

# Appendix A: The Billing System, V1.0

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## 1. RSL-IL EXCEL TEMPLATE

### 1.1 Configuration and Home Sheets

#### 1.1.1 home Sheet

	A	B	C	D	E	F	G	H	I
1	prj-billing	Billing System							
2	Index								
3									
4	INDEX								
5	<a href="#">rslil.config</a>								
6	<a href="#">nl.home</a>								
7	<a href="#">rslil.home</a>								
8	<a href="#">rslil.glossary</a>								
9	<a href="#">rslil.stakeholders</a>								
10	<a href="#">rslil.goals</a>								
11	<a href="#">rslil.actors</a>								
12	<a href="#">rslil.structural</a>								
13	<a href="#">rslil.usecases</a>								
14	<a href="#">rslil.usecases2.S2</a>								
15	<a href="#">rslil.usecases2.S3</a>								
16	<a href="#">rslil.usecases2.S4</a>								
17	<a href="#">rslil.usecases2.S5</a>								
18	<a href="#">rslil.requirements</a>								

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### 1.1.3 rslil.home Sheet

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## 1.2 Business Level Sheets

### 1.2.1 Glossary View (rslil.glossary sheet)

	A	B	C	D	E	F	G	H
1	<a href="#">Back to Index</a>							
2	<b>prj-billing</b>	<b>BillingSystem</b>						
3	<b>Glossary</b>							
4								
5	<b>Id</b>	<b>Class</b>	<b>Word</b>	<b>Definition</b>	<b>Synset</b>	<b>POS</b>	<b>Term Relation</b>	<b>Term Relation Type</b>
6	bill-customer	stakeholder, actor, entity	customer	A person that order products	customer.n.01	noun		
7	bill-employee	stakeholder, actor	employee	A person that create product invoices	employee.n.01	noun		
8	bill-client	stakeholder, actor	client	A person that order products and receives invoices	client.n.01	noun		
9	bill-manager	stakeholder, actor	manager	A person that interacts with the billing system	manager.n.01	noun		
10	bill-staff	stakeholder, actor	staff	A employee that create product invoices and delivers invoices	staff.n.01	noun		
11	bill-audit	stakeholder	audit	Auditor that audits the enterprise in some way	audit.n.01	noun		
12	bill-enterprise	stakeholder, entity	enterprise	A entity that has the information of the enterprise	enterprise.n.01	noun		
13	bill-address	entity	address	A entity that contains information of customers and enterprise's address	address.n.01	noun		
14	bill-line	entity	invoice	A entity that contains general information of invoice and the discount to be applied on the products	invoice.n.01	noun		
15	bill-line-item	entity	invoice line	A entity that contains specific information and is part of invoice class	invoice.n.01.line.n.02	noun		
16	bill-product	entity	product	A entity that contains information about the product that will be invoiced	product.n.01	noun		
17	bill-vat-cat	entity	value-added tax category	A entity that contains information about the types of vat applied in the company	vat.n.01.category.n.01	noun		

### 1.2.2 Stakeholders View (rslil.stakeholders sheet)

	A	B	C	D	E	F	G
1	<a href="#">Back to Index</a>						
2							
3	<b>prj-billing</b>	<b>Billing System</b>					
4	<b>Stakeholders</b>						
5							
6	<b>Id</b>	<b>Class</b>	<b>Name</b>	<b>Description</b>	<b>Role</b>	<b>Category</b>	<b>Is aggregated by</b>
7	bill-customer	individual person	Customer	A customer that order products and receives invoices.	client	business customer	bill-client
8	bill-employee	individual person	Employee	A employee that create product invoices and delivers invoices.	staff	business user direct	bill-client
9	bill-employee-AT	individual person	Antônio Álvares	A employee that create product invoices and delivers invoices.	staff	business user direct	bill-employee
10	bill-employee-AT	individual person	Anna Tropa	A employee that create product invoices and delivers invoices.	staff	business user direct	bill-employee
11	bill-manager	individual person	Mauro Catralino	A manager that interacts with the billing system and performs multiple actions in the system, such as data audits and create product discounts.	manager	business user direct	bill-client
12	bill-client	group organization	Enterprise	The company that is going to use the billing system.	enterprise	technical	
13	bill-tax-aut	group organization	Tax Authority	The tax authority's mission is to administer taxes, customs duties and other taxes which are assigned, as well as exercising control of the external border of the European Union and the national customs territory, for tax purposes, economic and social protection, in accordance with the policies set by the Government and European Union law.	audit	technical	
14	bill-fn-dept	group organization	Finance Department	The Finance Department is a division of the company that supports services to employees. This department is responsible for stock management, financial risk management and investor relations.	support	business user direct	bill-client
15	bill-user	individual person	User	A person that uses the system.	use system	business user direct	bill-user

### 1.2.3 Goals View (rslil.goals sheet)

Back to Index						
<b>prj-billing Billing System Goals</b>						
Id	Description	Source (Stakeholder)	Criticality	Dependent by	Dependency Type	Decomposed by Decomposition Type
G1	The system needs to provide a billing service.					G1.1, G1.2, G1.3, G1.4, and G1.5, G1.6
G1.1	The system needs to be able to manage invoices.	stk-employee-41	high	G1	requires	G1.1.1, G1.1.2, G1.1.3, G1.1.4, G1.1.5, G1.1.6, G1.1.7, G1.1.8
G1.1.1	The system needs to be able to create invoices.	employee	very high	G1.1	requires	
G1.1.2	The system needs to be able to track customer purchases.	employee	high	G1.1	supports	
G1.1.3	The system needs to be able to send invoices to a customer email.	employee	medium	G1.1	supports	
G1.1.4	The system needs to be able to export data to other sources (excel word and pdf).	employee	medium	G1.1	supports	
G1.1.5	The system needs to be able to print invoices.	employee	very high	G1.1	requires	
G1.1.6	The invoices needs to have the fiscal id of the enterprise (owner of the system).	employee	very high	G1.1	requires	
G1.1.7	The system needs to be able to finish invoices.	employee	very high	G1.1	requires	
G1.1.8	The system needs to be able to issue invoices.	employee	very high	G1.1	requires	
G1.2	The system needs to be able to generate sales report.	manager	high	G1	supports	
G1.3	The system needs to be able to manage products.	manager	very high	G1	requires	
G1.4	The system needs to be able to configure VAT taxes.	manager	very high	G1	requires	
G1.5	The system needs to be able to manage customers.	manager	very high	G1	requires	
G1.6	The system need to be configured.	manager	very high	G1	requires	

### 1.3 System Level Sheets

#### 1.3.1 Actors View (rslil.actors sheet)

Back to Index				
<b>prj-billing Billing System Actors</b>				
<b>System</b>				
<b>Actors</b>				
Id	Name	Responsibilities	Specialization of	Stakeholder
<b>S2</b>	<b>Manage invoices</b>			
act-emp	employee	Person that can manage invoices, products and customers but cant configure the System.		stk-employee
<b>S3</b>	<b>General Configurations</b>			
act man	manager	A person can configure the System		stk manager
<b>S4</b>	<b>Manage Products</b>			
act-emp	employee	Person that can manage invoices, products and customers but cant configure the System.		stk-employee
<b>S5</b>	<b>Manage Customers</b>			
act-cust	customer	A person that order products		stk-customer
act-emp	employee	Person that can manage invoices, products and customers but cant configure the System.		stk-employee

### 1.3.2 Structural View (rslil.structural sheet)

	A	B	C	D	E	F	G
1	<a href="#">Back to Index</a>						
2							
3	<b>prj-billing Billing System</b>						
4	<b>Structural</b>						
5							
6	Entity1						
7	Attribute1						
8							
9	<b>id</b>	<b>Name</b>	<b>Description</b>	<b>Type</b>	<b>Default Value</b>	<b>References to</b>	<b>Multiplicity</b>
10	E.1	enterprise	A entity of (BillingSystem) that has the information of the enterprise.				
11		name		text			
12		logo		image			
13		fiscal_id		integer			
14		address	The reference to the address associated to the enterprise.	ref		address	1
15	E.2	customer	A person that order products.				
16		id		integer			
17		fiscal_id		integer			
18		name		text			
19		address	The reference to the address associated to the customer.	ref		address	1
20	C.3	address	A module of (BillingSystem) that contains information of customer's and enterprise's address.				
21		street		text			
22		door_number		integer			
23		locality		text			
24		postal_code		integer			
25		country		text			
26	E.4	invoice	A module of (BillingSystem) that contains general information of invoice.				
27		id		integer			
28		invoice_date		date	datetime now		
29		total_value		decimal			
30		vat_total_value		decimal			
31		customer_id	The reference to the customer_id associated to the customer.	integer		customer	*
32		discount		decimal			
33	C.5	invoice_line	A module of (BillingSystem) that contains specific information and is part of invoice class.				
34		product		text		product	
35		unitary_value		integer			
36		quantity		integer	1		
37		line_value		decimal			
38		vat_tax		decimal		vat category	



### 1.3.4 Scenarios View (rslil.usecases2.Sn sheet)

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