Appendix A: The Billing System, V1.0

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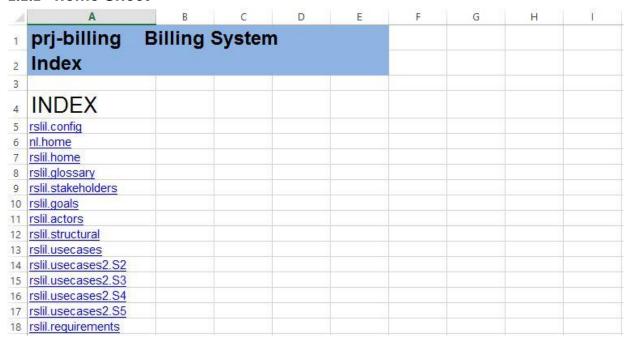
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1. RSL-IL EXCEL TEMPLATE

1.1 Configuration and Home Sheets

1.1.1 home Sheet



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1.1.2 rslil.config Sheet

			0			6	. H		.7	- X	- 1	- 1
Back to Index												
prj-billing	Billing System											
General Configu												
Glossary Types												
Class of term:	statieholder	ently	architectural	actor	stateholder, actor	stakeholder, entity	stakeholder, actor, entity					
POS (part-of-speech):	adjective	adverb	noun	verb								
Synset. Term Relation Type:	antonym		syconym					-				
remikeason type.	Jankorijin	hypernym	Sjeiotijm									
Stakeholder Types	and the second s	Total Ballion Coll	The same of the sa	In this in the case of	individual external system	T			_	_		
Class of Stateholder: Calegory:	group.organization business	group, business_unit business customer	group team	individual person business customer chample	individual eigemai system	business user indirect	business advisor expert	business advis	Business	Description of	In the lead	
Gareyo y	[DESIRES S	I suavines s. cusaomer	Journal of Continues and Control	Tomas as costomer champs	District desired District of the Control of the Con	[Danier rate mane]	Instances was pure either	Tousandas advis	(susmiess)	Tournièse 1	(BOURNICES	-
Goals Types	VI-2-27	200	Santa Santa									
Criticality:	very low	llow	medium	high	very high							
Goal Dependency Type:	requires	supports	obstructs	conflicts	identical							
Goal Decomposition Type:	and	or	-			1						
Pre conditions	Pos conditions											
use case	(entity, attribute, current state)											
	4											
Entity Attributes Types			Total		Total Control							_
Attribute Type	boolean	integer	decimal	currency	date.	tme	datetime	enumeration	text	regex	ref	ims
Athibute Multiplicity		- U				-			-	-		_
Use Cases 2 Types												
Sequential	TRUE	FALSE										
Action	A CONTRACTOR OF THE CONTRACTOR	SAMPLE SA	Ularia de la companya									
Type	ActorPrepareData	ActorCallSystem	SystemExecutes	SystemRetumResult	ActorPrepareData; ActorCaltSystem	SystemExecutes: SystemRetumResult						
				250000000000000000000000000000000000000								
Scenario Type	MainScenario	AlternativeScenario	ExceptionScenario									
	ACCRECATION .		personal services (180)									
Action verb		Te -	Tax construction	Terreson .								
Name	Number	Role	Description	value								
ask		planet	asker	Taxana and a same								
		0 agent 1 topic	question	anonymous user question								
		2 reopient	hearer	medical specialist	1							
				THE STREET WAS AND SERVICE OF								

1.1.3 rslil.home Sheet

A	В	C	D	E
Back to Index				
prj-billing Home	BillingSy	/stem		
Project				
id	System Id	Name	Description	Decomposed by
	prj-Eddicz	BilingSystem	This project consists in the analysis and specification of the BillingSystem. The BillingSystem must do a complete management of customers, products and involces. The system must also have the functionality of can be configured and facilitate the work of managers; he allows to control the company's involcing, payments to receive and issue several reports. This system is divided into 4 subsystems: customer relationship management system; products management system; invoices management system, system configurator.	82, 83, 84, 85
Systems				
id	System Id	Name	Description	Is Part Of
S1	sys-billing	Billing System	System that provides all functionalities needed to provide a billing service:	
S2	sys-mng-inv	Manage invoices	System that contains all functionalities related to managing invoices.	sys-billing
S3 S4	sys cont sys-mng-produ	General configurations cts. Manage Products	System that have functionables not related with any type of cluster	sys: billing sys-billing
\$5		mer Manage customer		sys billing

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1.2 Business Level Sheets

1.2.1 Glossary View (rslil.glossary sheet)

A	В	C.	U	- L	1	G	
Back to Index							
prj-billing	BillingSystem						
Glossary							
CICSOULT							
	- Complete						
ld Im-deslamer	Class stakeholder, ador collin	Word	Oelinition Aperson hall order products	Synset customer r 61	POS	Lerm Relation	Jerm Relation Ty
rm deadmer	завкеновая, астоп ститу	(ava autum	A person transfer produces	caesiomer is 4/1	resum		
trm-amployee	stakeho der; ador	amployee	A person that create product invoices	employae.n.01	าวนท		
					1 (37.53.21)		
lm died	slakehotter, actor	cliced	A captomics that order products and receives	dientn 01	noun:		
			rvoices				
tm-manager	stakeholder; actor	manager	A person that interacts with the billing system.	managerin.01	noun		
		200	100				
lm-staff	stakeholder, actor	∈ laff	A amplicyee that create product invoices and delivers	statti01	noun		
			FVOICES				
trm-staff	stakeho der	Eudit	Auditor that audits the enterprise in some way.	audtn.01	noun		
lm enl	stakeholder, emily	collerprise	A entity that roes the information of the enterprise	enterprise a 91.	noun		
		1:5338 (F80)		D0405000000000	500000		
lrm: add	entity	address:	A entity that contains information of custmer's and enterprise's address.	address i 01	naum		
			E INSTERNATIONS.				
lim ne	entity	recice		invoice n 01	naun		
			and the discount to be applied on the products				
lm av fne	entity	evoice line	A entity that contains a people information and is part of invoice class.	invoice a 01, line or 02	aaun		
			21 Voice class.				
trm-prod	entity:	product	A entity that contains information about the product	productin.01	noun	A	
ani-proof	viniq	p. 000.01	that will be invoiced.	production	Thousand the same of the same		
			00000000000000000000000000000000000000		1		
trm-vat-cat	entity	value-add tax category		vat a.01;category n 01	noun		
			sal applied in the company				

1.2.2 Stakeholders View (rslil.stakeholders sheet)

A	E .	5	D	Ε	Г	G
dack to index						
nei hillinn B	illing System	11/				
bil-billing p	illing System					
Stakeholders 5 4 1	B.					
ld	Class	Name	Description	Role	Category	is aggregated by
stic-customer	Individual person	Customer	A customer that order products and receives invoices.	d ent	business distanta	stic-ent
stic-employee	Individual parson	Employee		staff	business user direct	stic-ent
		0 8807-007	A employee that create product invoices and delivers invoices.			
stk-employee-AF	individual person	Antônio Pólvora		staff	husiness user direct	stk-employee
			A amployee that create product invoices and delivers invoices.			
stic-employee-AT	Individual person	Andé Tiago		staff	husiness user direct	stir-employee
			A employee that create product invoices and delivers invoices.			
slic-manager	Individual person	Tiago Catarino	A manager that interacts with the billing system and performs multiple actions in the system, such as data audits and create	manager	husiness user direct	atk-ent
		40000 800	product discounts			
stic-ent	group organization	Enterprise	The company that is going to use the billing system.	enferprise	technics	
stk-tax-aut	group organization	Tax Authority	The tax authority's mission is to administer taxes, customs duties		technical	
		00000000000000000000000000000000000000	and other taxes which are assigned, as well as exercising control of the external border of the European Union and the national	100000		
			customs territory for tax purposes, economic and social			
			protection, in accordance with the policies set by the Government			
			and European Union faw.			
elk for dep	group organization	Finance Department	The Finance Department is a diceson of the company that supports services to employees. This department is responsible.	smithes	husiness uses direct	edk end
			he dech management, lieuwide hiek management and investor relations.			
8	Individual person	User	A person that uses the system.	use system	business user direct	atk-user

1.2.3 Goals View (rslil.goals sheet)



1.3 System Level Sheets

1.3.1 Actors View (rslil.actors sheet)

А	В	C	D	E
Back to Index	<u>X</u>			
prj-billi	ing Billing Syste	em		to a grant of the state of the
Actors				
System	298			
Actors				
ld	Name	Responsabilities	Specialization of	Stakeholder
S2	Manage invoices			100
act-emp	employee	Person that can manage invoices, products and customers but cant configure the System.		stk-employee
S3	General Configurations			
act man	manager	A person can configure the System		stk manager
				- 10
S4	Manage Products			
act-emp	employee	Person that can manage invoices, products and customers but cant configure the System.		stk-employee
S5	Manage Customers			-
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

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1.3.2 Structural View (rslil.structural sheet)

Back to Inde	Б	c	D	F	F	- 6
Back to mide	44					
nri hilli	ng Billing S	vetom				
prj-billi		ystem				
Structu	ıral	Harris Control of the			4-	
Entity1						
Attribute 1	8					
id	Name	Description	Type	Default Value	References to	Multiplicit
E.1	enterprise	A entity of {BillingSystem} that has the information of the enterprise.	1.24			1,11,11,11,11
	name		tec			
	loga -		image		1	
	fiscal_id	8	integer		- 2	
	address	The reference to the address aspeciated to the enterprise	rot		address	-
E.2	customer	A person that order products.				
12	d		integer			
	fiscal_id		integer			
	name		text	8		
	address	The reference to the address associated to the customer.	ref		address	
E.3	address	A module of (DillingSystem) that contains information of custmer's and ent	erprise's address.			
	street		tec			
	dcor_number		integer			
	ocality		tex.			
	postal_code		integer			
	country		text	1		
E.4	Invoice	A module of [BillingSystem] that contains general information of invoice.				
	d		integer			
	nvoice_date		date	Idatetime now		
	total_value		decimal			
	vat total value		decmal			
	customer_id	The reference to the customer_id associated to the customer.	integer		customer	×
	discount	This feet effect to the castornal_to assess allower in social field.	decimal		COSTO IIBI	
E.5	invoice_line	A module of (DillingSystem) that contains specific information and is part of			- N	
	product	The no escano ment dust entre part of	text	T T	product	
	unitary_value	7	Integer		B. I. Sand	
	quantity		integer		1	
	ine_value		decimal			
	vat tax		decimal		vat category	

1.3.3 Use Cases View (rslil.usecases sheet)

A Back to Index	В	C	D	3	F	- 6	Н	1	- 2	К	L
	Billing System					-1.			4		
use Cases								The state of the s			
		Systems Use Cases									
92	Manage Invoices					- 10					_
ld	Name	Description	Accomplished goals	Functional Requirements	Actors initiates	Actors participates	Pre conditions	Pos conditions	Include	UC	ended by Extension Point
uc-mig-itv	Manage Invoice.	The administrative manage an invoice.	G1.1		act-act					uc-end-inv uc-end-inv uc-exp-inv uc-pri-inv uc-fin-inv uc-lis-inv	Create/Update Send Export Print Finish Issue
us-on-up-line	CreateiUpdate hydice	The administrative creares/updares an invoice.	G1.11		acr-adt			The invoice need to have at least a product (invoice line).	uc-on-up-ine- line		
uc-crr-up-inv-line	Create/Update Invoice Line	The administrative createsh pdares an invoice line.	G1.11		act-adt						
us-end-inu	Send invoice to customer, email	The administrative send a involce to the customer email.	G1.13		act-adt		The system need to have at least one invoice related to the customer.				
ucresprins	Esportinusions	The administrative export the invoices data to another source.	G1.14		ect-edt		The system need to have at least one product invoice data saved.				
uc-pri-inv	Print invoice	The administrative print an invoice.	G1.15		act-adt	1.					
uctioning	Emahlussan	The administrative finish an irredice.			act-adt						
uc-iss-ins	lana.hapica	The administrative issue an invoice.			act-ack						
53	General Configurations			The second		No.	90				
ld	Name	Description	Accomplished goals	Functional Requirements	Actors initiates	Actors participates	Pre conditions	Pos conditions	Include	UC Ext	ended by Extension Point
uc-gen-config	General Configuration	The manager manage the billing system configurations.	G1.6		act-man					uc-gen-report uc-conf-ent uc-conf-fax	Generate Enterprise VAT
uc-gen-report	Generate sales report	The manage order the system to generate a sales report.	G12		act-man		The system needs to have at least one product invoice saved.				
vo-cenf-ent	Configure Enterprise, information	The manager change the description of the enterprise lowner of the system).	G1.15		act-man		The system needs to have at least one enterprise saved.				
o-conf-tas	Configure VAT tases	The manager configure the VAT taxes	G1.4		act-man		The system must have at least one category of products.				

1.3.4 Scenarios View (rslil.usecases2.Sn sheet)

- 1.00 - P.O									
orj-billing Bill									
lse Cases (Sc	enarios for S2								
in the state of th	_		1			12		11	
SE CASES CENARIOS									
EPS	8								
C CASE: Manage Involc	4	-	2			6		111	10
	SCENARIOS						STEPS		
lame		Sequential	Label		Next Label	Actor Subject	Pre conditions	Pos conditions	Action Type
Main Scenaro	MainScenario	TRUE	1	The administrative inserts the name of the customer.		administrative			ActorPrepareData: ActorOallSystem
			2	The system searches and shows automatically the involces of the customer					SystemExecutes SystemBolumBolum
			3	The administrative selects the button Create/update (Extension Point).				5	Adort Call System
			4	The administrative selects the bullon Expert (Extension Point).					AdorCallSystem
			5	The administrative selects the button Frint (Februsion Point)					Ador Call System
			6	The administrative selects the button Hinish (Extension Point).		80		0	AdorCs I System
			7	The administrative selects the button Send (Extension Paint)					AderCallSystem
			8	The administrative selects the button issue (Fideresian Point)					AdorCadSystem
lame	Type	Sequential	Label	Text	Next Label	Actor Subject	Pre conditions	Pos conditions	Action Type
Exception Scenario	Exception@canarlo	TRUE	2a	The eye are chareful to differ name of the castlemen					BystemExecutes
			281	The system informs the administrative that the entered costomer name is not known.					SystemReturnResult
			242	The system asks the administrative to choose another coston as name.					SystemRelainRelai

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