360º Company Dashboard

Integrated Master in Informatics and Computing Engineering

Information Systems

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1. Project overview

This project consists on the development of a web application which provides information of a company's status, regarding the data contained in a SAF-T (Standard Audit File for Tax Purposes) and information regarding sales orders, purchases, inventory, and accounts payable, using dashboards to provide high level/graphical information with drill down functionalities.

2. Features

2.1. General Dashboard

Feature	**Description**	**Component**
Total sales net value	KPI that indicates the total sales net value during the specified fiscal year	S_KPI_001
Sales trend	Line chart that indicates the sales net value evolution during the specified fiscal year	S_LINE_001
Total purchases value	KPI that indicates the total value spent on purchases during the specified fiscal year	P_KPI_001
Purchases trend	Line chart that indicates the evolution of the value spent on purchases during the specified fiscal year	P_LINE_001
Inventory turnover	KPI that indicates the ratio of how many times the company has sold and replaced inventory the specified fiscal year	L_KPI_001
Total income	KPI that indicates the total net profit during the specified fiscal year	F_KPI_001
Income trend	Line chart that shows the evolution of net profit throughout the specified fiscal year	F_LINE_001

2.2. Sales Dashboard

Feature	Description	Component
Total sales net value	KPI that indicates the total sales net value during the specified fiscal year	S_KPI_001
Sales trend	Line chart that indicates the sales net value evolution during the specified fiscal year	S_LINE_001
Top sold products	Bar chart that shows the top 5 best selling products during the specified fiscal year	S_BAR_001
Top customers	Bar chart that shows the top 5 customers that purchased the most during the specified fiscal year	S_BAR_002
Sales by region	Pie chart that indicates the sales net value on each region during the specified fiscal year	S_PIE_001

2.3. Purchase Dashboard

Feature	**Description**	**Component**
Total purchases value	KPI that indicates the total value spent on purchases during the specified fiscal year	P_KPI_001
Total purchase orders	KPI that indicates the total purchase orders made during the specified fiscal year	P_KPI_002
Purchases trend	Line chart that indicates the evolution of the value spent on purchases during the specified fiscal year	P_LINE_001
Top suppliers	Bar chart that indicates the top 5 suppliers from which purchases were made during the specified fiscal year	P_BAR_001
Top purchased products	Bar chart that indicates the most purchased products the specified fiscal year	P_BAR_002

2.4. Logistics Dashboard

Feature	**Description**	**Component**
Inventory turnover	KPI that indicates the ratio of how many times the company has sold and replaced inventory the specified fiscal year	L_KPI_001
Average inventory period	KPI that indicates the average number of days goods are held in inventory before they are sold during the specified fiscal year	L_KPI_002
Inventory value	KPI that indicates the total inventory value	L_KPI_003
Total deliveries	KPI that indicates the total amount of deliveries made during the specified fiscal year	L_KPI_004
Delivery status	Pie chart that shows the percentage of deliveries that were made after their due date vs. deliveries that were made within their due date during the specified fiscal year	L_PIE_001
Deliveries by region	Pie chart that shows the total deliveries on each region during the specified fiscal year	L_PIE_002

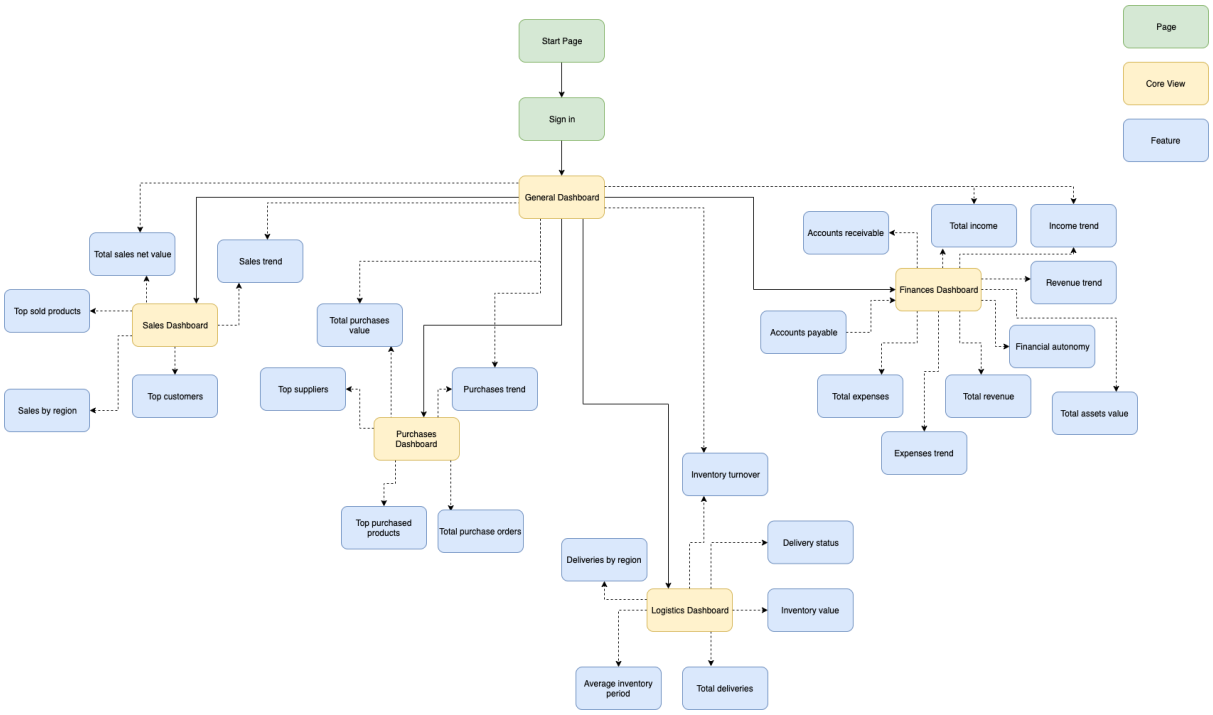
2.5. Finances Dashboard

Feature	Description	Component
Total income	KPI that indicates the total net profit during the specified fiscal year	F_KPI_001
Total revenue	KPI that indicates the total money received by the company during the specified fiscal year	F_KPI_002
Total expenses	KPI that indicates the total fees and expenses paid for during the specified fiscal year	F_KPI_003
Total assets value	KPI that indicates the company's total assets value	F_KPI_004
Accounts payable	KPI that indicates the amounts due to vendors or suppliers during the specified fiscal year	F_KPI_005
Accounts receivable	KPI that indicates the balance of money owed by the customers to the company during the specified fiscal year	F_KPI_006
Financial autonomy	KPI that indicates the ratio between the company's equity and its assets	F_KPI_007
Income trend	Line chart showing the evolution of net profit during the specified fiscal year	F_LINE_001
Revenue trend	Line chart showing the evolution of revenue during the specified fiscal year	F_LINE_002
Feature	**Description**	**Component**
Expenses trend	Line chart that shows the evolution of	F_LINE_003

	expenses throughout the specified fiscal year	

3. Information Architecture

3.1. Paths diagram



3.2. Core Views

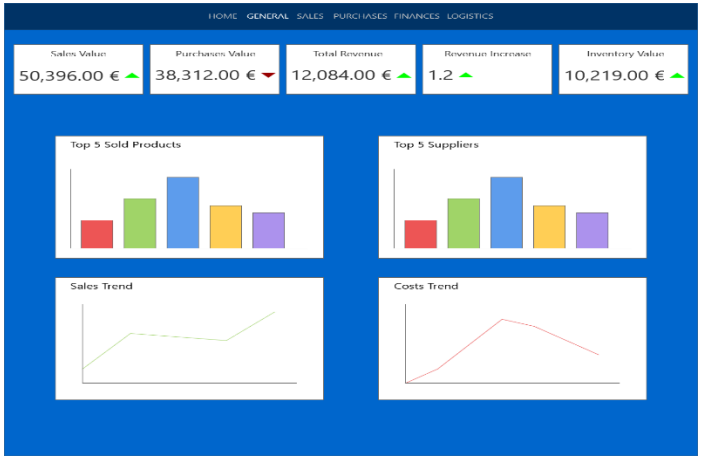
3.2.1. General Dashboard

User & Business Goals

- Company Overview (Sales Value, Costs Value, Sales Evolution, Costs Evolution, Inventory Value)
- Quickly view company status
- View to be used as a management tool

Inward Paths:

- Sign In
- "General" navigation button



Outward Paths:

- Provide the user with an aggregate of general information about the company relative to a given fiscal year
- Drill down on total net sales value
- Drill down on sales trend
- Drill down on total purchases value
- Drill down on purchases trend
- Drill down on inventory turnover
- Drill down on total income
- Drill down on income trend
- Change fiscal year

Elements of The Core

S_KPI_001 (KPI) | Total Sales Value	S_LINE_001 (LINE) | Sales Trend	P_KPI_001 (KPI) | Total Purchases Value	P_LINE_001 (LINE) | Purchases Trend
L_KPI_001 (KPI) | Inventory Turnover	F_KPI_001 (KPI) | Total Income	F_LINE_001 (LINE) | Income Trend	

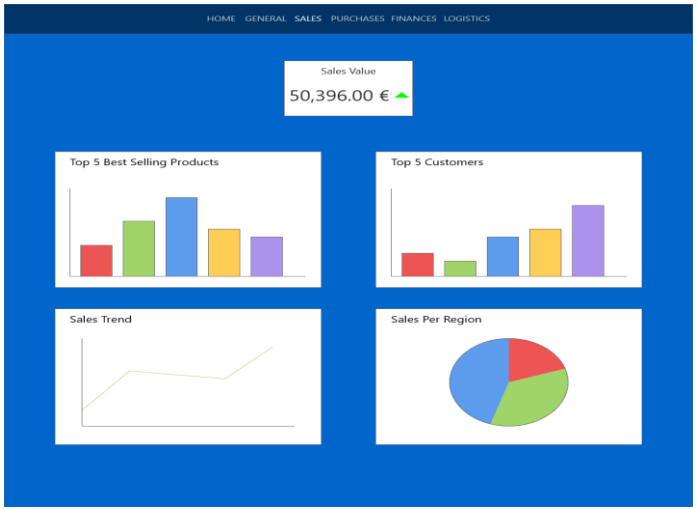
3.2.2. Sales dashboard

User & Business Goals

- Sales Overview (Sales Value, Top Products, Top Customers, Sales Trend, Sales per Region)
- Quickly view sales status
- View to be used as a management tool

Inward Paths:

- "Sales" navigation button



Outward Paths:

- Provide the user with an aggregate of the company's sales information relative to a given fiscal year
- Drill down on customer and product
- Change fiscal year

Elements of The Core

S_KPI_001 (KPI) | Total Sales Value

S_LINE_001 (LINE) | Sales Trend

S_BAR_001 (BAR) | Top Sold Products

S_BAR_002 (LINE) | Top Customers

S_PIE_001 (PIE) | Sales By Region

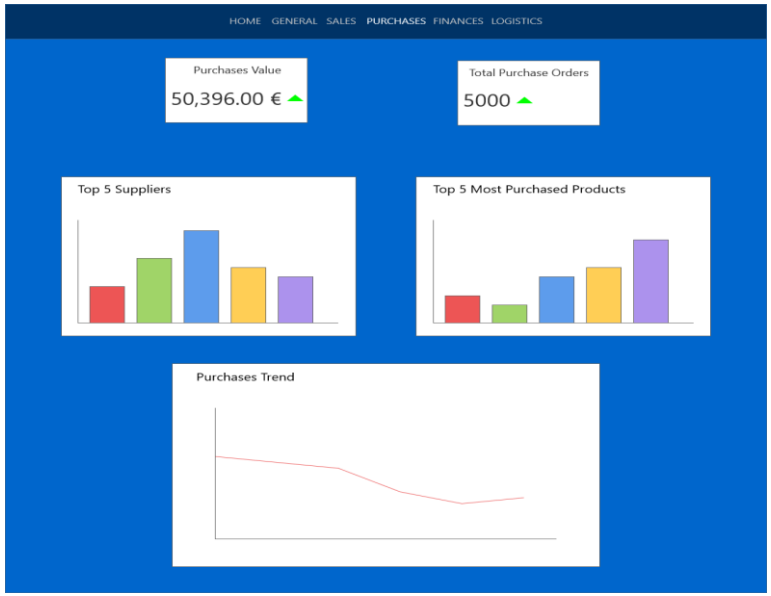
3.2.3. Purchases dashboard

User & Business Goals

- Purchases Overview (Purchases Value, Total Purchase Orders, Top Suppliers, Top Purchased Products, Purchases Trend)
- Quickly view purchases status
- View to be used as a management tool

Inward Paths:

- "Purchases" navigation button



Outward Paths

- Provide the user with an aggregate of the company's purchases information relative to a given fiscal year
- Drill down on supplier and product
- Change fiscal year

Elements of The Core

P_KPI_001 (KPI) | Total Purchases Value

P_KPI_002 (KPI) | Total Purchase Orders

P_LINE_001 (LINE) | Purchases Trends

P_BAR_001 (BAR) | Top Suppliers

asfP_BAR_002 (BAR) | Top Purchased Products

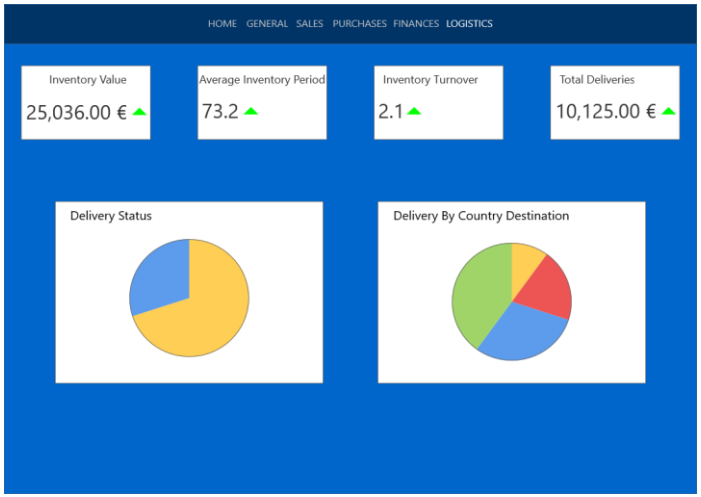
3.2.4. Logistics dashboard

User & Business Goals

- Logistics Overview (Inventory Turnover, Average Inventory Period, Inventory Value, Total Deliveries, Deliveries Status, Deliveries by Region)
- Quickly view logistics status
- View to be used as a management tool

Inward Paths:

- "Logistics" navigation button



Outward Paths

- Provide the user with an aggregate of the company's logistics information relative to a given fiscal year
- Change fiscal year

Elements of The Core

L_KPI_001 (KPI) | Inventory Turnover	L_KPI_002 (KPI) | Average Inventory Period	L_KPI_003 (KPI) | Inventory Value	L_KPI_004 (KPI) | Total Deliveries
L_PIE_001 (PIE) | Deliveries Status	L_PIE_002 (PIE) | Deliveries by Region		

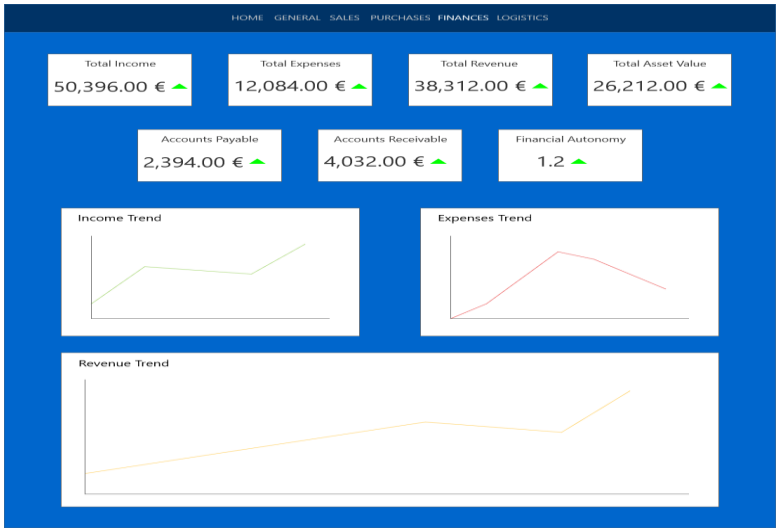
3.2.5. Finances dashboard

User & Business Goals

- Logistics Overview (Inventory Turnover, Average Inventory Period, Inventory Value, Total Deliveries, Deliveries Status, Deliveries by Region)
- Quickly view logistics status
- View to be used as a management tool

Inward Paths:

- "Finances" navigation button



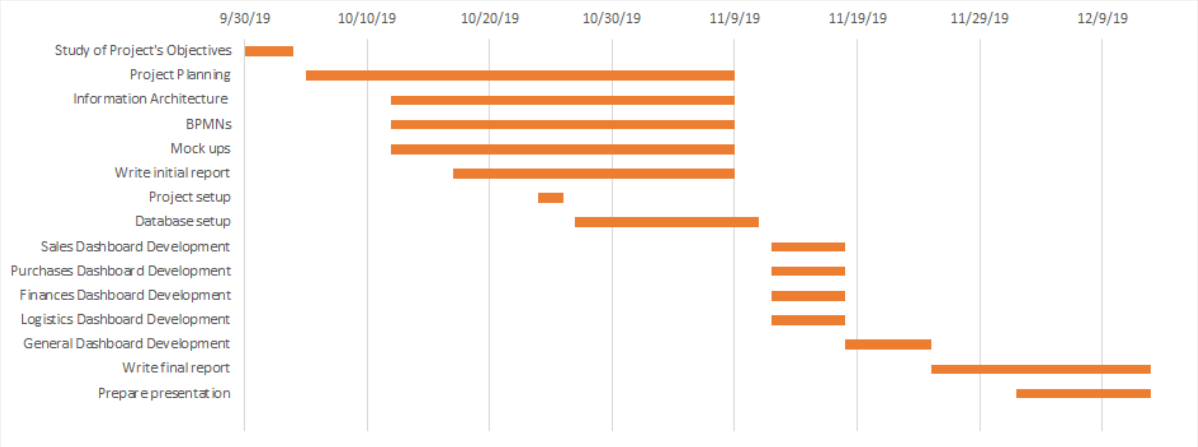
Outward Paths

- Provide the user with an aggregate of the company's financial information relative to a given fiscal year
- Change fiscal year

Elements of The Core

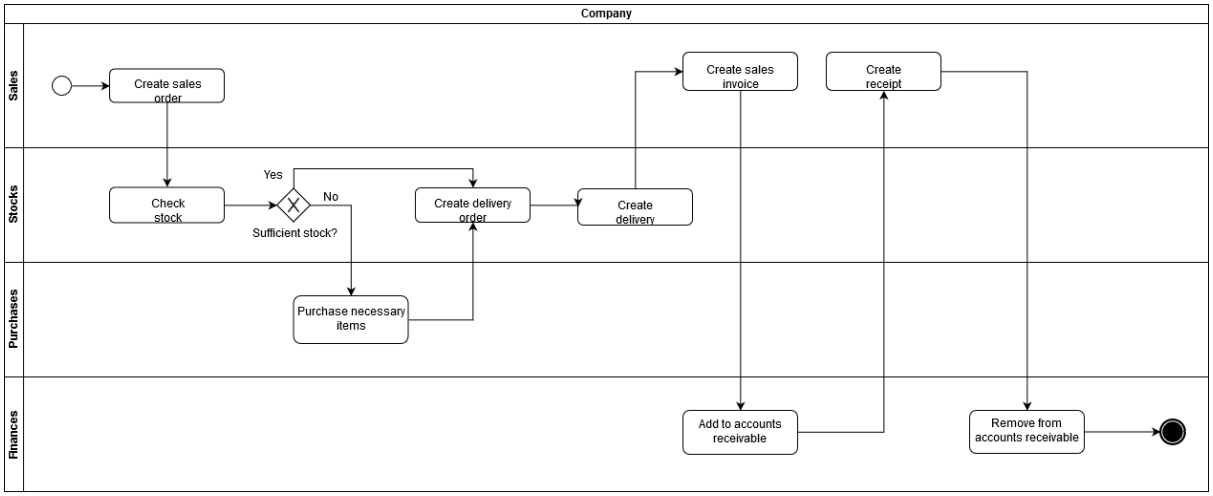
F_KPI_001 (KPI) | Total Income	F_KPI_002 (KPI) | Total Revenue	F_KPI_003 (KPI) | Total Expenses	F_KPI_004 (KPI) | Total Assets Value	F_LINE_002 (LINE) | Revenue Trend
F_KPI_005 (KPI) | Accounts Payable	F_KPI_006 (KPI) | Accounts Receivable	F_KPI_007 (KPI) | Financial Autonomy	F_LINE_001 (LINE) | Income Trend	F_LINE_003 (LINE) | Expenses

4. Project planning

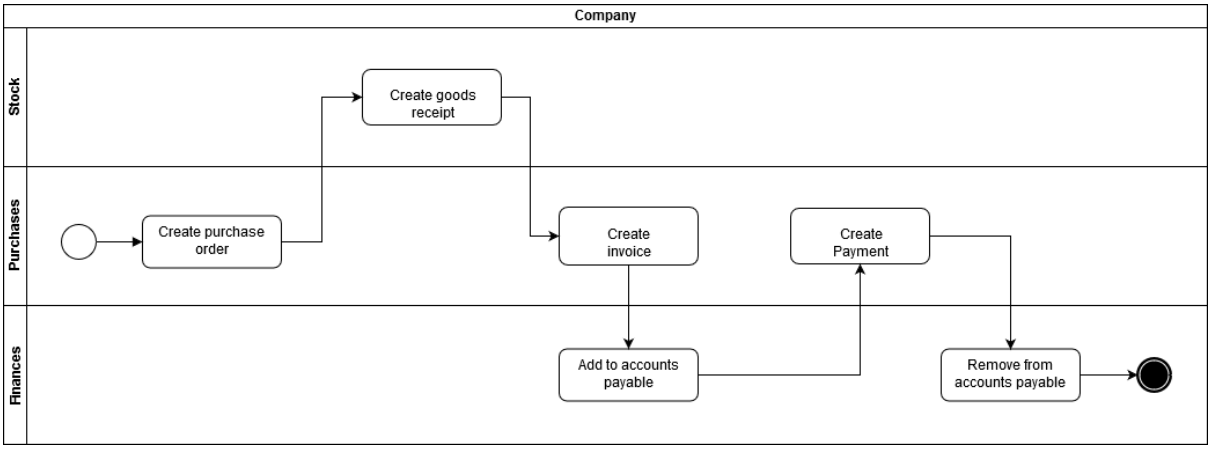
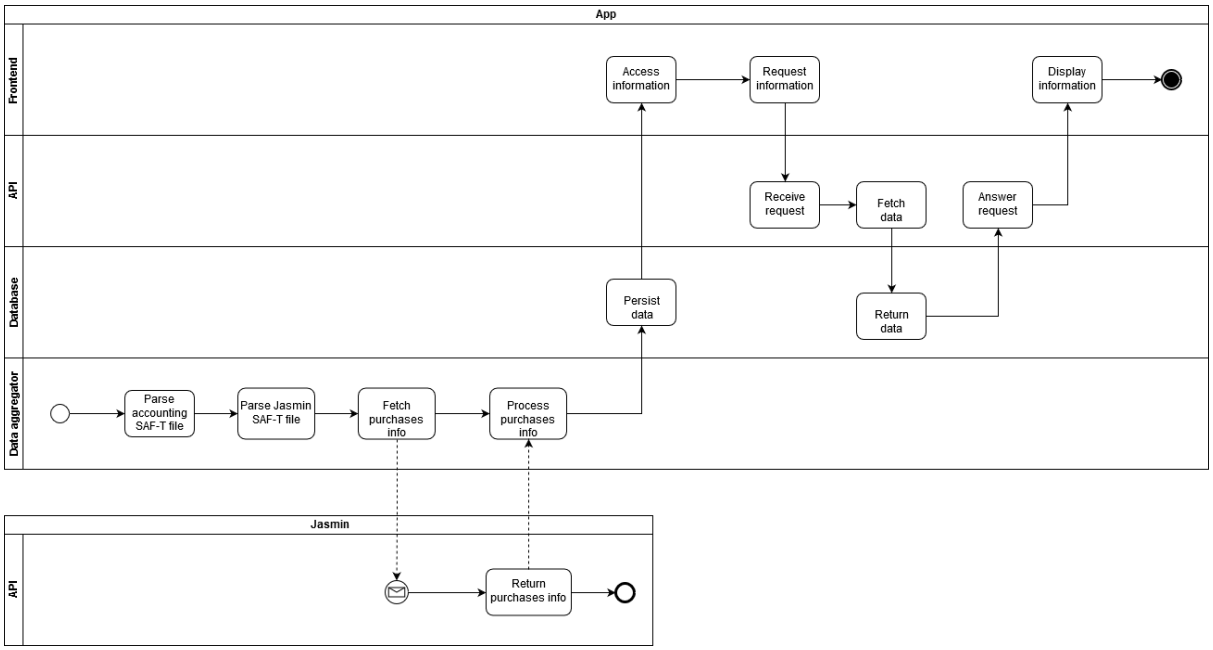


5. BPMN (Business Process Modeling Notation) diagrams

5.1. Jasmin sales process



5.2. Jasmin purchases process



5.3. 360º Dashboard application process