

# Intercompany

*Functional Specification*

## Information Systems

Integrated Masters in Informatics and Computer Engineering  
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### **Grupo W**

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# 1. Project overview

The aim of this project is to develop and implement a customizable interface that will be able to handle all transactions between two different companies (a supplier and a client), with Jasmin integration. Users will be able to search for various products and buy them in a single transaction.

In order to achieve this goal, we have to first, identify the project's core views, second, develop a website that will allow us to implement these features and third, build the interface between the application and Jasmin.

Besides completing a purchase/sale, there will also be information available on sales, purchases, inventory, billing and other relevant information.

In this project we will use Jasmin to deal with all the data and processes surrounding transactions, inventory and information about each product. This information will be accessible after establishing a communication layer between Jasmin and the back-end of our project.

## 2. Functionalities and features

### 2.1 Make Purchase

Functionality	Description
Product Search	Show products from a specific keyword.
Current Supplier	Shows the current supplier from which the products are being purchased.
Product(s)	Displays all the products that are currently being purchased.
Product Information	Shows all the information that is known about the product that is being purchased: <ul style="list-style-type: none"><li>• Name</li><li>• Warehouse</li><li>• Available Quantity</li><li>• Desired Quantity</li><li>• Price per unit</li><li>• Discount</li><li>• IVA</li><li>• Total product payment</li></ul>
Exchange Rate	Shown in case of purchase between different types of currency.
Payment Method	All the current methods of payment that are supported by the supplier.
Billing information	Necessary information in order to successfully complete the order payment. <ul style="list-style-type: none"><li>• Entity</li><li>• Name</li><li>• Reference</li></ul>
Order Total	Total payment required to complete the purchase.

*Table 1 - Make Purchase*

## 2.2 Purchase State

Functionality	Description
Purchase History	Presents information about the orders created in the system: <ul style="list-style-type: none"><li>• Date of placement</li><li>• Reference</li><li>• Serial Number</li><li>• Order total</li><li>• Order Status</li></ul>
Order Status	Shows the current status of all placed orders: <ul style="list-style-type: none"><li>• Processing (in case payment has not been completed yet or the order has not been dispatched)</li><li>• In transport (The order has left the supplier warehouses)</li><li>• Completed (The order has successfully reached its destination with no issues)</li><li>• Cancelled (The order placed has been cancelled due to a variety of reasons)</li></ul>
Order Cancelling	A button that allows the user to cancel an order.

*Table 2 - Purchase State*

## 2.3 Validate Sale

Functionality	Description
Transport Guide	The supplier creates a transport guide for every order, containing an estimate of time until arrival.
Dispatched Sales	Sales that have been dispatched by the supplier.

*Table 3 - Validate Sale*

## 2.4 Make Sale

Functionality	Description
Current Customer	Shows the current customer which is purchasing the products.
Product information	Shows all the information that is known about the product that is being sold: <ul style="list-style-type: none"><li>• Name</li><li>• Warehouse</li><li>• Available Quantity</li><li>• Desired Quantity</li><li>• Price per unit</li><li>• Discount</li><li>• IVA</li><li>• Total product payment</li></ul>
Exchange Rate	Shown in case of sale between different types of currency.
Payment Method	All the current methods of payment that are supported by the supplier.
Billing information	Necessary information in order to successfully complete the order payment. <ul style="list-style-type: none"><li>• Entity</li><li>• Name</li><li>• Reference</li></ul>
Order Total	Total payment required to complete the purchase.

*Table 4 - Make Sale*

### 3. Information Architecture

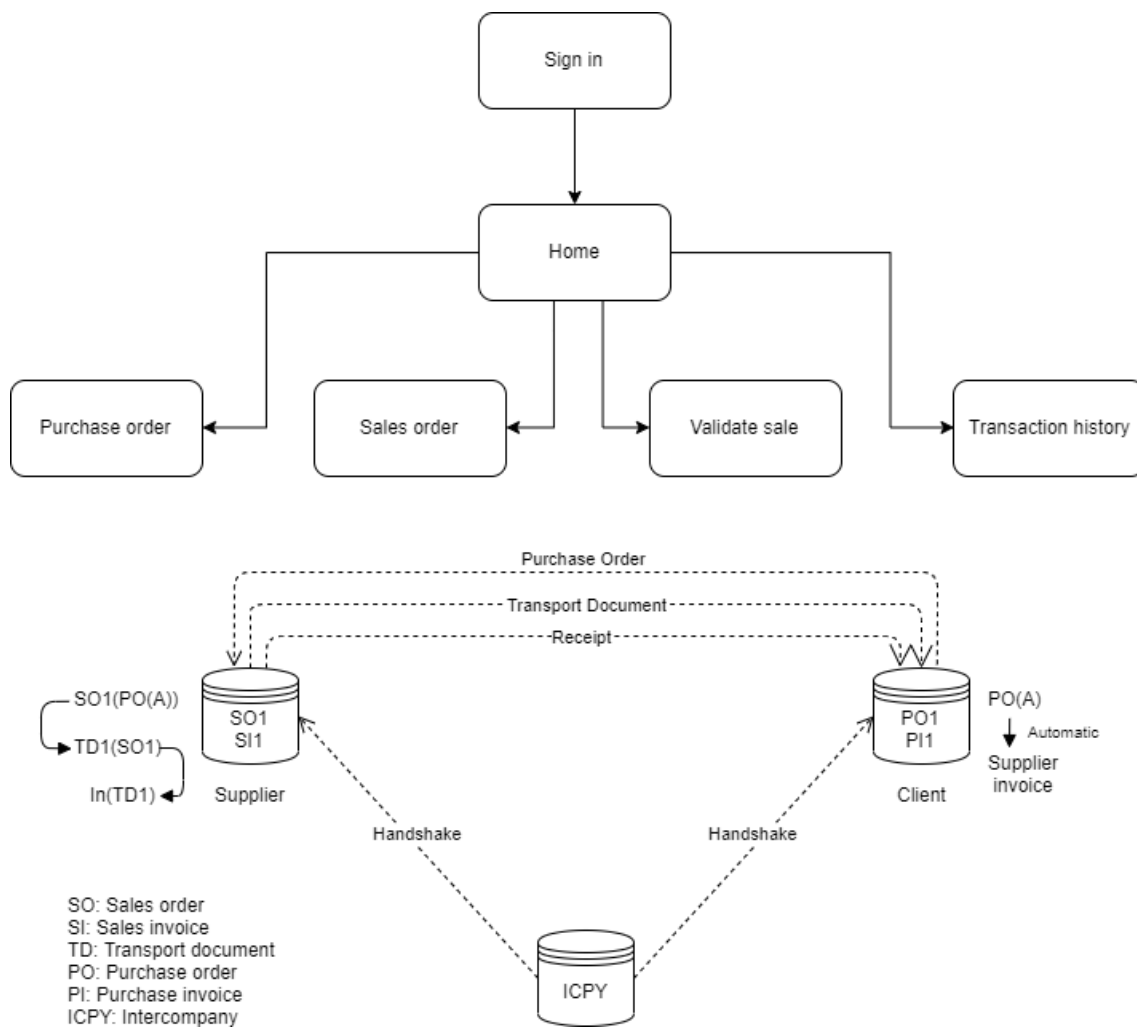


Image 1 - Information Architecture

## 4. BPMN

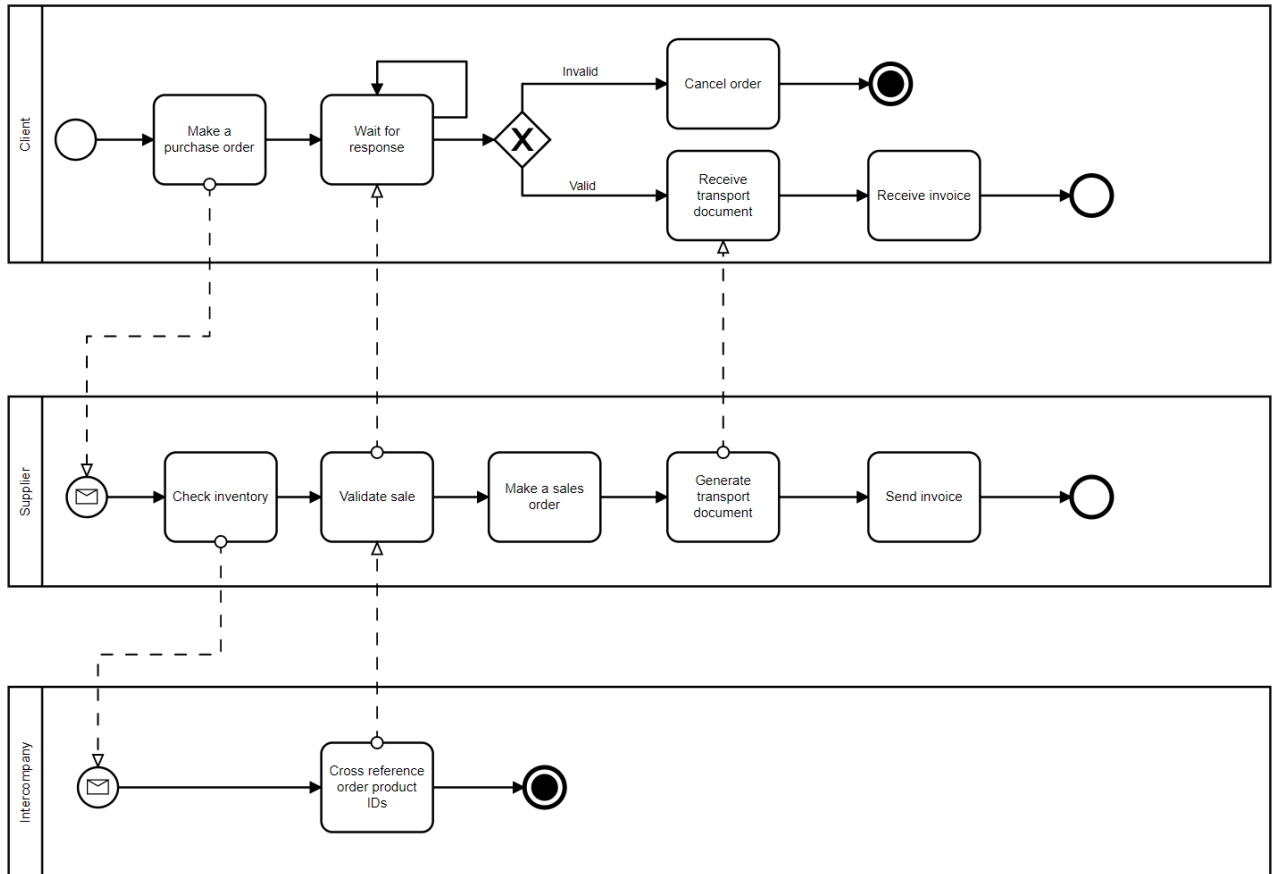


Image 2 - BPMN



## 5. Mockups

### 5.1 Purchase Order

#### User and Business goals

- A form that allows the company to place a purchase order to the provider.

Inward Paths:

Purchase  
button on  
navebar

The screenshot shows a web application interface for creating a purchase order. The header is blue with a hamburger menu icon, the text 'Intercompany', a search icon, and a three-dot menu icon. The form is divided into several sections: 'Tipo de Documento' with a dropdown menu showing 'EG'; 'Série' with a dropdown showing '2019' and a sub-label 'Série para o an...'; 'Número' with a text input containing '1'; 'Data' with a date picker showing '08/11/2019'; 'Referência' with a text input; 'Fornecedor' with a dropdown showing 'Escreva para pesquisar'; 'Condição de Pagamento' with a text input; 'Condição de Envio' with a text input; and 'Desconto' with a text input showing '0,00 %'. Below these is a section titled 'Produtos e Serviços' containing a table with columns: 'Artigo', 'Descrição', 'Armazém', 'Quantidade', 'Unidade', 'Preço Unitário', 'Desconto', 'Data de Envio', 'Tipo de IVA', and 'Total'. The table is currently empty. At the bottom right, there is a 'Total' label and a value of '0,00 €'.

Outward  
Paths:

Next\_butto  
n\_001

Intercompa  
ny

*Image 3 - Purchase order*

#### Elements of the core

- Input\_001(input\_widget) - Product Search
- Input\_002(input\_widget) - Product information
- Info\_001(label\_widget) - Current Supplier
- Info\_002(label\_widget) - Product(s)
- Info\_003(label\_widget) - Exchange Rate
- Info\_004(label\_widget) - Billing information
- Info\_005(label\_widget) - Order Total
- Next\_button\_001(button\_widget) - Validate the purchase

## 5.2 Sales Order

### User and Business goals

- A form that allows the company to place a sales order to the client.

Inward Paths:

Validate\_button

Outward  
Paths:

Next\_button\_002

Intercompany

Image 4 - Sales Order

### Elements of the core

- Input\_003(input\_widget) - Product Search
- Input\_004(input\_widget) - Product information
- Info\_006(label\_widget) - Current Client
- Info\_007(label\_widget) - Product(s)
- Info\_008(label\_widget) - Exchange Rate
- Info\_009(label\_widget) - Billing information
- Info\_010(label\_widget) - Order Total
- Next\_button\_002(button\_widget) - Validate the sale

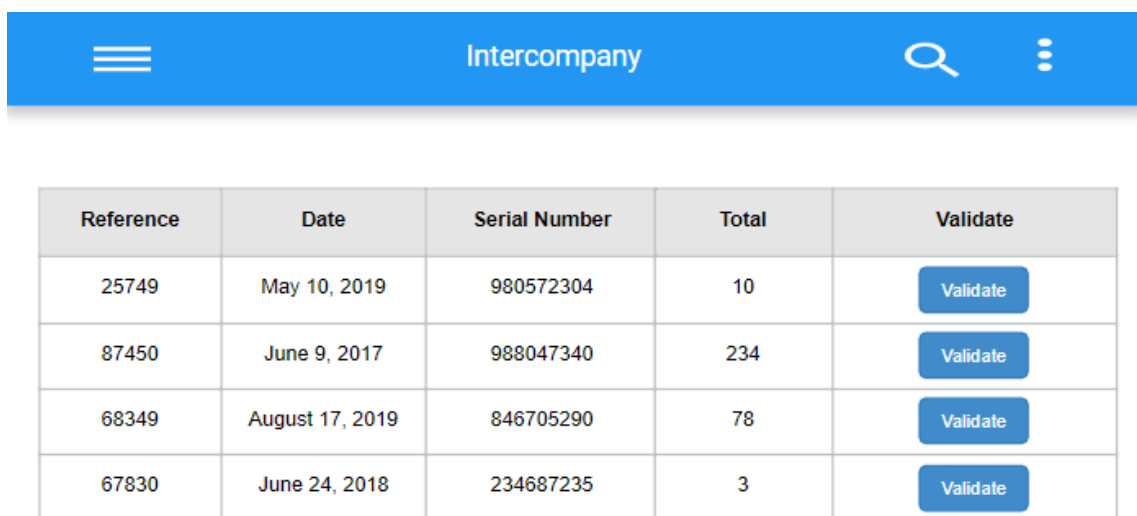
## 5.3 Valid State

### User and Business goals

- A table that allows the user to see the reference, date, serial number and total of all the sales orders that were recently dispatched or that are waiting for a transport guide.

Inward Paths:

Sales button  
on navebar



The screenshot shows a mobile application interface for 'Intercompany'. At the top is a blue header bar with a hamburger menu icon on the left, the text 'Intercompany' in the center, a magnifying glass icon on the right, and a three-dot menu icon on the far right. Below the header is a table with five columns: 'Reference', 'Date', 'Serial Number', 'Total', and 'Validate'. The table contains four rows of data. Each row has a 'Validate' button in the 'Validate' column.

Reference	Date	Serial Number	Total	Validate
25749	May 10, 2019	980572304	10	<button>Validate</button>
87450	June 9, 2017	988047340	234	<button>Validate</button>
68349	August 17, 2019	846705290	78	<button>Validate</button>
67830	June 24, 2018	234687235	3	<button>Validate</button>

Outward  
Paths:

Validate\_  
button

Intercomp  
any

*Image 5 - Validate Sale*

### Elements of the core

- Validate\_button(button\_widget) - Transport Guide
- Table\_001(table\_widget) - Sales Information
- Info\_011(label\_widget) - Dispatched Sales

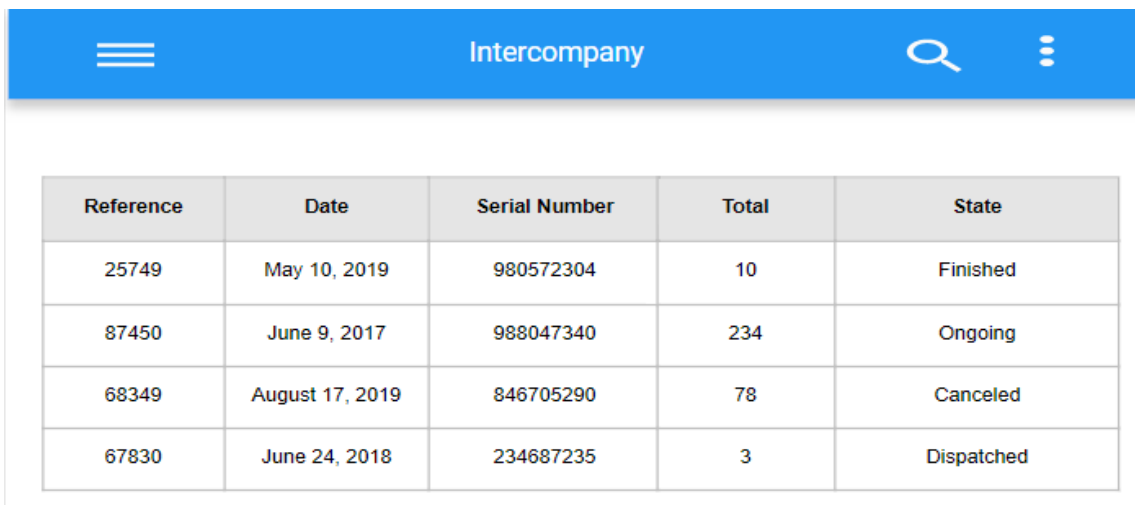
## 5.4 Transaction History

### User and Business goals

- A table that allows the user to see the reference, date, serial number and total of all the purchases made by the company, as well as their status. It also gives the user the power to cancel an order.

Inward Paths:

This is the homepage, so it appears after the login



Reference	Date	Serial Number	Total	State
25749	May 10, 2019	980572304	10	Finished
87450	June 9, 2017	988047340	234	Ongoing
68349	August 17, 2019	846705290	78	Canceled
67830	June 24, 2018	234687235	3	Dispatched

Outward Paths:

Intercomp  
any

Navbar  
Purchase

Navbar  
Sales

*Image 6 - Transaction History*

### Elements of the core

- Cancel\_button(button\_widget) - Order Cancellation
- Table\_001(table\_widget) -Purchase History
- Info\_012(label\_widget) - Order Status

## 6. Gantt project planning

