order management and delivery optimization. The goal is to provide a clear and functional experience for users interacting with the system.
- Overview: The main purpose of the website is to help customers manage, track, and optimize their deliveries. Identify audiences (businesses, individuals) and their specific needs, such as ease of ordering, real-time tracking, and route optimization.
- **Content plan:** Plan the types of content that will be needed, such as:
 - **Description of services:** Detailed explanation of delivery services, order management and route optimization process.
 - **Guides and FAQs:** Create content that makes the system easier to use, such as tutorials for placing orders, tracking deliveries, and managing logistics.
 - **Testimonials or case studies:** Show success stories of companies or individuals who have used the service effectively. Content should focus on the clarity, reliability, and efficiency of the system.

Website Content

- Communicate the logistics process and provide the necessary tools for customers to manage their deliveries effectively. Clear instructions, defined action buttons, and real-time updates should be the pillars of the content.
- **Visitor view:** Identify that the most important thing for site users will be efficient order management, transparency in delivery times and route optimization.
- **Who you want to reach and who they are:** The following is identified as the target audience:
 - **Companies:** Those that require the transport of goods, such as construction materials, furniture or food.
- **Audit images, videos, texts, and how content relates to another:**
 - **Images:** Images should show examples of products transported, vehicles used, and tracking tools.
 - **Texts:** Texts should be simple and clear, explaining each step of the delivery process. The relationship between the contents should be logical, guiding the user through the entire order management process.

Content Modeling

- **Hierarchy**

- **Most important pages:** The main pages include the order form, order tracking, and delivery options.
- **Support pages:** Pages that provide additional information, such as FAQs and testimonials, should complement the main pages.
- **Supplemental pages:** Pages such as contact, and company information should provide support for key pages.
- **Information Architecture:** Structure content logically, ensuring clear navigation between order management, tracking, and service details sections.
- **Wireframing:** Design wireframes to visualize the arrangement of elements on the page, without focusing on colors yet. Place forms, buttons, and content blocks in their general positions, and add explanatory comments.

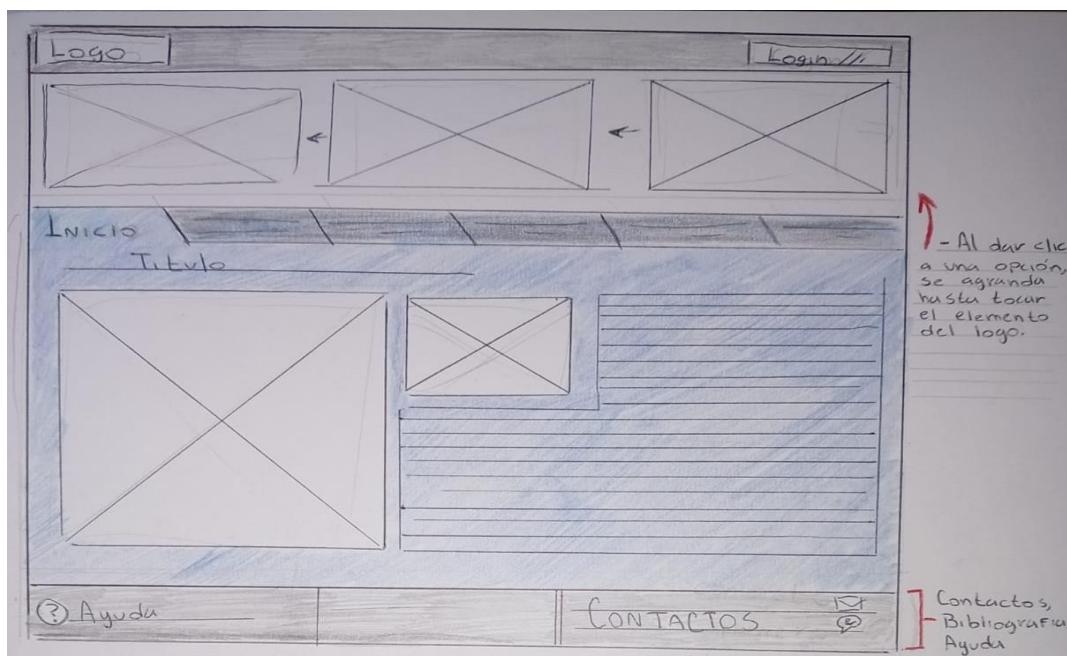


Figure 1 Home Concept

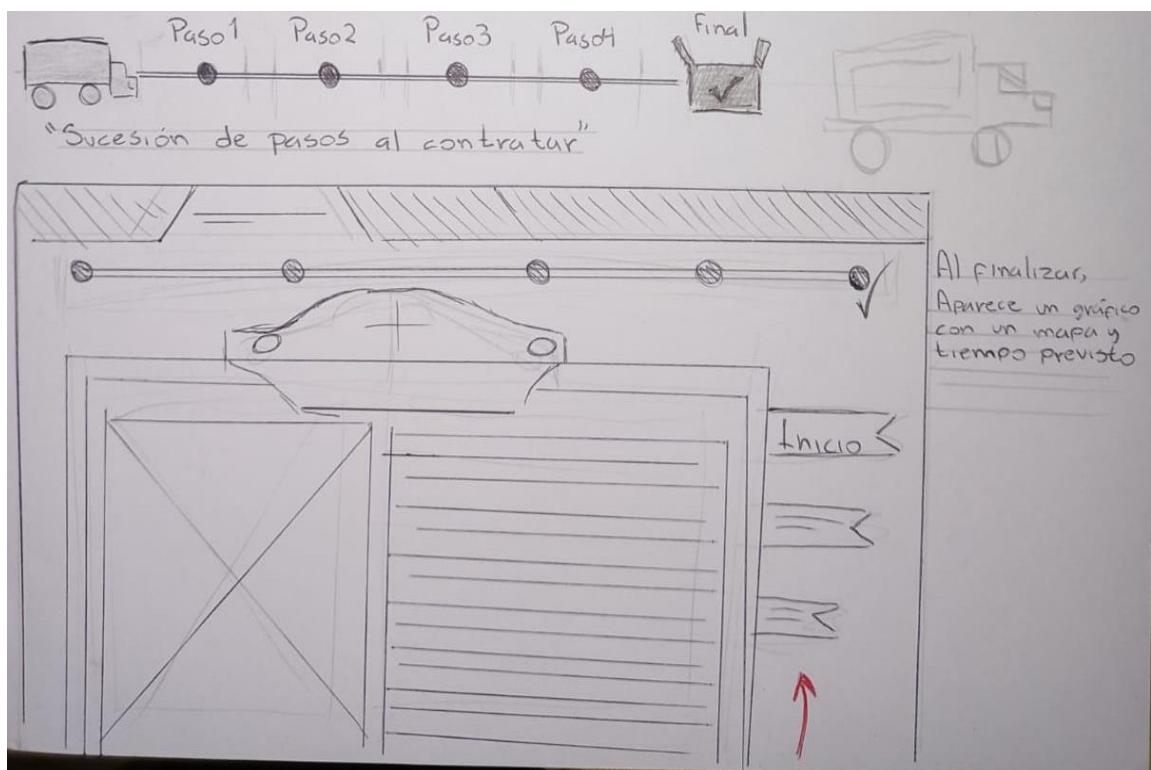


Figure 2 Delivery Request Form Page Concept

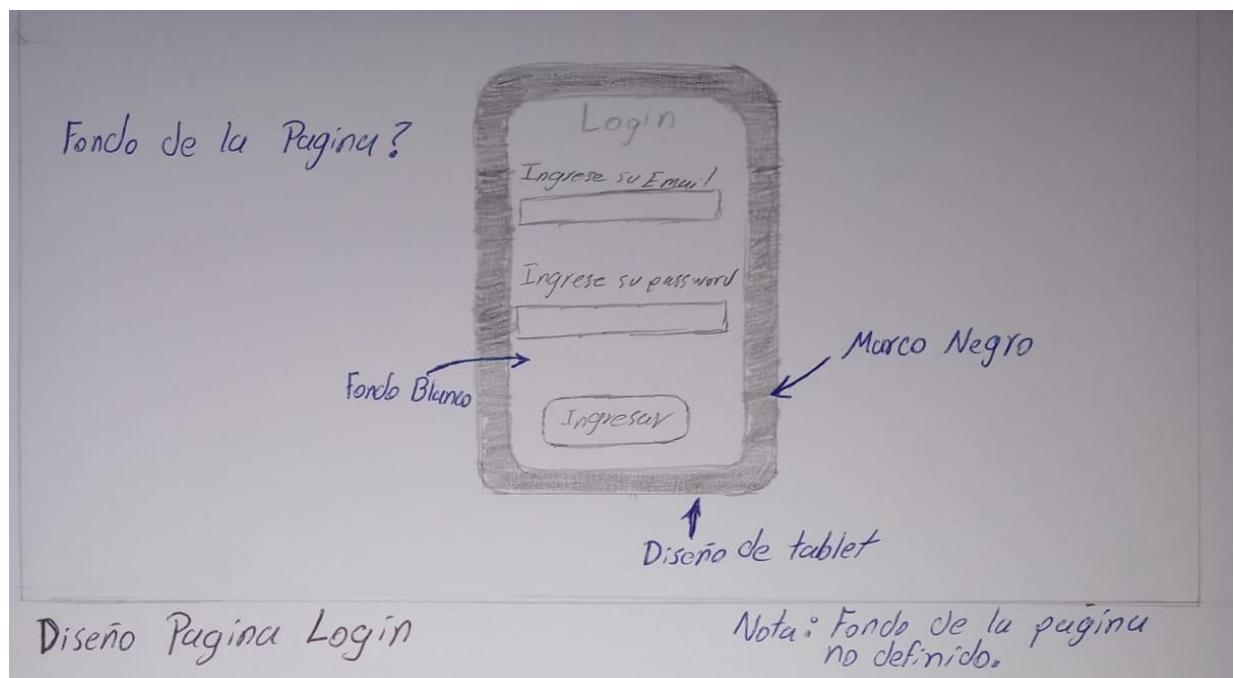


Figure 3 Login Page Concept

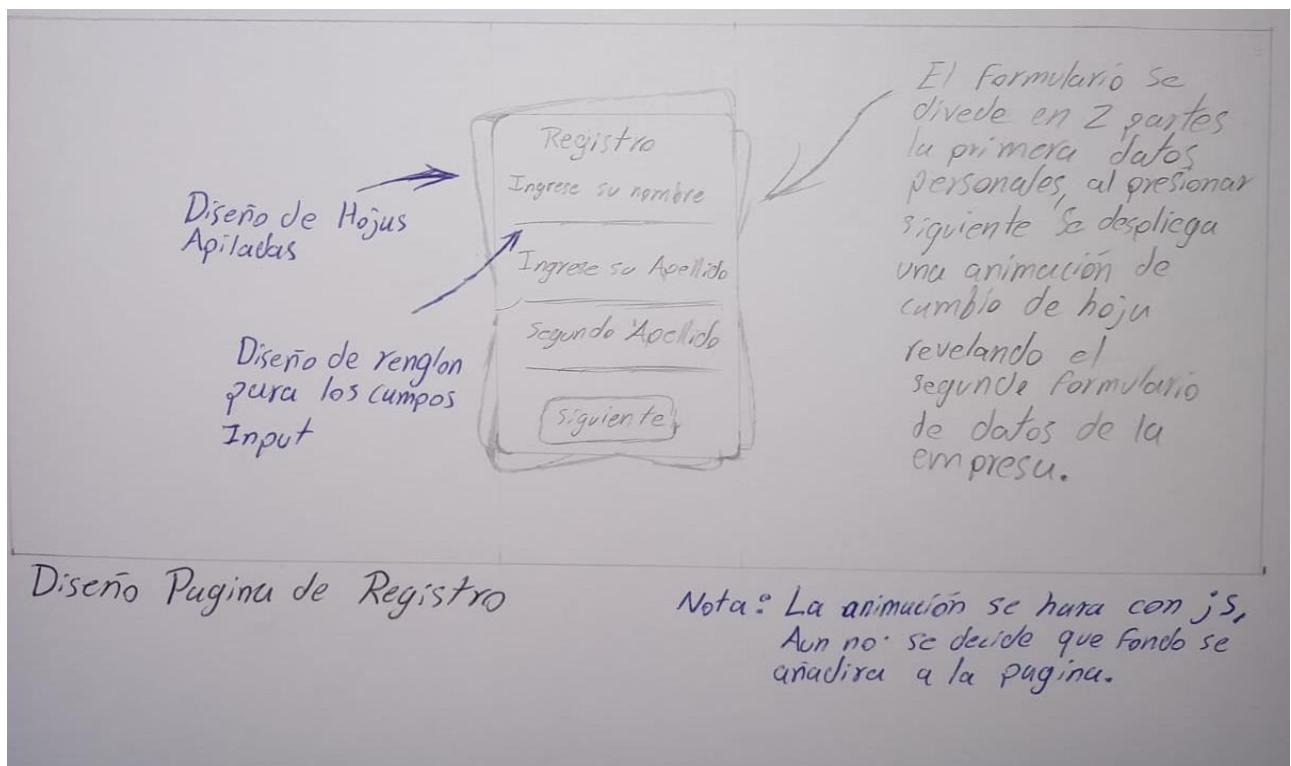


Figure 4 Register Page Concept

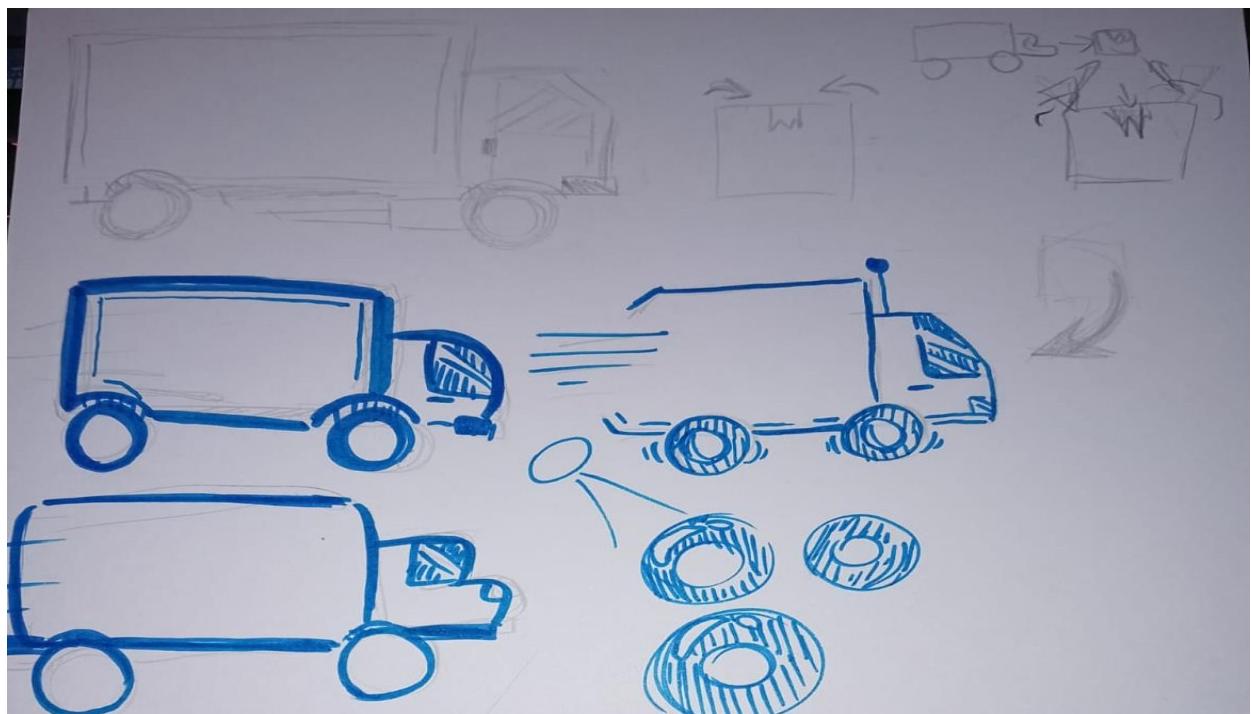


Figure 5 Logo Concept Not Definitive

3. PRE-CONSTRUCTION

Website Flow

- The website flow should be clearly defined, to ensure that users can place orders and manage them efficiently. A possible flow would be the following:
- **Home page:** Presents clear options for placing a new order or tracking an existing one.
- **Create a new order:** The user accesses a form where the details of the product, quantity, and delivery destinations are entered.
- **Order confirmation:** The system displays an order summary with the selected delivery options, and the user confirms the shipment.
- **Order tracking:** The user receives a tracking number that allows them to monitor the status of their delivery.
- **Viewing Past Orders:** Users can log in to view previous orders or reorder similar products.

Images, videos, logos, UX design

- For the construction phase, the necessary visual and design resources must be identified:
- **Images:** Photographs of delivery vehicles transported products and optimized routes.
- **Videos:** Instructions on how to use the site's features or testimonials from satisfied customers.
- **Logos and branding:** Ensure that the company's visual identity is consistent throughout the site.
- **UX design:** User experience design should be clear and accessible, especially in sections like the order form and tracking tools.

4. CONSTRUCTION Front-End and Back-End Home Page



Figure 6 Home Page

```
4 <!DOCTYPE html>
5 <html lang="en">
6 <head>
7   <meta charset="UTF-8">
8   <meta name="viewport" content="width=device-width, initial-scale=1.0">
9   <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" rel="stylesheet">
10  <link rel="preconnect" href="https://fonts.googleapis.com">
11  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
12  <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap" rel="stylesheet">
13  <link rel="stylesheet" href="css/index.css">
14 <title>Inicio</title>
15
16 </head>
17 <body>
18   <div class="background-image"></div>
19   <div class="login-register">
20     <a href="/LOGIXPRESS/Login.php">Login/Register</a>
21   </div>
22   <section class="content-section">
23     <header class="header-oval">
24       <h1>Bienvenidos a LOGIXPRESS</h1>
25       <p>Optimiza y ahorra en tus envíos de mercancía!</p>
26     </header>
27     <div class="container">
28       <!-- Botón caja 1 - Inicio -->
29       <a href="#" onclick="verificarLogin('Home.html')" class="box">
30         <div class="tape"></div>
31         <div class="icons">
32           <div class="icon up-icon">↑ </div>
33           <div class="icon umbrella-icon">☂ </div>
34         </div>
35         <p class="text">Inicio</p>
36       </a>
37
38       <!-- Botón caja 2 - Entrega -->
39       <a href="#" onclick="verificarLogin('EntregaForm.php')" class="box">
40         <div class="tape"></div>
41         <div class="icons">
42           <div class="icon up-icon">↑ </div>
43           <div class="icon umbrella-icon">☂ </div>
44         </div>
45         <p>Entrega</p>
46       </a>
47
48       <!-- Botón caja 3 - Acerca De -->
49       <a href="#" onclick="verificarLogin('Nosotros.php')" class="box">
50         <div class="tape"></div>
51         <div class="icons">
52           <div class="icon up-icon">↑ </div>
```

Figure 7 Code

This page was created using HTML, PHP, and JavaScript, along with some external and custom resources to structure and style a LOGIXPRESS platform login page.

PHP:

- HTML5: Provides the basic structure of the page, including header tags and navigation links, as well as a welcome section.

JavaScript:

- The checkLogin() function will allow access to other pages to be conditioned based on the user's authentication status. If the user is not logged in, they are automatically redirected to the login page.

CSS and Bootstrap:

- Uses Bootstrap 4.3.1 for layout styles, such as responsive formatting and the use of a container to organize content. A custom stylesheet (index.css) is also loaded to apply additional styling, such as the background image, header, and navigation box styling.

Google Fonts:

- Uses the Pacifico font to give text a distinctive style.

Navigation Structure:

- The page contains a series of interactive boxes that act as buttons to direct to different sections ("Home", "Delivery", "About Us" and "Help"). These boxes will only allow access if the user is logged in; otherwise, they are redirected to the login page.

Login Page

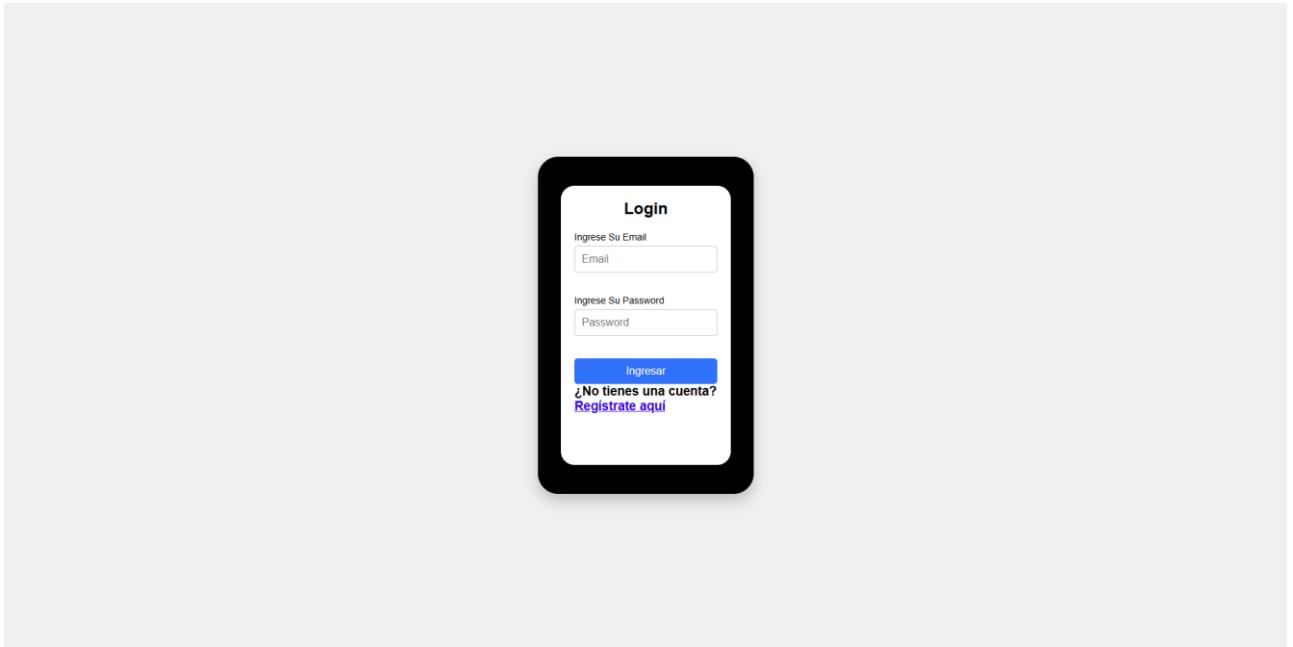


Figure 8 Login Page

```
<!DOCTYPE html>
<html lang="es">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="css/Login.css">
    <title>Login</title>
</head>
<body>
    <section class="tablet">
        <div class="screen">
            <form method="POST" action="">
                <h2>Login</h2>

                <?php if (isset($error)): ?>
                |   <p style="color: red;"><?php echo $error; ?></p>
                <?php endif; ?>

                <label for="email">Ingrese Su Email</label>
                <input type="text" id="email" name="email" placeholder="Email" required>
                <br>
                <label for="password">Ingrese Su Password</label>
                <input type="password" id="password" name="password" placeholder="Password" required>
                <br>
                <button type="submit">Ingresar</button>
                <h3>¿No tienes una cuenta? <a href="/LOGIXPRESS/Register.php">Regístrate aquí</a></h3>
            </form>
        </div>
    </section>
</body>
</html>
```

Figure 9 Code Login Page

This page implements a login page using PHP, HTML and CSS for the LOGIXPRESS platform, allowing users to authenticate and access their account.

1. PHP and Sessions:

Start a session with `session_start()` to manage the user's status and check if they are logged in. If the form is submitted (`$_SERVER['REQUEST_METHOD'] === 'POST'`), the email and password entered by the user are captured.

2. Database Connection (PDO):

The connection to the logixpress database is done through PDO (PHP Data Objects), which allows for a secure and configurable connection. PDO options include error handling with `PDO::ERRMODE_EXCEPTION` for robust management and `PDO::FETCH_ASSOC` to fetch the data as an associative array.

3. User Verification:

A prepared query (`$stmt = $pdo->prepare(...)`) is used to look up the user in the database based on the email provided, avoiding SQL injection vulnerabilities. If the user is found and the password matches, the user ID is saved in the session (`$_SESSION['user_id']`) and redirected to Home2.php. If the credentials do not match, an error message is displayed on the page.

4. HTML5 and Login Form:

The login form has input fields for email and password, which are required. It uses a submit button to submit credentials via the POST method. It includes a link to register, in case the user does not have an account, redirecting them to the registration page.

5. CSS Styles:

Applies a custom stylesheet (Login.css) to the visual layout of the login page, giving a particular style to the form and its container, simulating the appearance of a tablet for an attractive and professional visual look.

Register Page

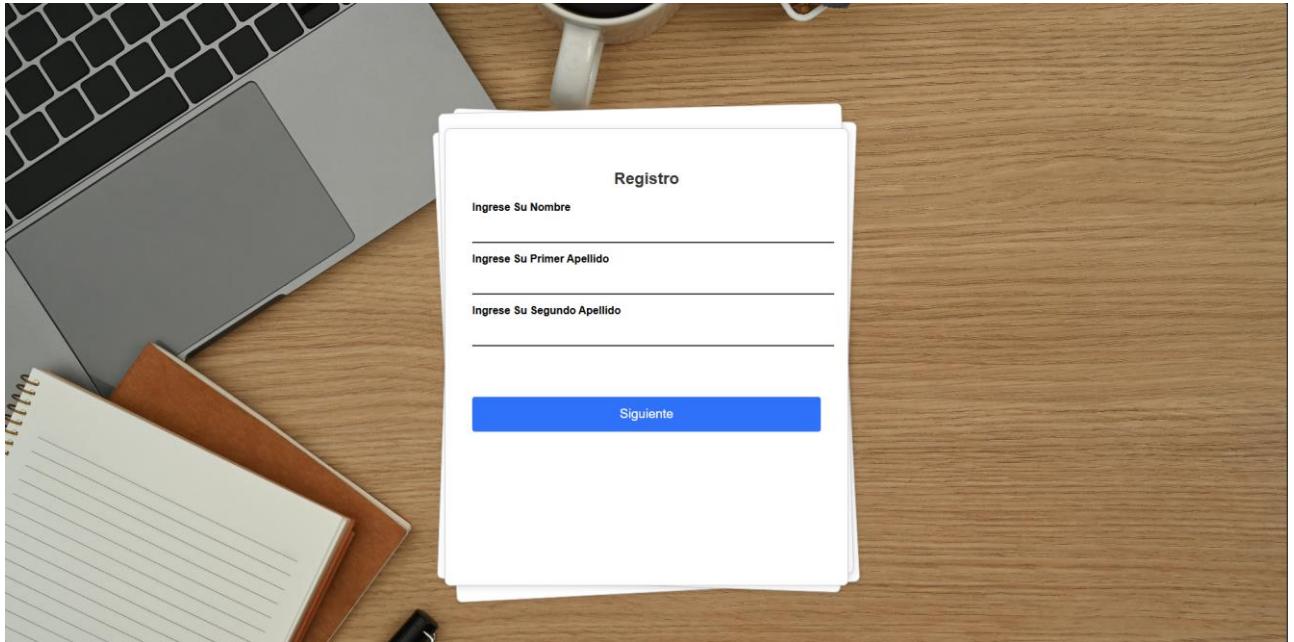


Figure 10 Register Page

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="css/Register.css">
  <title>Register</title>
</head>
<body>

  <div class="background-image"></div>

  <section>
    <div class="stacked-paper-container">
      <div class="paper-layer" id="paper1"></div>
      <div class="paper-layer" id="paper2"></div>
      <div class="paper-layer" id="paper3"></div>
    </div>

    <!-- Formulario 1 -->
    <div class="form-box form-page" id="form1">
      <form id="form1-content" method="POST">
        <h2>Registro</h2>
        <input type="hidden" name="form1" value="1">
        <label for="nombre">Ingrese Su Nombre:</label>
        <input type="text" id="nombre" name="nombre" required>
        <br>
        <label for="primerApe">Ingrese Su Primer Apellido:</label>
        <input type="text" id="primerApe" name="primerApe" required>
        <br>
        <label for="segundoApe">Ingrese Su Segundo Apellido:</label>
        <input type="text" id="segundoApe" name="segundoApe" required>
        <br>
        <button type="button" id="nextBtn" onclick="guardarYMostrarFormulario2(event)">Siguiente</button>
      </form>
    </div>

    <!-- Formulario 2 (visible pero detrás del formulario 1) -->
    <div class="form-box form-page" id="form2" style="display: none;">
      <form id="form2-content" method="POST" action="Register.php">
        <h2>Datos de la Empresa:</h2>
        <input type="hidden" name="form2" value="2">
        <label for="empresa">Nombre De La Empresa:</label>
        <input type="text" id="empresa" name="empresa" required>
        <br>
        <label for="telefono">Ingrese el Teléfono de la Empresa:</label>
        <input type="tel" id="telefono" name="telefono" required>
        <br>
        <label for="email">Ingrese el Email de la Empresa:</label>
        <input type="email" id="email" name="email" required>
      </form>
    </div>
  </section>
</body>
```

Figure 11 Code Register Page

```

<!-- Formulario 2 (visible pero detrás del formulario 1) -->
<div class="form-box form-page" id="form2" style="display: none;">
    <form id="form2-content" method="POST" action="Register.php">
        <h2>Datos de la Empresa</h2>
        <input type="hidden" name="form2" value="1">
        <label for="empresa">Nombre De La Empresa</label>
        <input type="text" id="empresa" name="empresa" required>
        <br>
        <label for="telefono">Ingrese el Teléfono de la Empresa</label>
        <input type="tel" id="telefono" name="telefono" required>
        <br>
        <label for="email">Ingrese el Email de la Empresa</label>
        <input type="email" id="email" name="email" required>
        <br>
        <label for="password">Password</label>
        <input type="password" id="password" name="password" required>
        <button type="submit">Finalizar</button>
    </form>
</div>
</section>

<script>
    function mostrarFormulario2() {
        document.getElementById('form1').style.display = 'none';
        document.getElementById('form2').style.display = 'block';
    }
</script>

<script src="../js/register.js"></script>

</body>
</html>

```

Figure 12 Code Register Page pt2

This page is designed for a registration page that uses a sequential forms format to collect user data in two steps, including personal information and company data.

1. General Structure:

- The page starts with the standard `<!DOCTYPE html>` and sets the language to English.
- In the header (`<head>`), the UTF-8 character encoding and viewport are set to ensure adaptability to mobile devices.
- A custom stylesheet (Register.css) is included that defines the visual layout, as well as a page title.

2. Visual Layers and Background:

- The background-image class sets a background image that fills the entire screen, adding an attractive visual context.
- The "paper-layer" layers simulate a stacked folder effect in the interface, which organizes the forms in a visually structured way.

3. Sequential Registration Form:

- The page contains two forms, each located in a box (form-box form-page), allowing data entry in two steps:
- Form 1: Collects personal data (name, firstApe, secondApe). This form is initially displayed and contains a Next button that, when pressed, activates the next form.
- Form 2: Collects business data (company, phone, email, password) and is initially hidden. It is only displayed when the user completes the first form and presses the Next button.
- Each form includes required fields and labels to guide the user through data entry.

4. JavaScript:

- The showForm2() function is a simple JavaScript function that changes the style of the forms, hiding the first one (form1) and showing the second one (form2), creating a transition between the two steps.
- An additional JavaScript file (register.js) allows for additional functionality such as saving data to the session using AJAX and controlling transition logic between forms.

About Us Page

The screenshot shows the 'About Us' page for LOGIXPRESS. The page features a blue header with the company's logo, which includes a truck icon and the word 'LOGIXPRESS'. Below the header is a white content area containing three descriptive sections, each with an image and text. The first section is titled 'Imagen descriptiva 1' and discusses the company's history and mission. The second section is titled 'Imagen descriptiva 2' and discusses their distribution mission. The third section is titled 'Imagen descriptiva 3' and discusses their commitment to intelligent and efficient distribution. At the bottom of the page is a blue footer button labeled 'Regresar a Home'.

Figure 13 About Us Page

This page is designed for an informative “About Us” page for LOGIXPRESS, which presents the company’s mission, vision, and history, using a structured visual layout and a combination of text and images.

General Structure:

- The HTML page starts with the standard <!DOCTYPE html> and specifies the language as English.
- In the header (<head>), UTF-8 encoding and viewport are set to ensure that the page is responsive on mobile devices.
- A stylesheet (About Us.css) is loaded that provides the custom styles for the page.

Header with Logo:

- The page includes a header (<header>) with a header class and a logo-container section containing the LOGIXPRESS logo image. This reinforces the brand identity at the top of the page.
- The image () is used to display the company logo.

Informative Content Section:

- The main section of the page (<section>) includes a content box (<div class="box">) where the company's informative paragraphs are organized in a column format.
- Each information block (<div class="paragraph">) combines text and a representative image:
- First Block: Explains the company's background, highlighting its focus on transportation efficiency and service quality.
- Second Block: Focuses on LOGIXPRESS' mission, its commitment to advanced technology and route optimization.
- Third Block: Describes the relationship of trust and experience that LOGIXPRESS has built in the sector.
- Images () are placed next to the text in each block to visually complement the information, alternating between the left and right side of the text in each section.

Navigation Button:

- At the end of the section, a navigation button (<div class="back-button">) is included that redirects users back to the platform's main page (Home2.php), making navigation easier.

Delivery Page

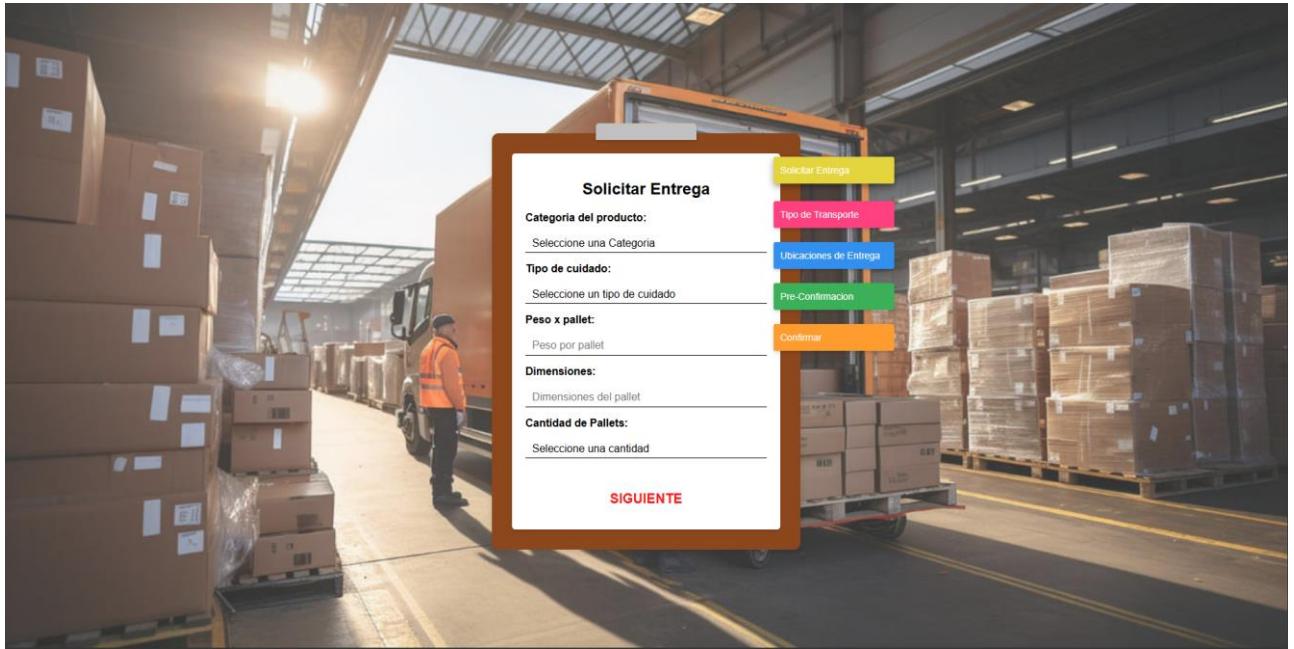


Figure 14 Delivery Request Form Page

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="css/portapapeles.css">
    <title>Solicitar Entrega</title>
</head>
<body>

    <div class="background-image"></div>

    <div class="clipboard">
        <div class="paper">
            <!-- Contenido de Solicitar Entrega -->
            <div id="SolicitarEntrega" class="tab-content active-content">
                <form class="form" onsubmit="nextTab(event)">
                    <h2>Solicitar Entrega</h2>

                    <label for="producto">Categoría del producto:</label>
                    <select id="producto" name="producto" placeholder="Categoría del producto">
                        <option value="" disabled selected>Seleccione una Categoría</option>
                        <option value="" disabled selected>Seleccione una Categoría</option>
                        <option value="opcion1">Opción 1</option>
                        <option value="opcion2">Opción 2</option>
                        <option value="opcion3">Opción 3</option>
                    </select>

                    <label for="cuidado">Tipo de cuidado:</label>
                    <select type="text" id="cuidado" name="cuidado" placeholder="Tipo de cuidado">
                        <option value="" disabled selected>Seleccione un tipo de cuidado</option>
                        <option value="opcion1">Opción 1</option>
                        <option value="opcion2">Opción 2</option>
                        <option value="opcion3">Opción 3</option>
                    </select>

                    <label for="peso">Peso x pallet:</label>
                    <input type="text" id="peso" name="peso" placeholder="Peso por pallet">

                    <label for="dimensiones">Dimensiones:</label>
                    <input type="num" id="dimensiones" name="dimensiones" placeholder="Dimensiones del pallet">

                    <label for="cantidad">Cantidad de Pallets:</label>
                    <select type="num" id="cantidad" name="cantidad" placeholder="Cantidad de pallets">
                        <option value="" disabled selected>Seleccione una cantidad</option>
                        <option value="opcion1">Opción 1</option>
                        <option value="opcion2">Opción 2</option>
                        <option value="opcion3">Opción 3</option>
                    </select>
                </form>
            </div>
        </div>
    </div>
```

Figure 15 Code Delivery Request Form

This page is designed for a delivery request page on the LOGIXPRESS platform. It uses a sticky note-inspired visual style and a tabbed structure to guide users through the different stages of a delivery request.

General Structure:

- The file starts with <!DOCTYPE html> and specifies the language as English.
- In the header (<head>), the UTF-8 character set and viewport are set to make the page responsive on mobile devices.
- A custom stylesheet (clipboard.css) is included that formats the elements, especially the sticky note style and the "paper" container where the forms are hosted.

Background Image and "Clipboard" Container:

- A background-image div adds a decorative background image to the page.
- Inside a clipboard div, the main content container (paper) is located, where the request form and the different tabs for each section of the request process are located.

Request Delivery Section:

- The first tab, RequestDelivery, contains a form that allows the user to specify details about the delivery:
- Form Fields: Fields such as "Product Category," "Care Type," "Weight x Pallet," "Dimensions," and "Pallet Quantity" are included with default labels and values to guide the user.
- Ship Button: A submit button with the class next-button allows the user to advance to the next step by submitting the data.

Tab Content:

- There are multiple tab-content sections that represent the different steps in the request flow:
 - Transport Type: Contains information or fields to select the type of transport.
 - Delivery Locations: Allows the user to specify locations.
 - Pre-Confirmation: A preview of the request before confirming.
 - Confirm: Presents the final confirmation of the request.
 - Only one section is visible at a time, controlled by the tab navigation JavaScript.

Tab Navigation with Sticky Notes:

- Navigation between sections uses sticky-note buttons, each with a distinctive color and text indicating the corresponding step.
- Clicking on each button activates the corresponding section using the openTab() function defined in the post-it.js file.

JavaScript:

- The external JavaScript file (post-it.js) controls navigation between tabs using functions that toggle the content of each section on or off based on the button pressed.

User Account Administration Page

The screenshot shows a user account administration page. On the left, there's a sidebar with three tabs: 'Información Personal', 'Información de la Cuenta', and 'Ubicaciones Asociadas'. The 'Información Personal' tab is active, displaying fields for Name (Nombre de Pila: Eduardo Antonio, Primer Apellido: Vazquez, Segundo Apellido: Granados) and Phone Number (Teléfono: 6646795299). To the right of these fields are four blue 'Actualizar' (Update) buttons. The 'Información de la Cuenta' and 'Ubicaciones Asociadas' tabs are inactive.

Figure 16 User Account Administration Page

```
user.php > ...
1  <?php
2  session_start();
3
4 // Verificar si el usuario está autenticado
5 if (!isset($_SESSION['user_id'])) {
6     header("Location: login.php");
7     exit;
8 }
9
10 // Conexión a la base de datos con PDO
11 try {
12     $pdo = new PDO("mysql:host=localhost;dbname=logixpress", 'root', '', [
13         PDO::ATTR_ERRMODE => PDO::ERRMODE_EXCEPTION,
14         PDO::ATTR_DEFAULT_FETCH_MODE => PDO::FETCH_ASSOC
15     ]);
16 } catch (PDOException $e) {
17     die("Error en la conexión: " . $e->getMessage());
18 }
19
20 // Obtener el ID de usuario desde la sesión
21 $userId = $_SESSION['user_id'];
22
23 // Función para obtener datos del usuario
24 function getUserData($pdo, $userId) {
25     $stmt = $pdo->prepare("SELECT nombrePila, primerApellido, segundoApellido, numTelefono, nombreEmpresa, email, password FROM CLIENTE WHERE num = :id");
26     $stmt->execute([':id' => $userId]);
27     return $stmt->fetch();
28 }
29
30 // Función para obtener tipos de ubicación desde la tabla TIPO_UBICACION
31 function getLocationTypes($pdo) {
32     $stmt = $pdo->query("SELECT num, descripcion FROM TIPO_UBICACION");
33     return $stmt->fetchAll();
34 }
35
36 // Obtener los tipos de ubicación
37 $locationTypes = getLocationTypes($pdo);
38 |
39
40 // Función para obtener las ubicaciones asociadas al usuario
41 function getUserLocations($pdo, $userId) {
42     $stmt = $pdo->prepare(
43         "SELECT u.codigo, u.numCalle, u.origenColonia, u.codigoPostal, tu.descripcion
44         FROM UBICACION u
45         INNER JOIN CLIENTE_UBI cu ON u.codigo = cu.codigo
46         INNER JOIN TIPO_UBICACION tu ON u.tipo_Ubicacion = tu.num
47         WHERE cu.num = :id
48     ");
49     $stmt->execute([':id' => $userId]);
```

Figure 17 Code

This is an account administration page for the LOGIXPRESS platform, where users can manage their personal information, account details, and associated locations.

1. User Session and Authentication

- The page starts with session_start() to use the user's session.
- It verifies if the user is logged in by checking if \$_SESSION['user_id'] is set; if not, it redirects to login.php to secure the page and prevent unauthorized access.

2. Database Connection

- It connects to the logixpress database using PDO (PHP Data Objects), which allows a secure connection and the configuration of options for error handling (ERRMODE_EXCEPTION) and the formatting of results (FETCH_ASSOC).

3. PHP Functions to Get User Data

- getUserData: Retrieves personal information of the user from the CUSTOMER table using the user_id of the session.
- getLocationTypes: Retrieves the location types from LOCATION_TYPE, which will be used in the location association form.
- getUserLocations: Retrieves the locations associated with the user from the LOCATION, CLIENT_UBI, and LOCATION_TYPE tables.

4. CRUD Operations in PHP

- Update Personal Information: Allows the user to update a specific field, validating that the field is allowed before running the update in the database.
- Delete Account: Deletes the user record in CLIENT, destroys the session, and redirects to login.php.
- Add New Location: Inserts a new location in LOCATION and associates it with the user in CLIENT_UBI.
- Update Location: Modifies the details of a specific location.
- Delete Location: Deletes the location from the CLIENT_UBI table.

5. HTML Interface

- Header (<head>): Sets the UTF-8 character encoding, the viewport to make the page responsive, and links the CSS file user.css for layout.

6. JavaScript for the Dynamic Interface

- Show Sections: The showSection() function allows you to toggle between sections of the interface, hiding the other sections.
- Edit Fields: The enableEdit, cancelEdit, and saveChanges functions control editing and saving user data dynamically, without requiring a page reload.

7. Vertical Navigation Structure

- The user navigation panel includes links to “Personal Information,” “Account Information,” and “Associated Locations” that allow users to navigate through the different sections of the page.

8. Section Contents

- Personal Information: Displays and allows editing of fields such as first name, last name, and phone number, with “Update,” “Confirm,” and “Cancel” buttons for each field.
- Account Information: Allows viewing and editing of the company name and email, as well as offering the option to delete the account.
- Associated Locations: Displays a table of locations and a form to add new locations. Users can update or delete specific locations.

ATTACHMENTS

Program operation

At the beginning we have 4 sections and in these we can find information about our services, about us and the information to contact us.

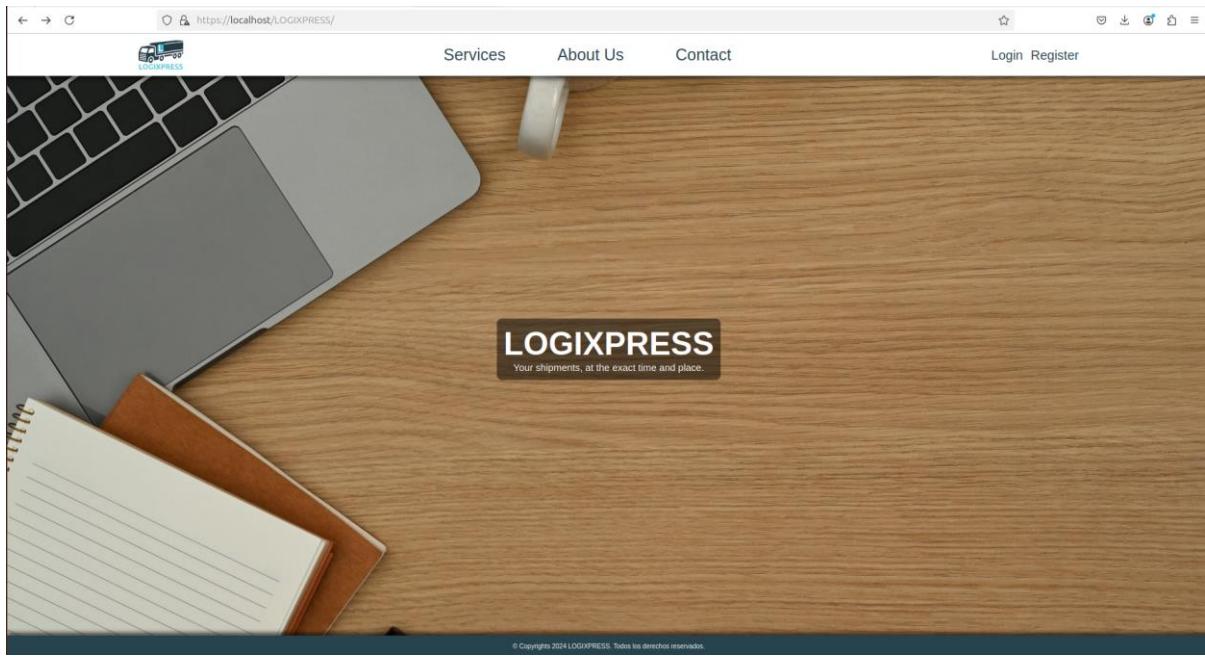


Figure 18.- home

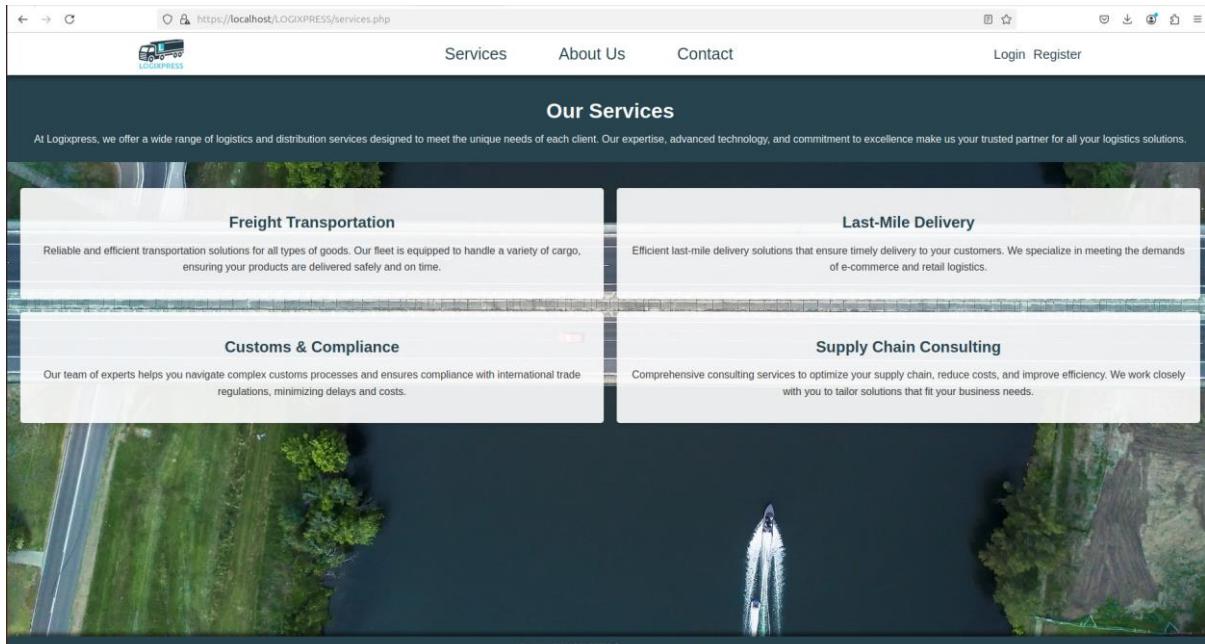


Figure 19.- services

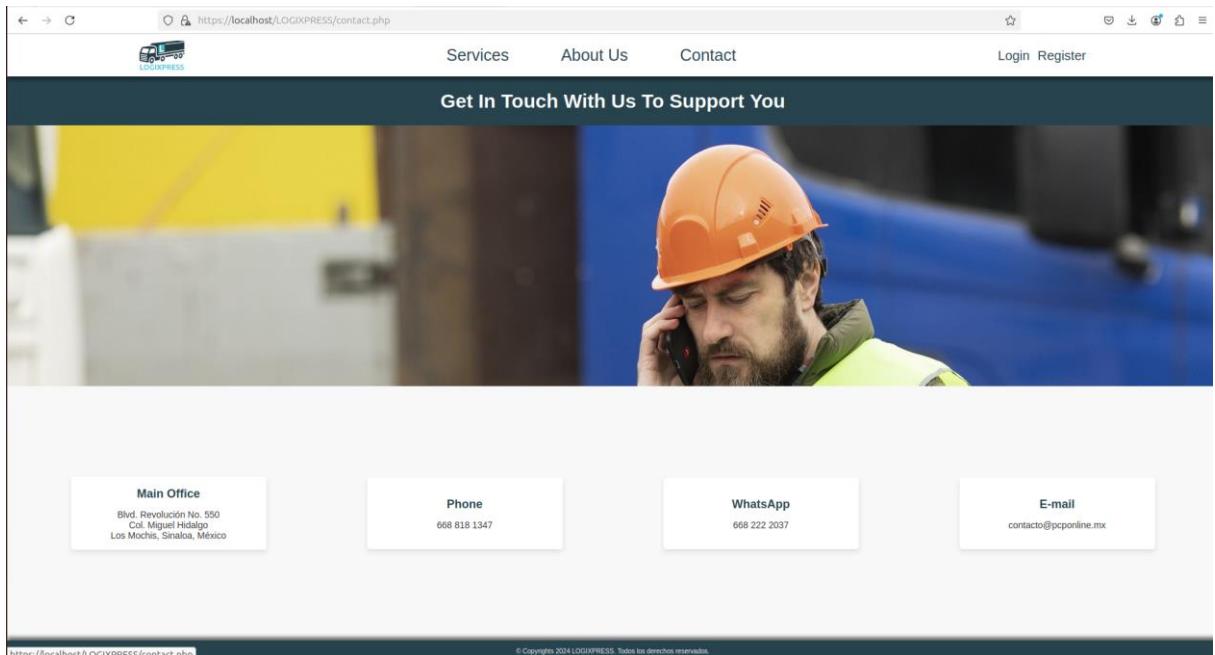


Figure 20.- Contact

Registration

In this section you create an account, filling the form to have an account with us.

Write your data such as name, surname, company name, phone, email and a password (this will be your password to enter your account).

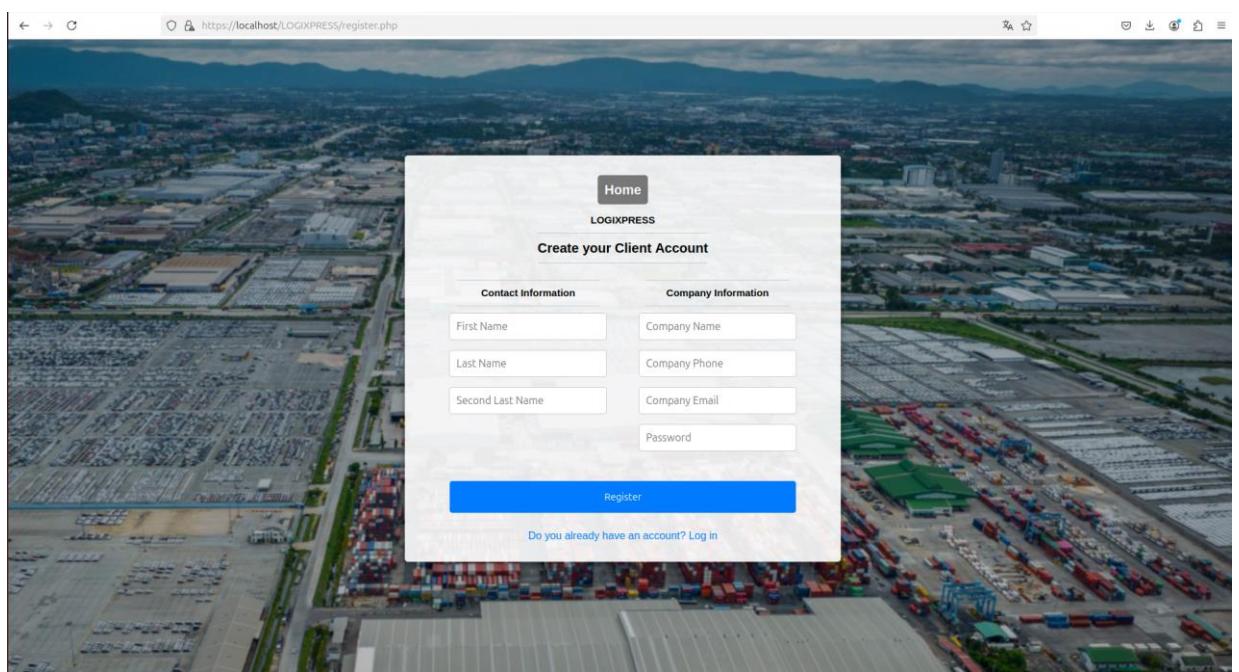


Figure 21.- Register

Then you will have to register your previously created email and password.

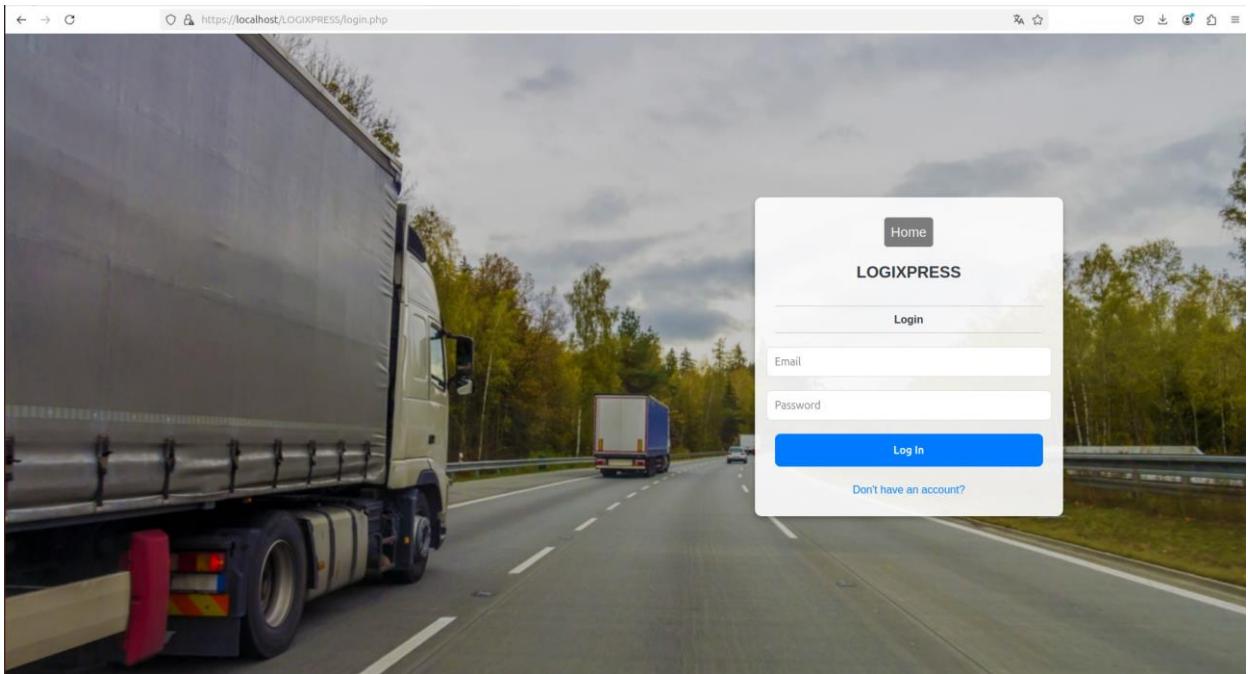


Figure 22.- Login

You enter the customer menu and have the options delivery, delivery details, locations, products and edit count.

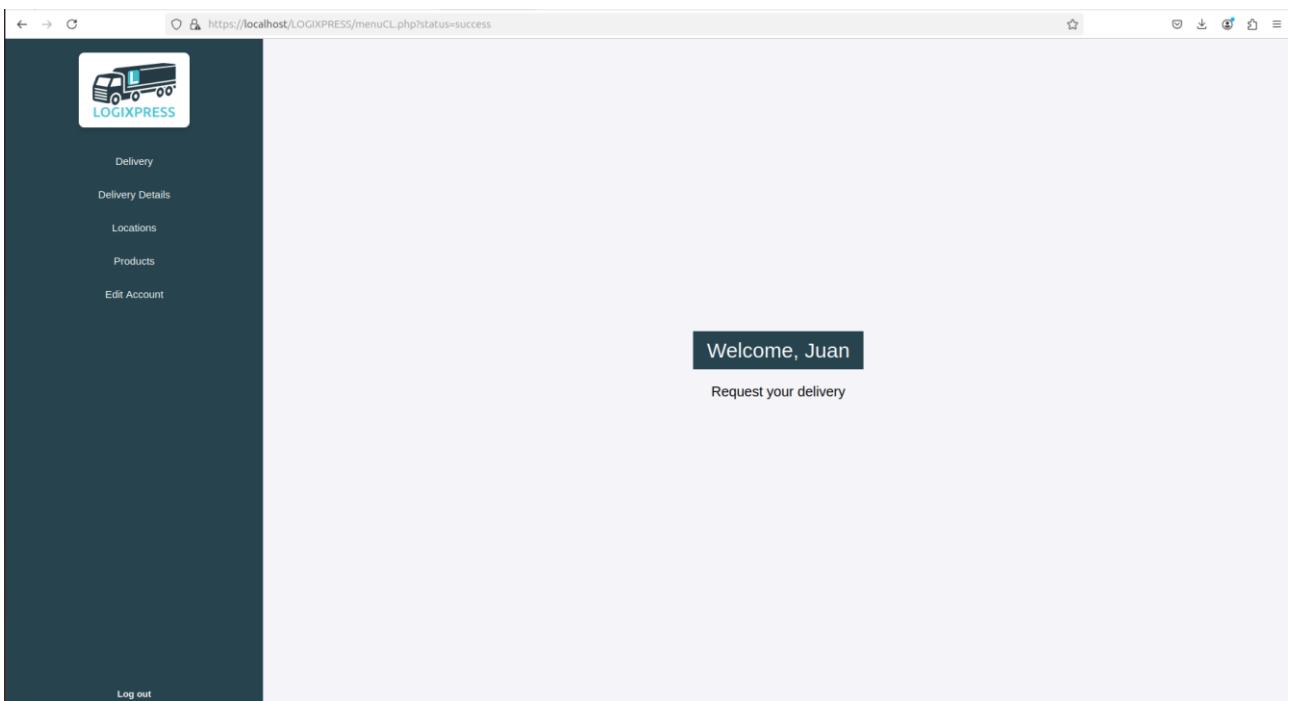


Figure 23.- MenuCL

we first add the locations for your delivery:we go to the add location section,

we add the name that will be given to the

-location

-Street

-Settlement

-Zip code

then click on add location

The screenshot shows a web-based application interface for Logixpress. On the left, there is a sidebar with a logo and links for Delivery, Delivery Details, Locations, Products, and Edit Account. At the bottom of the sidebar is a 'Log out' button. The main content area has a header with 'Add Location' and 'Edit Location' tabs. Below the header is a 'Location List' table:

ID	Name
3	Sucursal Playas
4	Cliente Maquiladora XYZ
6	Punto de Entrega Macroplaza

To the right of the table is a 'Add New Location' form with fields for Location Name, Street, Street Number, Settlement, Zip code, and a blue 'Add Location' button.

Figure 24.- MenuCL-section-location

If you make a mistake in registering a data, you can edit it by pressing edit location and clicking on the edit button you will get a form to edit the information, when you finish, click on update.

This screenshot shows the same application interface as Figure 24, but with the 'Edit Location' tab selected. The 'Edit Location' form is displayed on the right side of the screen, containing fields for Location Name, Street, Street Number, Settlement, and Zip code, along with an 'Update' button. The 'Location List' table from Figure 24 is also visible in the background.

Figure 25.- MenuCL-section-edit location

The next step is to go to products in this section you specify the product details that make up the delivery.

Click on add product and it will show a product form, where the fields are filled in.

The screenshot shows a web application interface for managing products. On the left, there's a sidebar with a logo and links for Delivery, Delivery Details, Locations, Products (which is selected), and Edit Account. Below these is a 'Log out' link. The main content area has tabs for 'Add Product' and 'Edit Product'. A 'Product List' table is displayed, containing items like 'Caja de cereales (Pallet)', 'Botellas de vino tinto (Caja)', etc. To the right, an 'Add Product' form is open, prompting for details such as Product Name, Description, Product Tag (set to 'Estándar'), Category Product (set to 'Equipos y materiales para agricultura'), Height (Meters), Width (Meters), Length (Meters), and Weight (Kilograms). A blue 'Add Product' button is at the bottom.

Figure 26.- MenuCL-section-products

If you make a mistake in registering a data, you can edit it by pressing edit product and click on the product in the list that you want to edit.

retype the data you want to correct and finish by clicking update.

This screenshot shows the 'Edit Product' screen. The sidebar and main layout are identical to Figure 26. The 'Edit Product' form is now active, showing details for a product named 'Caja de cereales (Pallet)'. The form includes fields for Product (set to 'Caja de cereales (Pallet)'), Description ('Paléte de cajas de cereales integrales'), Product Tag ('Estándar'), Category Product ('Productos alimenticios y bebidas variadas'), Height (Meters) (set to 1.5), Width (Meters) (set to 1), Length (Meters) (set to 1.2), and Weight (Kilograms) (set to 300). A blue 'Update' button is at the bottom.

Figure 27.- MenuCL-section-edit Products

The section to finalize the delivery is under deliveries where you specify the time data such as the day and time of availability to pick up and receive the delivery, the priority and a small section to specify the care instructions.
then click on next

Delivery Date: 05 / 12 / 2024

Start Time: 02 : 00

End Time: 06 : 00

Delivery Priority: Media

Instructions: please handle with care so as not to scratch the product.

Next

Figure 28.- MenuCL-section-Delivery

Next is step 2, here you select the product to be transported, the quantity (there is also the option to add more products in one delivery), select the type of cargo and click next.

Step 2: Products to Deliver

Product: Lámparas de techo de cristal (Caja)

Amount: 10

Load Type: General

Add Product Remove Last Product

Previous Next

Figure 29.- MenuCL-section-Delivery Step 2

Then it is step 3. select the locations: origin and destination (you can add more than one location just by clicking on add destination) and finish with next.

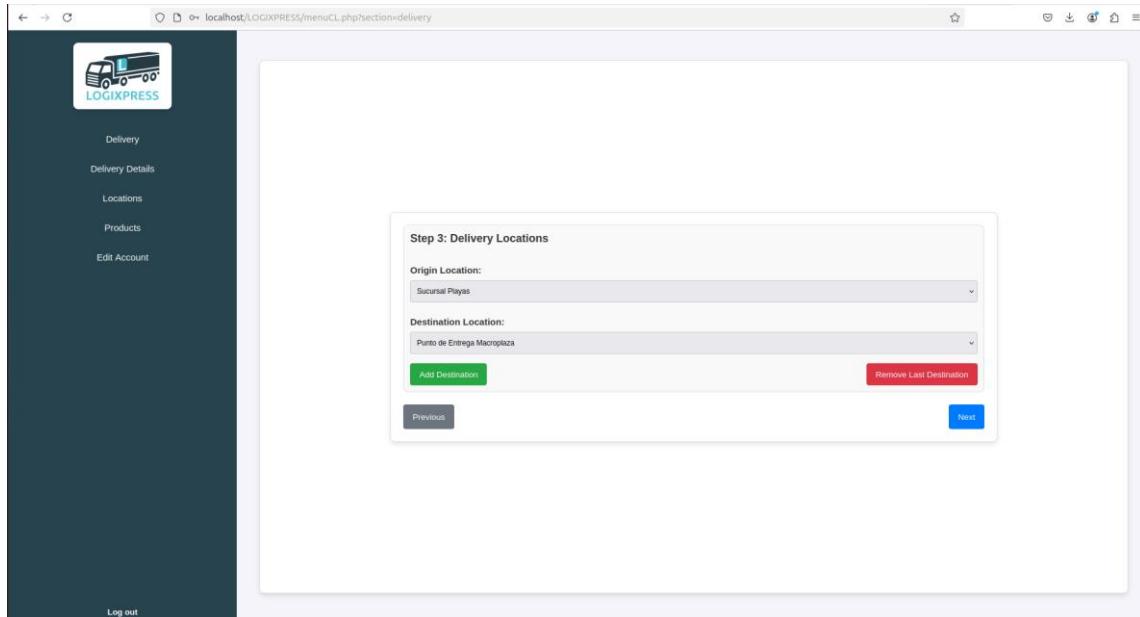


Figure 30.- MenuCL-section-Delivery Step 3

Here is shown a statement with the delivery characteristics if it is correct click on confirm delivery order, otherwise go back clicking on previous

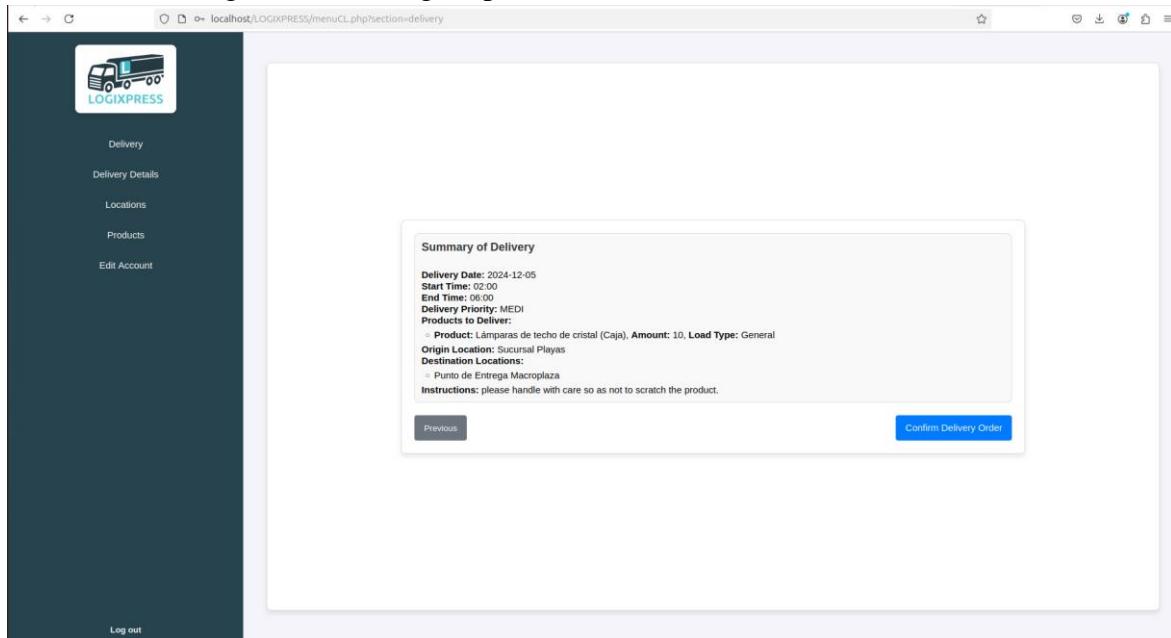


Figure 31.- MenuCL-section-Delivery Summary of delivery

It will show us a statement with the number of our delivery that we have requested.

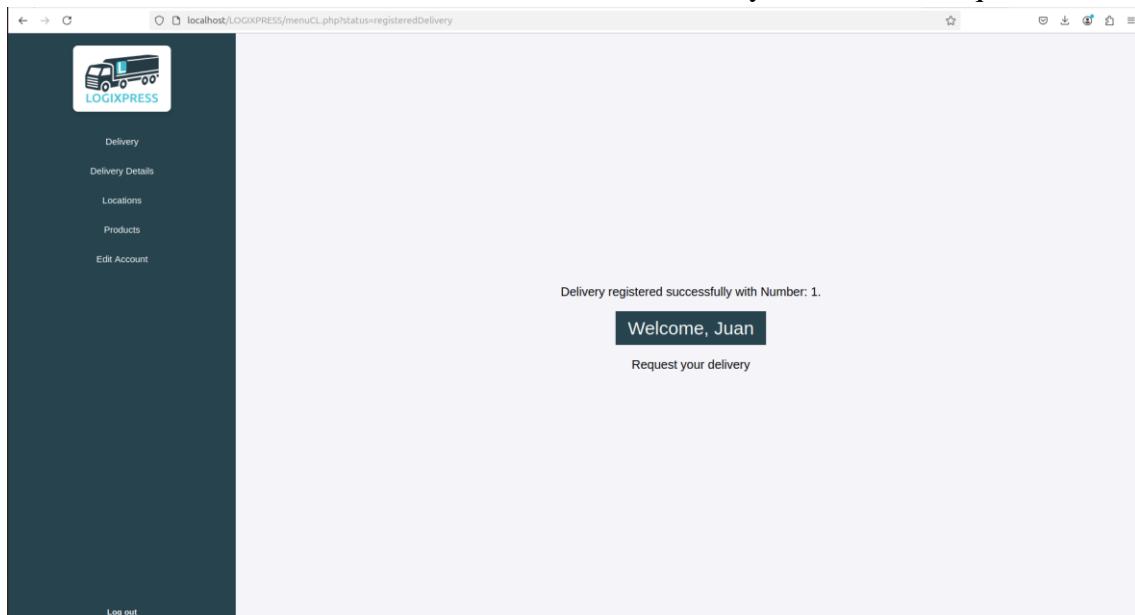


Figure 32.- MenuCL-section-Delivery registered

To view the details of requested deliveries go to delivery details and it will show the delivery status (shows the delivery id, status and an option to view details) click on see details and it will show all the delivery information.

The screenshot shows a web browser window with the URL `localhost/LOGIXPRESS/menuCL.php?section=deliverDetails&entrega_id=1`. The sidebar is identical to Figure 32. The main content area has two parts. On the left is a table titled "Delivery Status" with one row showing ID 1 and Status "Programada". A "See Details" button is next to the status. On the right is a large table divided into sections: "GENERAL INFORMATION" (Start Date: 2024-12-03, End Date: 2024-12-05, Time Window: 02:00:00 - 06:00:00, Status: Programada, Priority: Media), "PRICE BREAKDOWN" (Weight rate: N/A, Distance Rate: N/A, Volume Rate: \$700.00 MXN, Priority Rate: \$735.00 MXN, Labeling for Surcharge: \$5,000.00 MXN, Surcharge for Categories: \$9,000.00 MXN, Subtotal: \$15,435.00 MXN, IVA: \$2,469.60 MXN, Total: \$17,904.60 MXN), and "PRODUCT DETAILS (VOLUME AND WEIGHT)" (a table with columns Product Name, Individual Volume (m³), Individual Weight (kg), and Quantity). A note at the bottom states "N/A = No Aplica".

Figure 33.- MenuCL-section-Delivery details

If you want to edit your personal information, click on edit account and it will show the form with your information which you can edit several data.

Once you have made the changes click on update information.

The screenshot shows a web browser window with the URL `localhost/LOGIXPRESS/menuCL.php?section=editAccount`. On the left, there is a sidebar with a logo of a truck and the text "LOGIXPRESS". Below the logo are menu items: "Delivery", "Delivery Details", "Locations", "Products", "Edit Account", and "Log out". The main content area has two sections: "Edit Contact Information" and "Edit Account Information". The "Edit Contact Information" section contains fields for First Name (Juan), Last Name (Perez), and Second Last Name (Garcia). The "Edit Account Information" section contains fields for Phone Number (5551234567), Email (juan.perez@ejemplo.com), and Password (Leave empty to keep current password). A blue button at the bottom right of the form says "Update Information".

Figure 34.- MenuCL-section-Edit contact information

These are the options of our program, if you have any questions or suggestions you can contact us.

Being an employee of the company you will have to enter the email and password that the company gives you and click long in

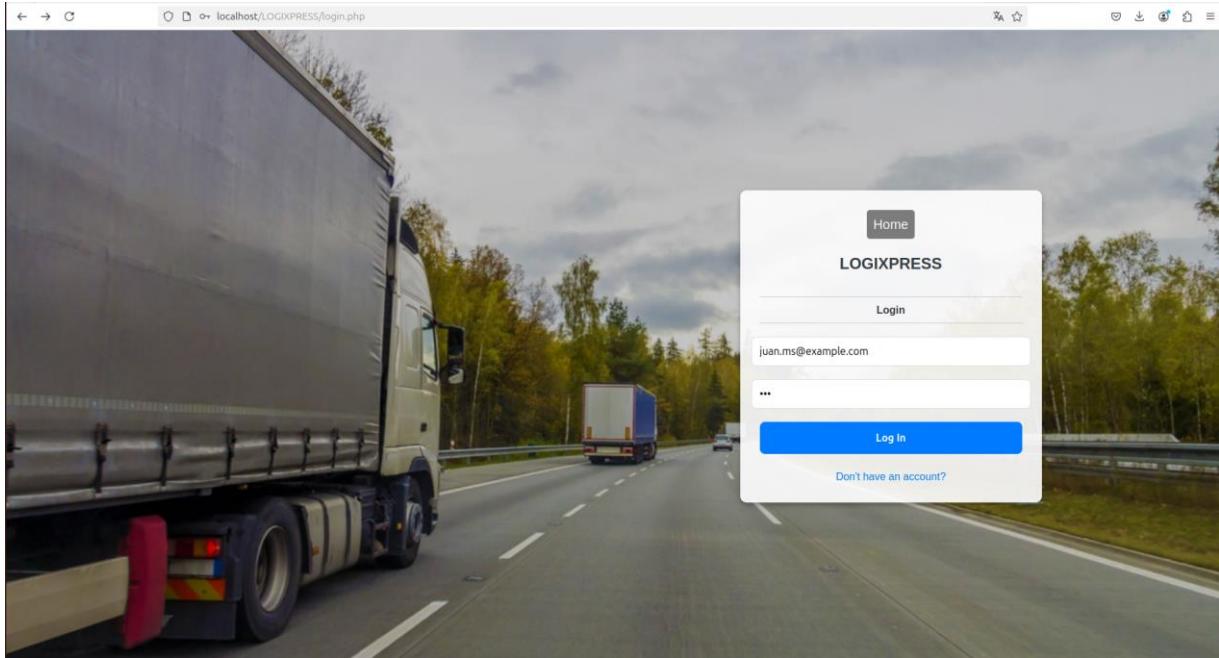


Figure 35.-Login

If you are a checker the menu will be as follows

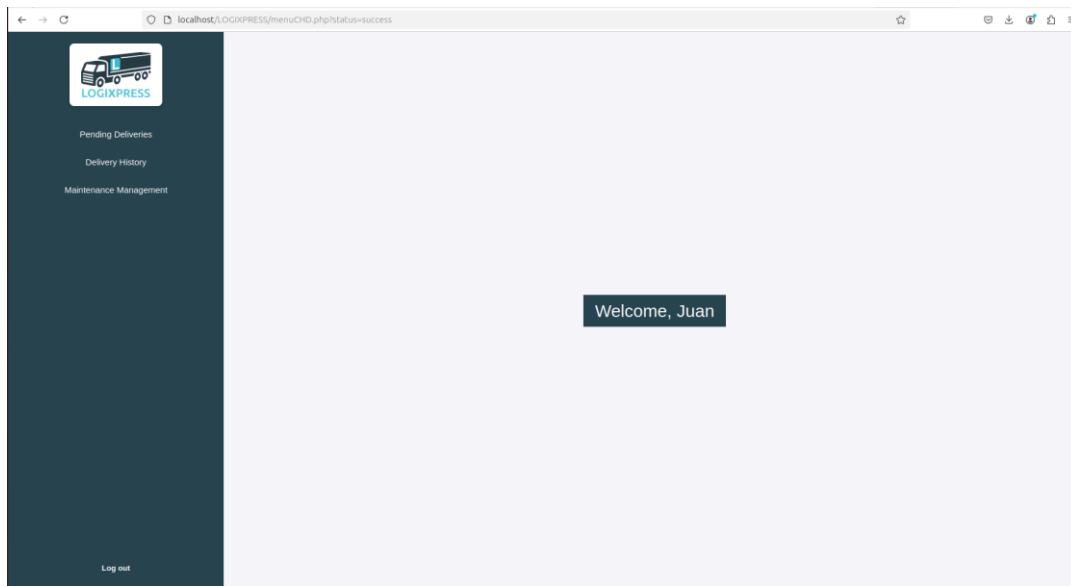


Figure 36.-MENUCHD

In pending deliveries we will find the deliveries that have not been completed here is a table and a button that shows the details of the delivery.

The screenshot shows a web application interface for 'LOGIXPRESS'. The top navigation bar includes links for 'Pending Deliveries', 'Delivery History', 'Maintenance Management', and a 'Log out' button. The main content area displays a table titled 'Entregas Pendientes' (Pending Deliveries) with the following data:

Entrega	Fecha	Empleado	Vehículo	Remolque	Estado	Actions
1	2024-12-03	Sin Asignar	Sin Asignar	Sin Asignar	Programada	Ver detalles de la entrega

Figure 37.- MenuCHD-pending deliveries

After clicking on delivery details, all the delivery characteristics will be displayed.

The screenshot shows the 'Detalles de la Entrega 1' (Details of Delivery 1) modal window. The window has tabs for 'Entrega: #1' and 'Programada'. The 'Información General' tab displays the following information:

- Cliente: Transporte Seguro S.A.
- Fecha de Pedido: 2024-12-03
- Fecha de Entrega: 2024-12-06
- Prioridad: Alta
- Tipos de Carga:
 - General

The 'Ubicaciones' tab shows:

- Ubicación de Salida: Cliente Maquiladora XYZ
- Ubicaciones de Llegada:
 - Sucursal Playas
 - Punto de Entrega Macroplaza

The 'Detalles de los Productos' tab displays a table with the following columns:

Nombre del Producto	Altura (m)	Ancho (m)	Longitud (m)	Peso (kg)	Cantidad
---------------------	------------	-----------	--------------	-----------	----------

Figure 38.- MenuCHD-pending deliveries details

At the end of the data you click on the assign delivery button and a window will appear showing the drivers, the category of the vehicle, vehicle, and trailer (if necessary) and click on save to finalize the assignment.

Figure 39.- MenuCHD- assing deliveries

The delivery history section shows a table with the deliveries previously made and a button to view their details.

The screenshot shows the Logixpress delivery history interface. On the left, a sidebar menu includes 'Pending Deliveries', 'Delivery History' (which is selected), and 'Maintenance Management'. A 'Log out' button is at the bottom. The main area is titled 'Historial de Entregas' and features a search bar. Below it is a table with columns: 'Entrega' (Delivery ID), 'Fecha de Entrega' (Delivery Date), 'Estado' (Status), 'Cliente' (Client), and 'Acciones' (Actions). The table contains four rows of data:

Entrega	Fecha de Entrega	Estado	Cliente	Acciones
2	2024-12-14	Programada	Logística Global	Ver Detalles
3	2024-12-07	Programada	Envíos Rápidos	Ver Detalles
1	2024-12-06	Programada	Transporte Seguro S.A.	Ver Detalles
4	2024-12-06	Peticion Atendida	Distribuciones MX	Ver Detalles

Figure 40.- MenuCHD- delivery history

after clicking on details, you will see the following section

The screenshot shows a detailed delivery report for delivery #2. The report is titled 'Delivery Report #2' and is presented in four sections: 'Client and Delivery Information', 'Resources Used', 'General Information', and 'Route Details'. The 'Client and Delivery Information' section includes fields for Delivery Number (2), Client (Transporte Seguro S.A.), Delivery Date (2024-12-14), Status (Programada), and Creation Date (2024-12-03). The 'Resources Used' section lists Drivers (Not defined), Vehicles (SNHON01ACTY001), and Trailers (SNY12350VOLV). The 'General Information' section includes Priority (Alta), Type of Load (Perecedero), and Instructions (No quiero que lean esto.). The 'Route Details' section lists Origin Location (Sucursal Playas), Destination Locations (Sucursal Playas, Punto de Entrega Macroplaza), and Total Distance (Not defined).

Figure 41.- MenuCHD- history deliveries details

The maintenance management option is used to send logs to vehicles or trailers that need to be sent for maintenance or those that have already left and only need their logs.

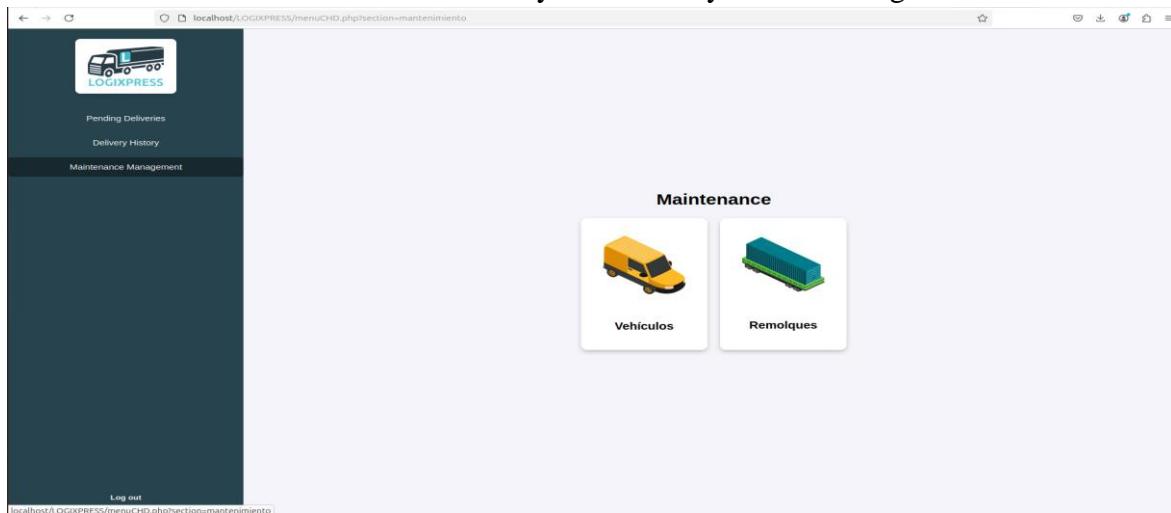


Figure 42.- MenuCHD- maintenance

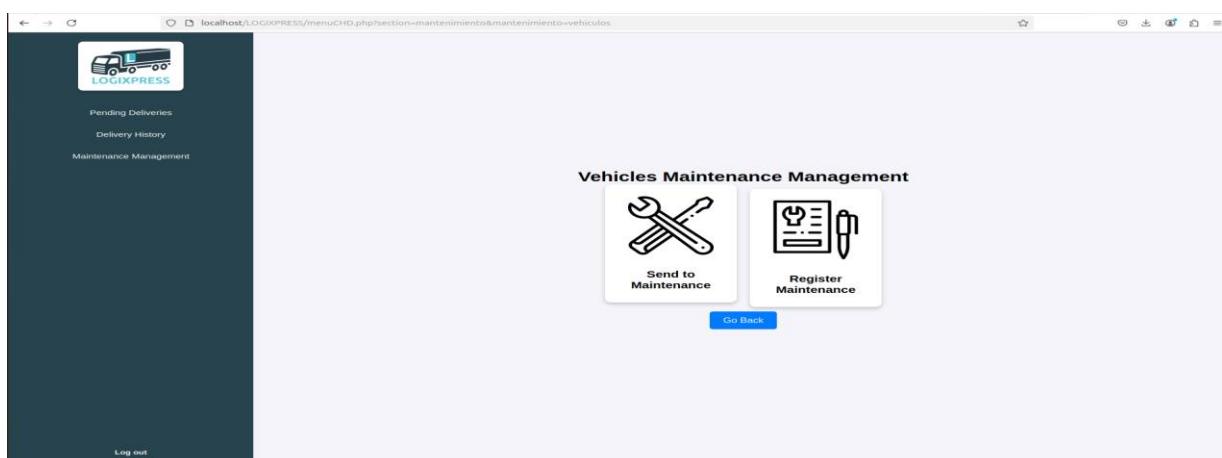


Figure 43.- MenuCHD- maintenance mangament vehicles

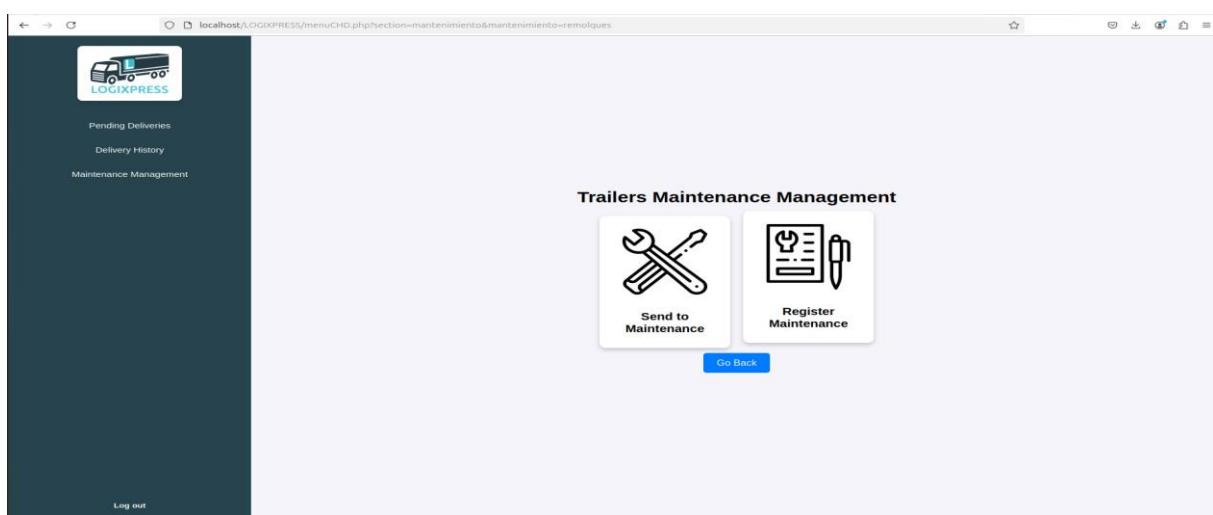


Figure 44.- MenuCHD- maintenance mangament trailers

If you select send maintenance to a trailer it will show you the existing trailers in the company and you can select it or you can search for its category, brand, model or even search by serial number.

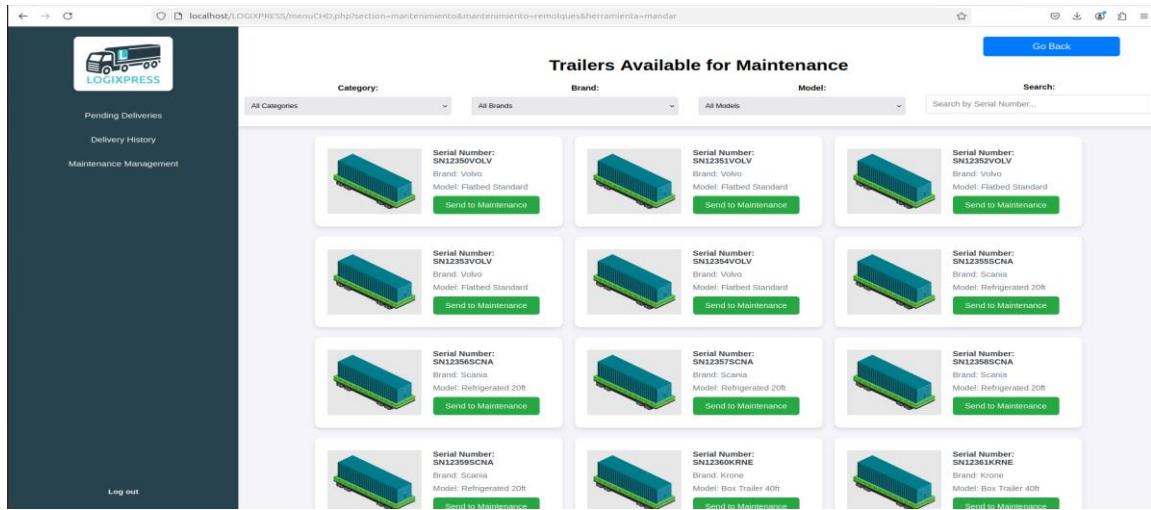


Figure 45.- MenuCHD- send maintenance trailer

Once selected you will be shown a confirmation notice

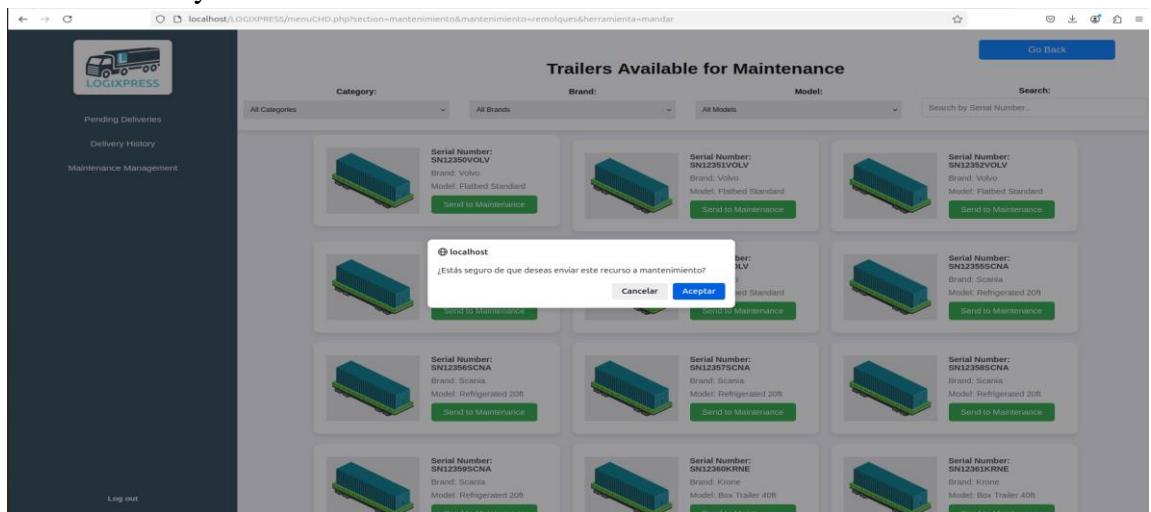


Figure 46.- MenuCHD- send maintenance trailer confirmation

If you click accept it will show you the next advert

Registration Successful

Go Back

Trailers Available for Maintenance

Category: Remolque Caja Cerrada Brand: All Brands Model: All Models Search: Search by Serial Number...

Serial Number: SN12360KRNE
Brand: Krone
Model: Box Trailer 40ft

Serial Number: SN12361KRNE
Brand: Krone
Model: Box Trailer 40ft

Serial Number: SN12362KRNE
Brand: Krone
Model: Box Trailer 40ft

Figure 47.- MenuCHD- send maintenance trailer confirmation advert

if you choose the option to register maintenance, the trailers previously sent to maintenance will be shown.

localhost/LOGIXPRESS/menuCHD.php?section=mantenimiento&mantenimiento=remolques& herramienta=registro

Go Back

Trailers Under Maintenance

Category: All Categories Brand: All Brands Model: All Models Search: Search by Serial Number...

Serial Number: SN12350VOLV
Brand: Volvo
Model: Flatbed Standard

Register Maintenance

Figure 48.- MenuCHD- register maintenance trailer

Choose the trailer to register and click on register maintence, then it will display the following confirmation statement

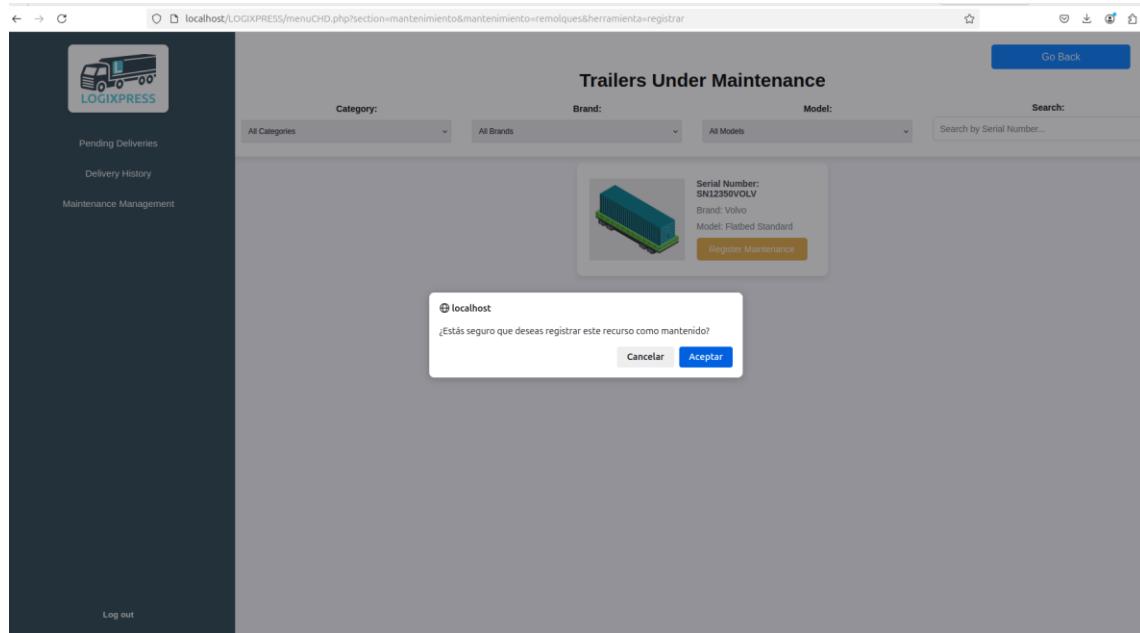


Figure 49.- MenuCHD- register maintenance trailer confirmation

After you confirm you will be shown a window to finalize the registration where you fill in the cost of the maintenance and the description of what adjustments were made.
click save registration to finish

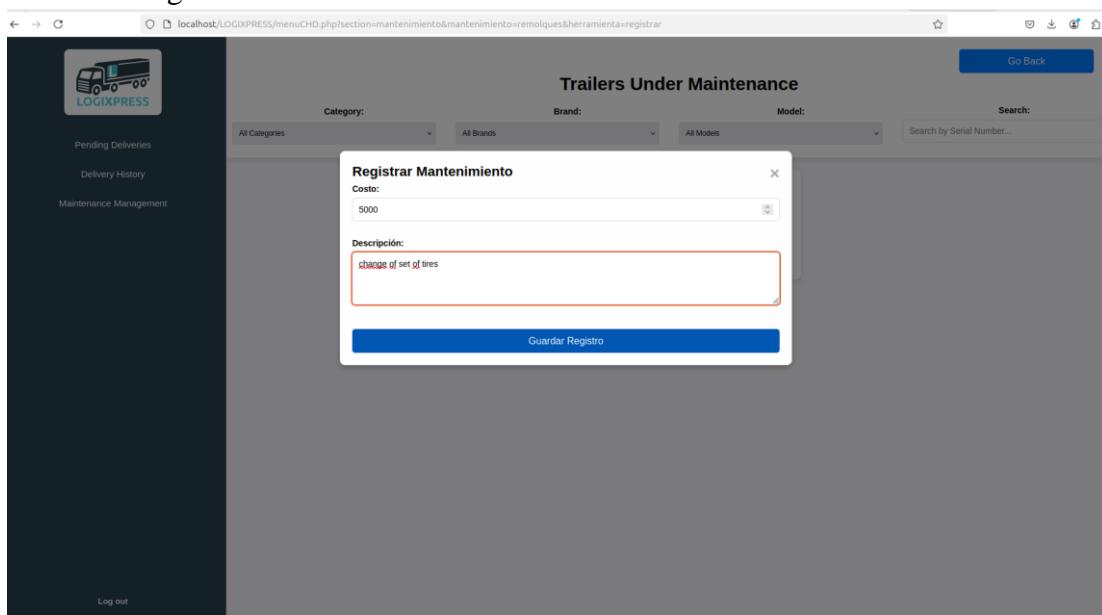


Figure 50.- MenuCHD- register maintenance trailer description

Once completed, the following statement will be displayed

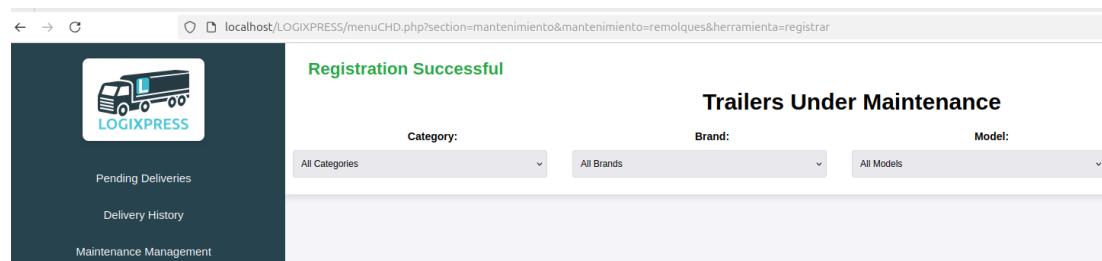


Figure 51.- MenuCHD- register maintenance trailer confirmation

If you select send maintenance to a vehicles it will show you the existing trailers in the company and you can select it or you can search for its category, brand, model or even search by serial number.

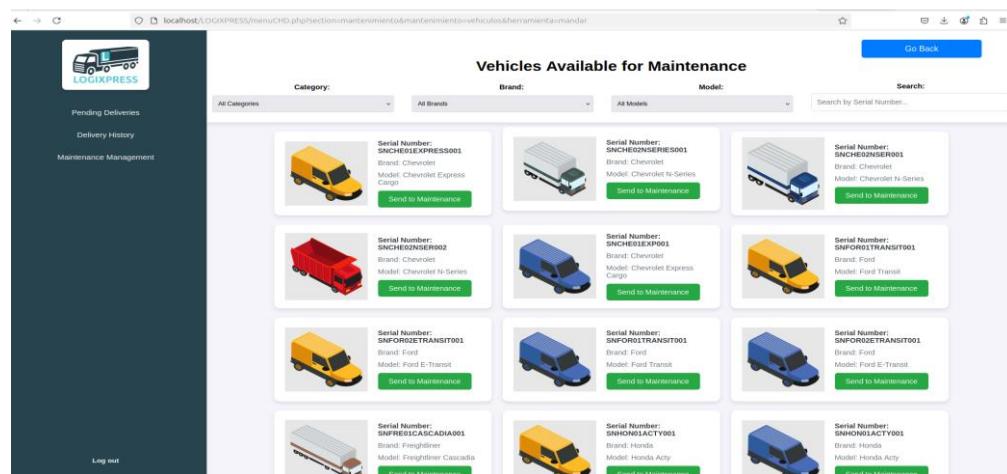


Figure 52.- MenuCHD- send maintenance vehicle

Once selected you will be shown a confirmation notice

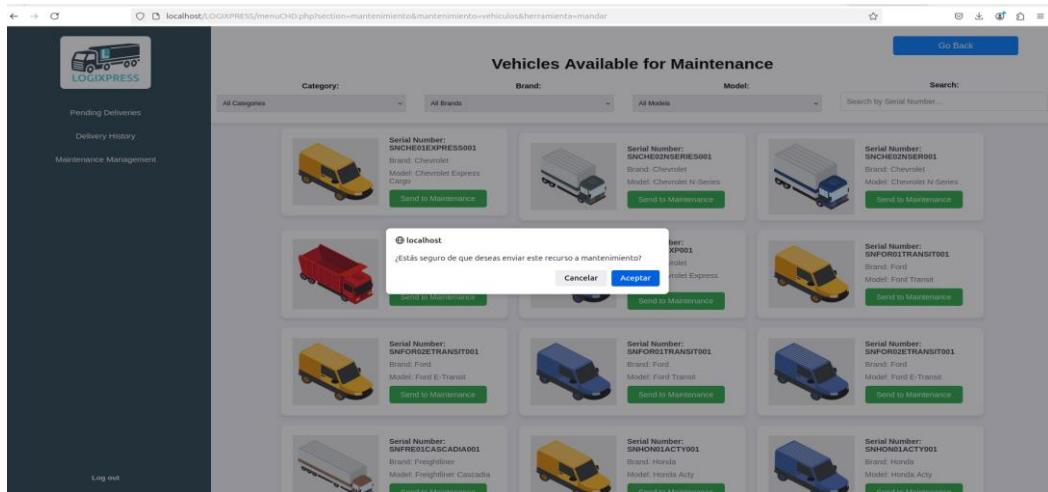


Figure 53.- MenuCHD- send maintenance vehicle confirmation

If you click accept it will show you the next advert

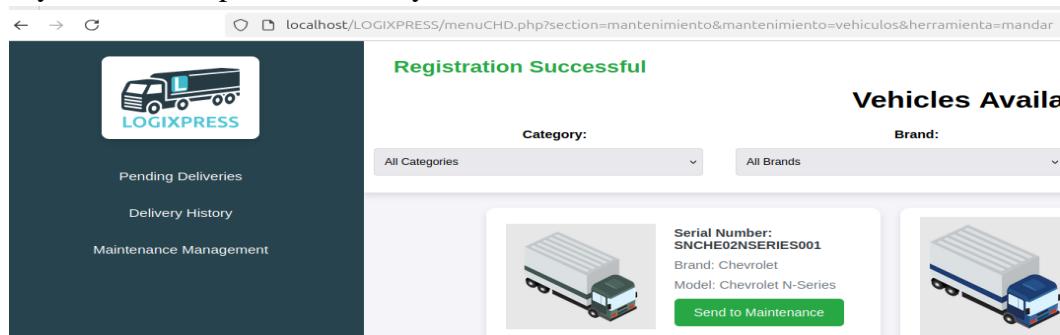


Figure 54.- MenuCHD- send maintenance vehicle confirmation advert

if you choose the option to register maintenance, the vehicles previously sent to maintenance will be shown.

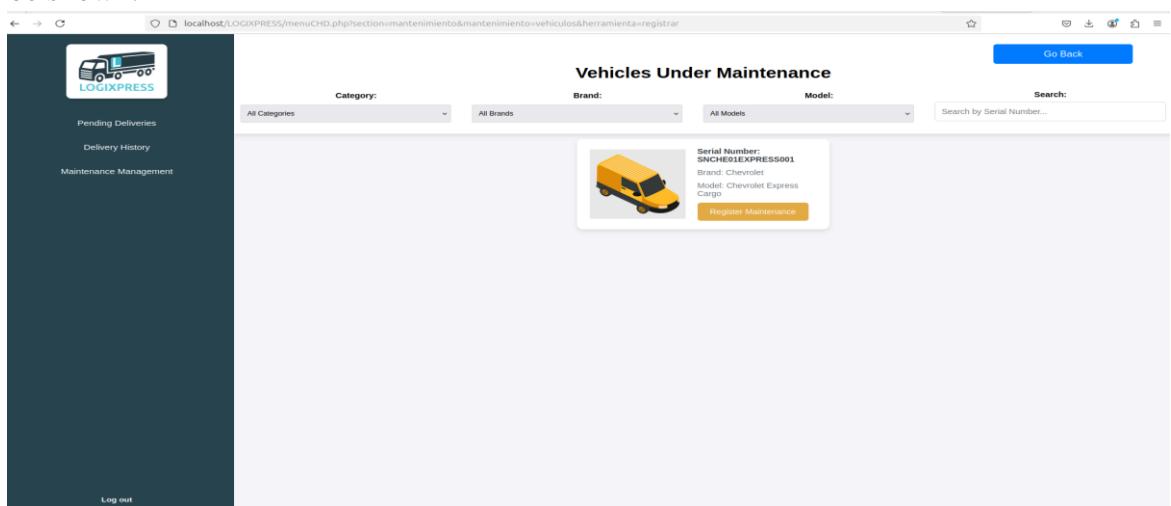


Figure 55.- MenuCHD- register maintenance vehicle

Choose the trailer to register and click on register maintenance, then it will display the following confirmation statement

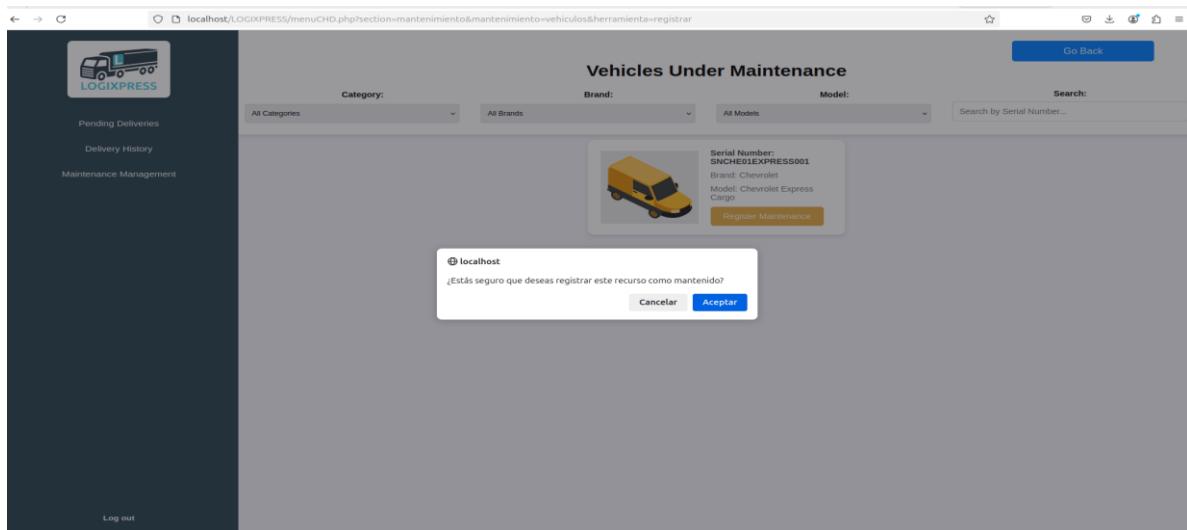


Figure 56.- MenuCHD- register maintenance vehicle confirmation

After you confirm you will be shown a window to finalize the registration where you fill in the cost of the maintenance and the description of what adjustments were made.
click save registration to finish

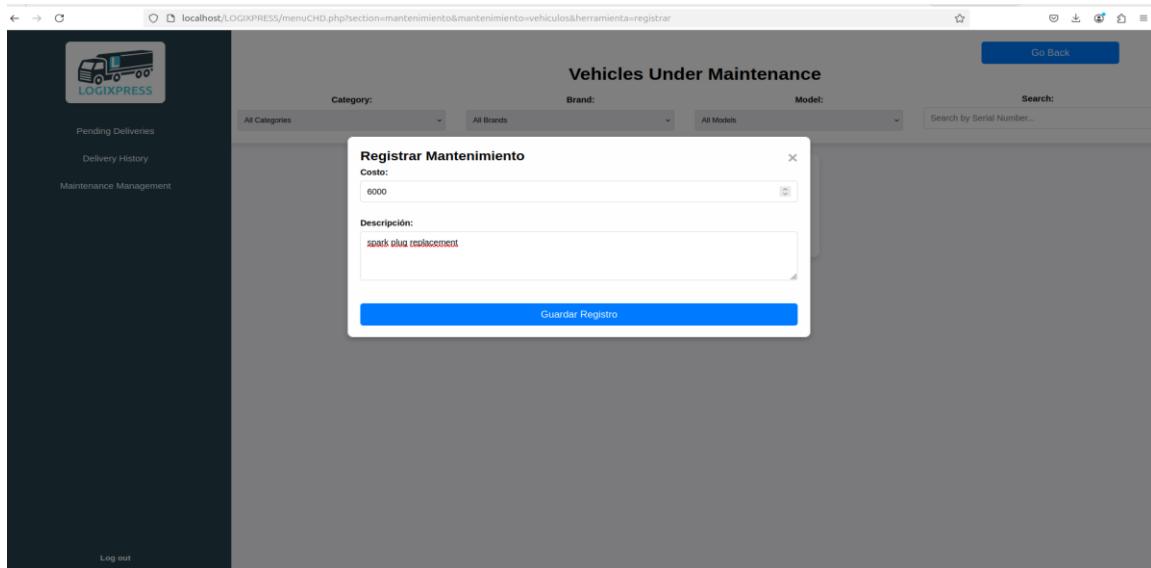


Figure 57.- MenuCHD- register maintenance vehicle description

Once completed, the following statement will be displayed

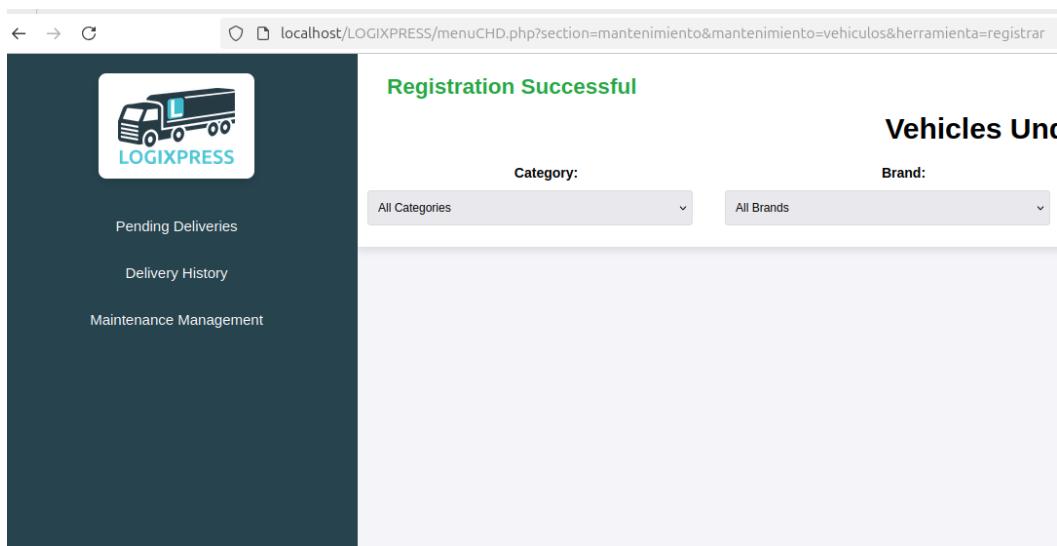


Figure 58.- MenuCHD- register maintenance vehicle confirmation

These are all the available shares, if you have any questions or suggestions please contact us.

If you log in as a driver you will be redirected to a page where there will be 2 sections, one to see the pending deliveries assigned and another to see the details of the delivery .

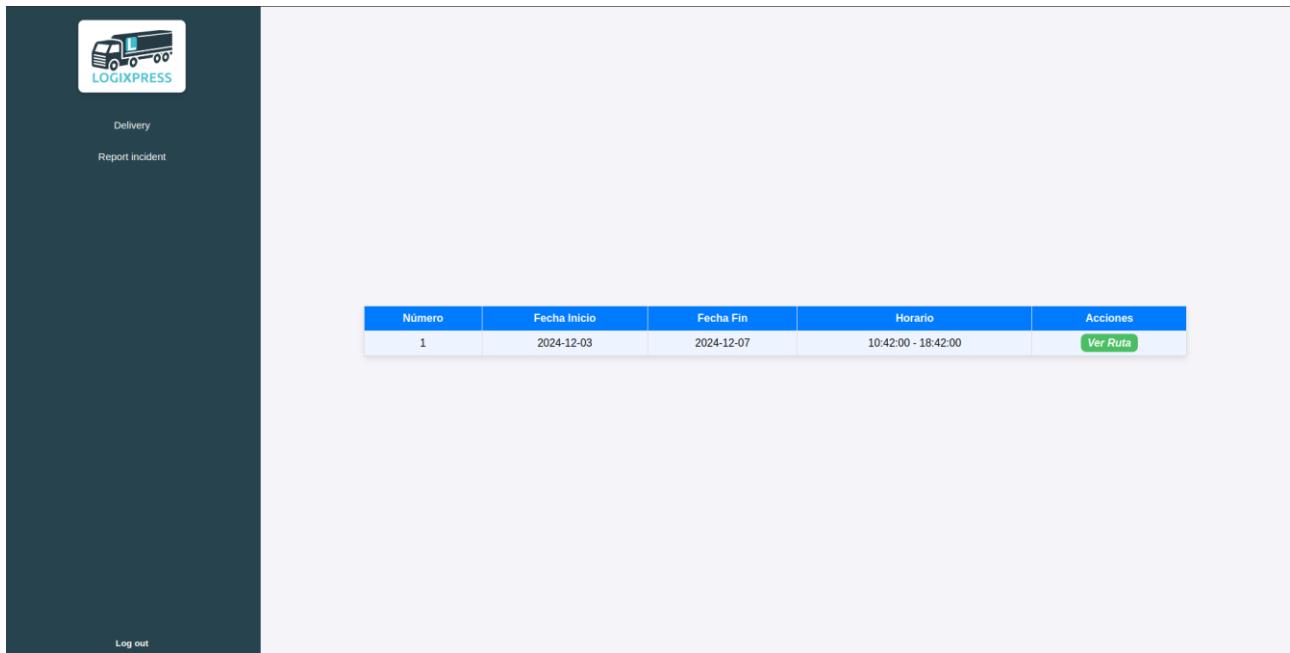


Figure 59.- MenuCHF

If the driver selects the show route button, the page loads a map showing the route and location details.

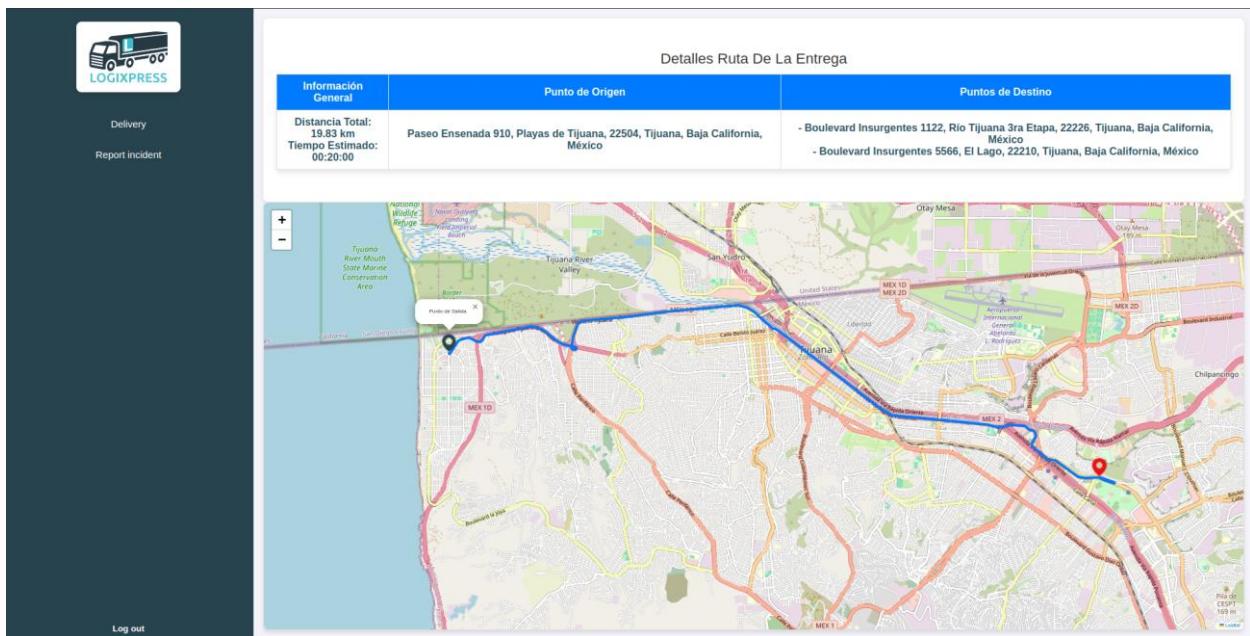


Figure 60.- MenuCHF-show route

If you log in as administrator you will be redirected to a different page where you can administrate the registration of employes, vehicles and trailers.

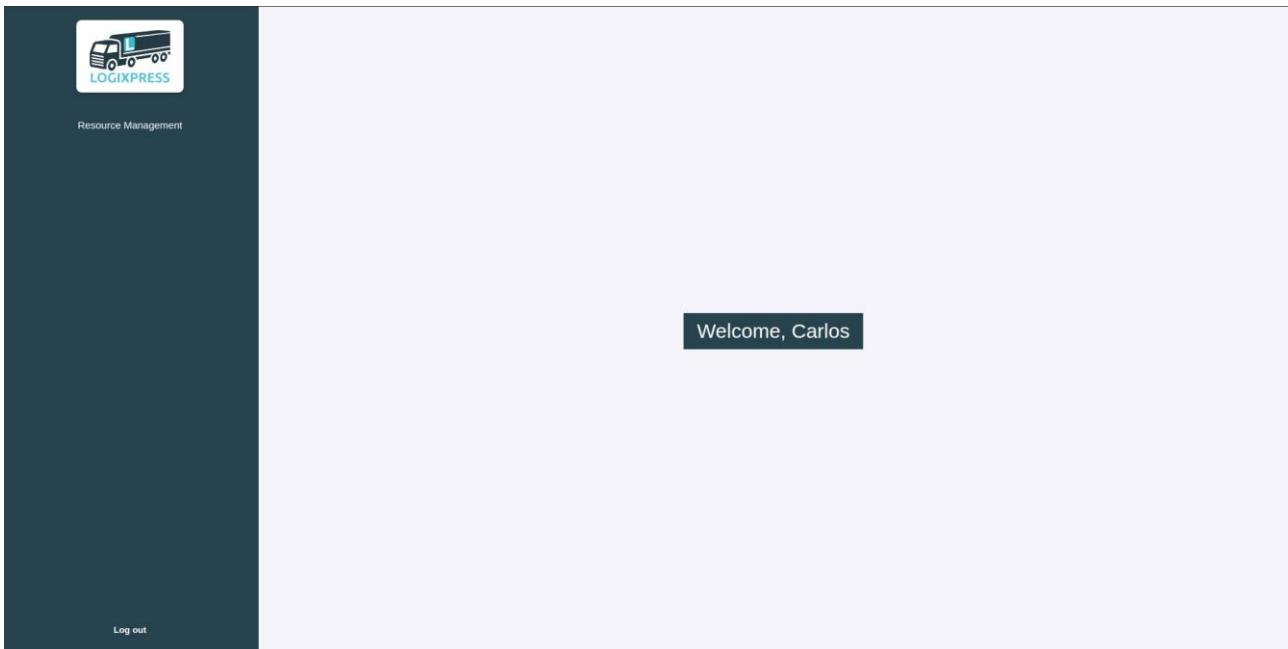


Figure 61.- MenuADM

On this page the administrator has a single section, which when selected displays a menu of 3 options.

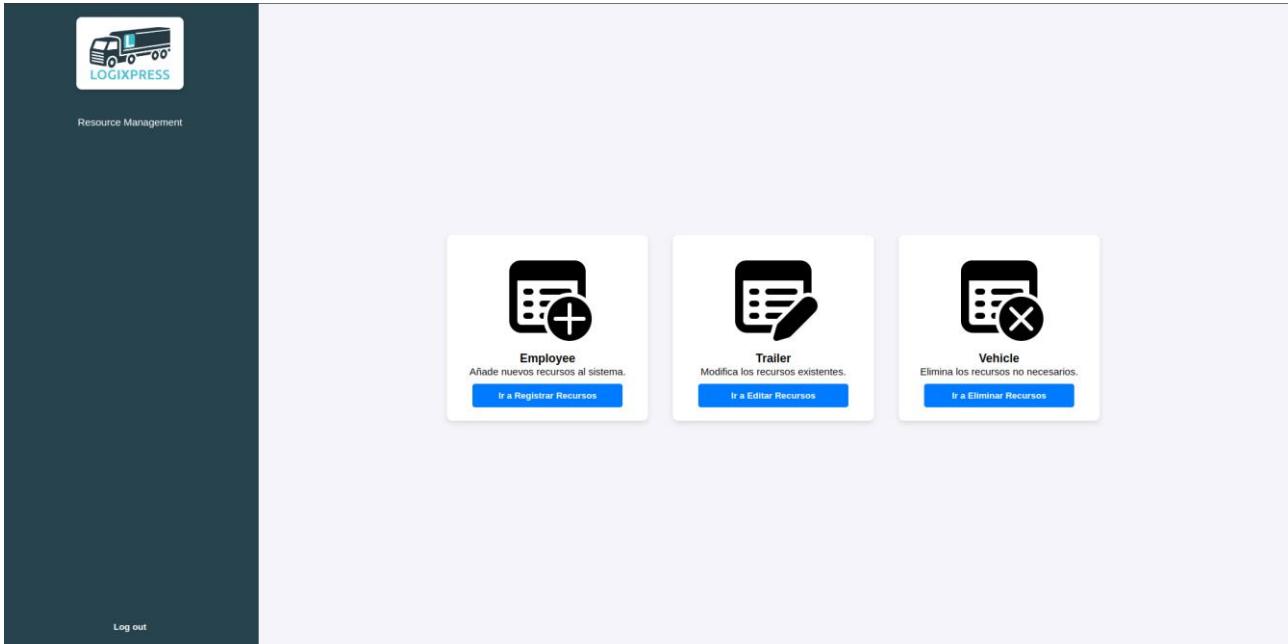


Figure 62.- MenuADM-Recourse management

In the employees option we can both register new employees and edit the data of existing employees.