

### Sales Force Automation

Deliverable 2: Interoperability

### Information Systems

4th year of the Master in Informatics and Computing Engineering

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## Information Architecture

### CV01 - Dashboard

### **User Goals:**

 Representative's dashboard, so the user can analyze products and statistical information, and also consult his daily agenda and preferred route.

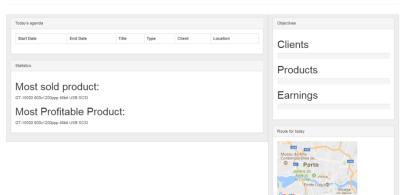
### **Business Goals:**

 Being able to analyze the principal data for a given day and product is key in choosing the next profitable step.

### Inward paths:

- Dashboard button.
- Login.

#### Dashboard



### Outward paths:

- Route in Google Maps.
- Client links in agenda.
- Product's statistics.
- Agenda.

- Daily agenda information.
- Objective's list.
- Statistics list.
- Route map.

### CV02 - Agenda

### **User Goals:**

 Representative's agenda which displays detailed information about the chosen day's work order.

### **Business Goals:**

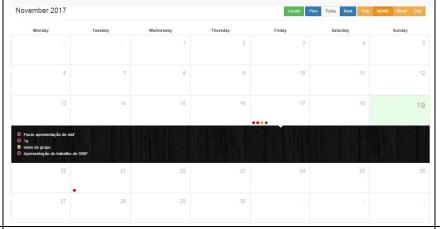
 Being able to plan ahead, setup meetings and organize long-term commitments is fundamental in every business management.

### Outward paths:

- Add a commitment to a chosen day.
- Activities agenda.
- Meetings links and notes.
- Calendar interactivity.

### Inward paths:

Agenda button.



- Monthly agenda.
- Daily task list.

### CV03 - Target customers

#### User Goals: **Business Goals:** Target customer's Indexing customers listing and general provides easy access to its information's, which information. makes it easier to set up business meetings. Inward paths: Outward paths: **Target Customers Target** Search for customer Sofrio, Lda 2017-11-17 3:43 s button. customer Sofrio, Lda Sofrio, Lda 2017-11-17 16:30 200267890 2017-11-21 1:0 200267890 using the 2017-11-17 0:0 Sofrio, Lda search bar. Target customers links and notes on the table. Add target customers. Elements of this core: Search bar. Customers information table.

### CV04 - Sales orders

### **User Goals:**

 Table with sales overall information about the products, such as its id, quantity and buyer's name.

### **Business Goals:**

 Being able to identify the key buyers and the most sold products.

### Inward paths:

 Sales orders button.



### **Outward paths:**

- Search for a sales order using the search bar.
  - Sales orders links and informatio n on the table.
- Add sales orders.

- Table with information regarding sales.
- Search bar.

### CV05 – Opportunities

Inward paths:

Opportunities

button.

#### **Business Goals: User Goals:** Identify Putting opportunities into opportunities to expand business perspective and throughout a analyzing them dedicated process. step-by-step is of major importance in every business daily agenda. Outward paths: Create Opportunities' Qualification Needs analysis Negotiations Ready to close information in Sofrio, Lda Sofrio, Lda Maria José da each of the Pentium 4 945+ Dual Core 3.4GHZ Processador Intel D326 2.5GHz steps' notes.

Processador Intel D326 2.5GHz Change the

state of the opportunities. Add new opportunities.

### Elements of this core:

Pentium D925 Dual Core

Step-by-step opportunity analysis.

Sofrio, Lda

Mesa p/ PC

Note cards.

### CV06 - Client Profile

### **User Goals:**

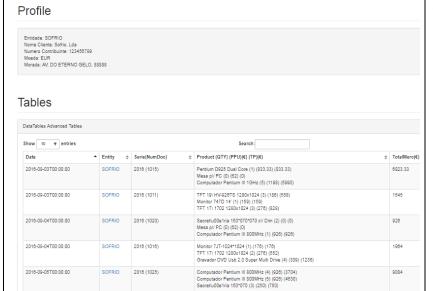
 Client's profile page, where the representative can track the latest buys, location and contact information.

### **Business Goals:**

Client's
 management, such
 as needs,
 preferred products
 and contacts, is
 important in order
 to deliver a more
 personalized
 service.

### Inward paths:

 Customer name.



### Outward paths:

- Location map.
- Last visits table.

- Profile information (name, email, phone).
- Visits' table.
- Location map.

### CV07 - Product information

### **User Goals:**

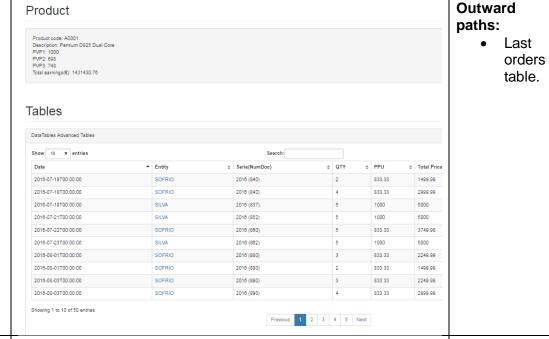
 Products' profile, where it's possible to look up product information regarding quantities/sales.

### **Business Goals:**

 Statistic studying about a product's profit can contribute to estimate its growth in value overtime, and if it still remains profitable.

### Inward paths:

• Product id.



- Product's information.
- Orders' table.
- Information regarding prices/stock/profit.

# Interoperability with Primavera

In this section, we will define what webservices will be implemented.

### Dashboard

Protocol to get the data that will be presented on the dashboard:

Webservice ID	DASHBOARD
Webservice Description	Provide some metrics related with how well the sales are performing and part of the agenda of the sales representative.
Related Core View(s)	CV01
HTTP Verb	GET
Route	/dashboard/?representative_id= <representative_id></representative_id>
Input Example	/dashboard/?representative_id=1
Expected Output	{     "today_agenda": [

## Agenda

Protocols to get and set the appointments that a sales representative attended and will attend:

Webservice ID	APPOINTMENTS
Webservice Description	Provide the detailed information of the appointments of a representative.
Related Core View(s)	CV02
HTTP Verb	GET
Route	/agenda/?representative_id= <representative_id></representative_id>
Input Example	/agenda/?representative_id=1
Expected Output	[

Webservice ID	APPOINTMENT_CREATE
Webservice Description	Create an appointment that the sales representative should attend.
Related Core View(s)	CV02
HTTP Verb	POST
Route	/agenda
Input Example	/agenda {     "start_date": "2017-11-17 23:00",     "end_date": "2017-11-17 23:56",     "title": "Present product",     "type": "Reunião",     "client": "SOFRIO",     "representative_id": "1",     "location": "Home",     "notes": "Do not be late." }

Expected Output	Success:
Expected Output	{     "id": "{35998DB3-CD18-11E7-8BA4-080027A3C35D}",     "start_date": "2017-11-17 23:00",     "end_date": "2017-11-17 23:56",     "title": "Present product",     "type": "Reunião",     "client": "SOFRIO",     "representative_id": "1",
	"location": "Home",
	"notes": "Do not be late."
	Failure: "It was not possible to create the appointment."

Webservice ID	APPOINTMENT_UPDATE
Webservice Description	Update the information of an appointment that the sales representative should attend.
Related Core View(s)	CV02
HTTP Verb	PUT
Route	/agenda/?id= <id></id>
Input Example	/agenda/?id={35998DB3-CD18-11E7-8BA4-080027A3C35D} {     "start_date": "2017-11-17 23:00",     "end_date": "2017-11-17 23:56",     "title": "Present product",     "type": "Compromisso",     "client": "SOFRIO",     "representative_id": "1",     "location": "Home",     "notes": "Do not be late." }
Expected Output	Success: {  "id": "{1884517D-CD19-11E7-8BA4-080027A3C35D}",  "start_date": "2017-11-17 23:00",  "end_date": "2017-11-17 23:56",  "title": "Present product",  "type": "Compromisso",  "client": "SOFRIO",  "representative_id": "1",  "location": "Home",  "notes": "Do not be late." } Failure: message with error description.

Webservice ID	APPOINTMENT_DELETE
Webservice Description	Hide an appointment that the sales representative should attend.
Related Core View(s)	CV02
HTTP Verb	DELETE
Route	/agenda/?id= <id></id>
Input Example	/agenda/?id={35998DB3-CD18-11E7-8BA4- 080027A3C35D}
Expected Output	Success: "Sucesso" Failure: message with error description.

### Sales Orders

Protocols to get, create, update and delete information about sales orders:

Webservice ID	SALES_ORDERS
Webservice Description	Get the sales orders.
Related Core View(s)	CV04
HTTP Verb	GET
Route	/DocVenda
Input Example	/DocVenda
Expected Output	Success: [  {     "id": "{308AB32A-CB4C-11E7-B836-080027640604}",     "Entidade": "SOFRIO",     "NumDoc": 24,     "Data": "2017-11-17T00:00:00",     "Desconto": 10,     "TotalMerc": 2504.03,     "Serie": "A",     "Anulado": true,     "LinhasDoc": [{         "CodArtigo": "A0003",         "DescArtigo": "Computador Pentium III 1GHz",         "IdCabecDoc": "{308AB32A-CB4C-11E7-B836-080027640604}",         "Quantidade": 1,         "Unidade": "UN",         "Desconto": 0,         "PrecoUnitario": 998.33,         "TotalLiquido": 898.5     }]

```
"id": "{DCBBF1F6-7A5A-11E6-A55F-080027184ECD}",
    "Entidade": "LIMA",
    "NumDoc": 1108,
    "Data": "2016-09-22T00:00:00",
    "Desconto": 0,
    "TotalMerc": 534,
    "Serie": "2016",
    "Anulado": false,
    "LinhasDoc": [{
    "CodArtigo": "B0006",
    "DescArtigo": "TFT 17" 1702 1280x1024",
    "IdCabecDoc": "{DCBBF1F6-7A5A-11E6-A55F-
    080027184ECD}",
    "Quantidade": 1,
    "Unidade": "UN",
    "Desconto": 0,
    "PrecoUnitario": 276,
"TotallLiquido": 276,
    "TotalLiquido": 276
    {
"CodArtigo": "B0004",
    "DescArtigo": "Ddram2 1024Mb 533Mhz PC2 4200", 
"IdCabecDoc": "{DCBBF1F6-7A5A-11E6-A55F-
    080027184ECD}",
    "Quantidade": 1,
    "Unidade": "UN",
    "Desconto": 2,
    "PrecoUnitario": 129,
    "TotallLiquido": 129,
    "TotalLiquido": 126.42
    }],
    }
Failure: message with error description.
```

Webservice ID	SALES_ORDERS_CLIENT
Webservice Description	Get the sales orders associated to a client.
Related Core View(s)	CV06
HTTP Verb	GET
Route	/DocVenda/?id= <id></id>
Input Example	/DocVenda/?id=SOFRIO
Expected Output	Success: [

Webservice Description         Get a specific sale order.           Related Core View(s)         CV07           HTTP Verb         GET           Route         /DocVenda/?id= <id>&amp;serie=<serie>           Input Example         /DocVenda/?id=15&amp;serie=A           Expected Output         Success: {</serie></id>	Webservice ID	SALES_ORDERS_ORDER
Route	Webservice Description	Get a specific sale order.
Input Example	Related Core View(s)	CV07
Input Example  //DocVenda/?id=15&serie=A   Success: {	HTTP Verb	GET
Success:  {     "id": "{A940A533-C7DF-11E7-B090-080027640604}",     "Entidade": "SOFRIO",     "NumDoc": 15,     "Data": "2017-11-12T00:00:00",     "Desconto": 0,     "TotalMerc": 465.84,     "Serie": "A",     "Anulado": false,     "LinhasDoc": [{         "CodArtigo": "B0001",         "DescArtigo": "Monitor 7JT-1024*1024",         "IdCabecDoc": "{A940A533-C7DF-11E7-B090-080027640604}",         "Quantidade": 2,         "Unidade": "UN",         "Desconto": 0,         "PrecoUnitario": 166.67,         "TotallLiquido": 333.34,         "TotalLiquido": 300.01         },         {               "CodArtigo": "Monitor 747D 14"",               "IdCabecDoce": "{A940A533-C7DF-11E7-B090-080027640604}",               "Quantidade": 1,                "Unidade": "UN",               "DescArtigo": "Monitor 747D 14"",                "IdCabecDoce": "{A940A533-C7DF-11E7-B090-080027640604}",                "Quantidade": 1,                "Unidade": "UN",                "Desconto": 10,	Route	/DocVenda/?id= <id>&amp;serie=<serie></serie></id>
{     "id": "(A940A533-C7DF-11E7-B090-080027640604)",     "Entidade": "SOFRIO",     "NumDoc": 15,     "Data": "2017-11-12T00:00:00",     "Desconto": 0,     "TotalMerc": 465.84,     "Serie": "A",     "Anulado": false,     "LinhasDoc": [{         "CodArtigo": "B0001",         "DescArtigo": "Monitor 7JT-1024*1024",         "IdCabecDoc": "(A940A533-C7DF-11E7-B090-080027640604)",         "Quantidade": 2,         "Unidade": "UN",         "Desconto": 0,         "PrecoUnitario": 166.67,         "TotalLiquido": 333.34,         "TotalLiquido": 300.01     },         {               "CodArtigo": "B0003",               "DescArtigo": "Monitor 747D 14",               "IdCabecDoce": "(A940A533-C7DF-11E7-B090-080027640604)",               "Quantidade": 1,               "Unidade": "UN",               "Desconto": 10,	Input Example	/DocVenda/?id=15&serie=A
"TotallLiquido": 132.5,  "TotalLiquido": 107.32  }],  Failure: message with error description.	Expected Output	{     "id": "{A940A533-C7DF-11E7-B090-080027640604}",     "Entidade": "SOFRIO",     "NumDoc": 15,     "Data": "2017-11-12T00:00:00",     "Desconto": 0,     "TotalMerc": 465.84,     "Serie": "A",     "Anulado": false,     "LinhasDoc": [{         "CodArtigo": "B0001",         "DescArtigo": "Monitor 7JT-1024*1024",         "IdCabecDoc": "{A940A533-C7DF-11E7-B090-080027640604}",         "Quantidade": 2,         "Unidade": "UN",         "Desconto": 0,         "PrecoUnitario": 166.67,         "TotalILiquido": 333.34,         "TotalLiquido": 300.01         },         {              "CodArtigo": "Monitor 747D 14"',             "IdCabecDoc": "{A940A533-C7DF-11E7-B090-080027640604}",             "Quantidade": 1,             "Unidade": "UN",             "DescArtigo": "Monitor 747D 14"',             "IdCabecDoc": "{A940A533-C7DF-11E7-B090-080027640604}",             "Quantidade": 1,             "Unidade": "UN",             "Desconto": 10,             "PrecoUnitario": 132.5,             "TotalILiquido": 132.5,             "TotalILiquido": 107.32             }],     }

Webservice ID	SALES_ORDERS_PRODUCT
Webservice Description	Get the sales orders associated to a product.
Related Core View(s)	CV04
HTTP Verb	GET
Route	/DocVenda/?id= <id></id>
Input Example	/DocVenda/?id=A0001
Expected Output	Success: [

Webservice ID	CREATE_SALES_ORDERS
Webservice Description	Creates a new sale order.
Related Core View(s)	CV04
HTTP Verb	POST
Route	/DocVenda
Input Example	/DocVenda/  {"Entidade":"SOFRIO",  "Serie":"A",  "LinhasDoc":[{"CodArtigo":"A0004","Quantidade":1,"Desconto":0}]  }
Expected Output	Success: "Sucesso"  Failure: message with error description.

Webservice ID	UPDATE_SALES_ORDERS
Webservice Description	Updates an existing order.
Related Core View(s)	CV04
HTTP Verb	PUT
Route	/DocVenda/?id= <id></id>
Input Example	/DocVenda/{9DD49CEB-CBAF-11E7-8D5E-080027640604}/ {"Entidade":"LIMA",    "Serie":"A",    "LinhasDoc":[{"CodArtigo":"A0002","Quantidade":1,"Desconto":0}] }
Expected Output	Success: "Sucesso"  Failure: message with error description.

Webservice ID	CANCEL_SALES_ORDER
Webservice Description	Cancels a sale order.
Related Core View(s)	CV04
HTTP Verb	DELETE
Route	/DocVenda/?id= <id></id>
Input Example	/DocVenda/?id={DCBBF1D6-7A5A-11E6-A55F- 080027184ECD}
Expected Output	Success: Sucesso"  Failure: message with error description.

### **Client Profile**

Protocol to get the information related to a client:

Webservice ID	CLIENT_PROFILE
Webservice Description	Obtain information about a client.
Related Core View(s)	CV06
HTTP Verb	GET
Route	/cliente/ <client_id></client_id>
Input Example	/cliente/SOFRIO
Expected Output	Success: {     "Morada": "AV. DO ETERNO GELO, 88888",     "CodCliente": "SOFRIO",     "NomeCliente": "Sofrio, Lda",     "NumContribuinte": "123456789",     "Moeda": "EUR",     "Email": "" } Failure: message with error description.

Target Customers
Protocol to get or search future commitments:

Webservice ID	TARGET_CUSTOMERS
Webservice Description	Check next commitments with target customers.
Related Core View(s)	CV03
HTTP Verb	GET
Route	/target_customers/?representative_id= <representative_id></representative_id>
Input Example	/target_customers/?representative_id=1
Expected Output	[

Walasamilaa ID	TARCET CUCTOMERO CEARCU
Webservice ID	TARGET_CUSTOMERS_SEARCH
Webservice Description	Search next commitments with target customers.
Related Core View(s)	CV03
HTTP Verb	GET
Route	/target_customers/?representative_id= <representative_id>&amp; target_customer_id=<target_customer_id></target_customer_id></representative_id>
Input Example	/target_customers/?representative_id=1⌖_customer_i d=SOFRIO
Expected Output	[

Opportunities

Protocol to get, create and edit the state of negotiations:

Webservice ID	OPORTUNITIES
Webservice Description	Retrieves the opportunities.
Related Core View(s)	CV05
HTTP Verb	GET
Route	/opportunities/?representative_id= <representative_id></representative_id>
Input Example	/opportunities/?representative_id=1
Expected Output	[

Webservice ID	CREATE_OPPORTUNITY
Webservice Description	Create a new opportunity.
Related Core View(s)	CV05
HTTP Verb	POST
Route	/opportunities
Input Example	/opportunities
	{
	"customer_id": "SOFRIO",
	"product_id": "A0001",
	"opportunity_type": "Needs analysis",
	"representative_id": "1"
	}
Expected Output	Success:
	{
	"opportunity_id": "OPV018",
	"customer_id": "SOFRIO",
	"customer_name": "Sofrio, Lda",
	"product_id": "A0001",
	"product_name": "Pentium D925 Dual Core",
	"opportunity_type": "Needs analysis",
	"representative_id": "1"
	}
	Failure: "It was not possible to create the opportunity."

Webservice ID	UPDATE_OPPORTUNITY
Webservice Description	Change the state of an opportunity.
Related Core View(s)	CV05
HTTP Verb	PUT
Route	/opportunities/?opportunity_id= <opportunity_id></opportunity_id>
Input Example	/opportunities/?opportunity_id=OPV018 {     "customer_id": "SOFRIO",     "product_id": "A0005",     "opportunity_type": "Needs analysis",     "representative_id": "1" }
Expected Output	Success: "Sucesso"
	Failure: message with error description.

Webservice ID	DELETE_OPPORTUNITY
Webservice Description	Delete the state of an opportunity.
Related Core View(s)	CV05
HTTP Verb	DELETE
Route	/opportunities/?opportunity_id= <opportunity_id></opportunity_id>
Input Example	/opportunities/?opportunity_id=OPV018
Expected Output	Success: "Sucesso"
	Failure: message with error description.

### **Product Information**

Protocol to get the details of a product,

Webservice ID	PRODUCT_INFORMATION
Webservice Description	Retrieves the details of a product.
Related Core View(s)	CV07
HTTP Verb	GET
Route	/artigo/?id= <product_id></product_id>
Input Example	/artigo/?id=A0001
Expected Output	Success: {     "CodArtigo": "A0001",     "DescArtigo": "Pentium D925 Dual Core",     "STKAtual": 569,     "PVP1": 1000,     "PVP2": 698,     "PVP3": 748,     "TotalEarnings": 1431430.76 } Failure: message with error description.