

#### Universidade do Minho

Conselho de Cursos de Engenharia Licenciatura em Engenharia Informática 3ºAno

### Disciplina:

#### Desenvolvimento de Sistemas de Software

Ano Lectivo de 2009/2010

# GereComSaber – (2ªFase)

Grupo: 33

João Correia 40688 Luís Ferreira 47043 Marcos Sousa 43197 Ricardo Ferreira 47057

Dezembro, 2009

Data de Recepção	
Responsável	
Avaliação	
Observações	

# GereComSaber - (2ªFase)



João Correia 40688



Luís Ferreira 47043



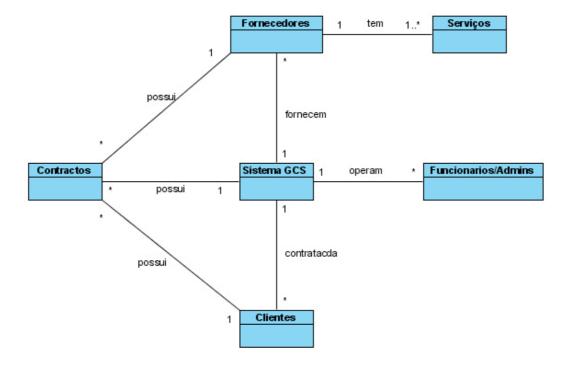
Marcos Sousa 43197



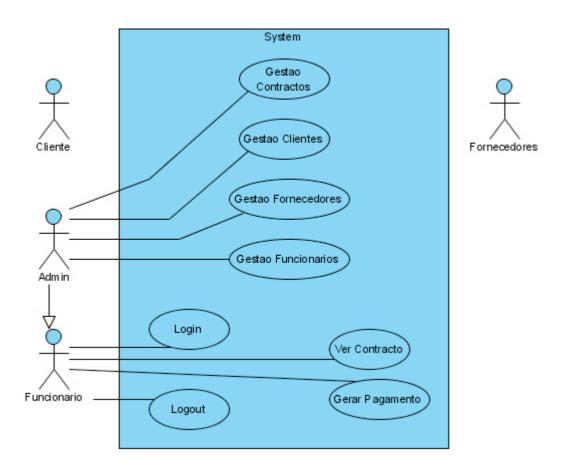
Ricardo Ferreira 47057

Dezembro, 2009

# Modelo do Domínio



# **Use Case's**



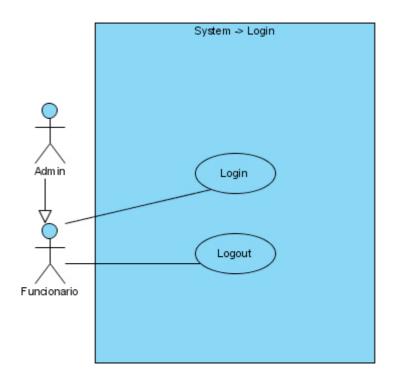
### **Gerar Pagamento**

Super Use Case			
Author	Ricardo Ferreira		
Date	30	/Nov/2009 21:09:01	
Brief Description			
Preconditions	Lo	gin AND (numero contractos <=1)	
Post-conditions			
		Actor Input	System Response
	1		Lista os clientes existentes
Flow of Events	2	Selecciona cliente	
Flow of Events	3		Lista contractos em divida
	4	Selecciona contracto	
	5		Sistema regista pagamento

#### **Ver Contacto**

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	26	26/Nov/2009 22:46:14		
<b>Brief Description</b>				
Preconditions	Lo	gin AND (numero contractos <= 1)		
Post-conditions				
		Actor Input	System Response	
	1		Lista clientes com contracto	
	2	Selecciona cliente		
	3		Lista contractos do cliente seleccionado	
Flow of Events	4	Selecciona contracto		
	5		Mostra: Serviços contactados	
			Tipo de Pagamento	
			Divida ou Estorno	
			Validade do contracto	

### **Use Case – Gestão Clientes**



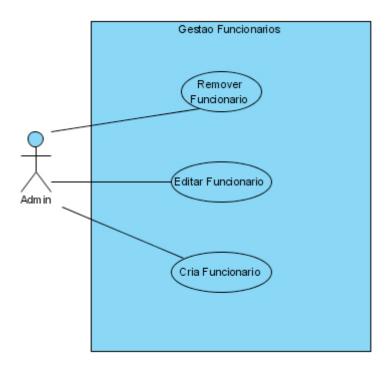
# Login

Super Use Case					
Author	Ri	Ricardo Ferreira			
Date	26	3/Nov/2009 17:56:59			
<b>Brief Description</b>					
Preconditions	Lo	gout			
Post-conditions	Lo	gin			
	Actor Input System Response				
	1		Pede Username e Password		
Flow of Events	2	Insere Username e Password			
	3		Verifica dados		
	4	Efectua login e atribui privilegios			
		Actor Input	System Response		
	1				
Exception	2				
	3		Menssagem Erro("Dados errados ou inexistentes")		
	4				

## Logout

Super Use Case			
Author	Ricardo Ferreira		
Date	26	/Nov/2009 18:03:27	
<b>Brief Description</b>			
Preconditions	Login		
Post-conditions	Logout		
Flow of Events	Actor Input System Response		System Response
Flow of Events	1		Logout e remove privilegios

### **Use Case – Gestão Funcionarios**



### **Remover Funcionario**

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	26	/Nov/2009 18:22:52		
<b>Brief Description</b>				
Preconditions	(n	umero funcionarios <= 1) AND (Login co	m privilegios de Admin)	
Post-conditions	nu	mero funcionarios - 1		
		Actor Input	System Response	
	1		Lista funcionarios existentes	
Flow of Frances	2	Seleciona funcionario a remover		
Flow of Events	3		Pede confirmacao	
	4	Confirma		
	5		Apaga registo do funcionario selecionado	
		Actor Input	System Response	
F	1			
Exception	2			
	3		Sai da janela remover funcionarios	

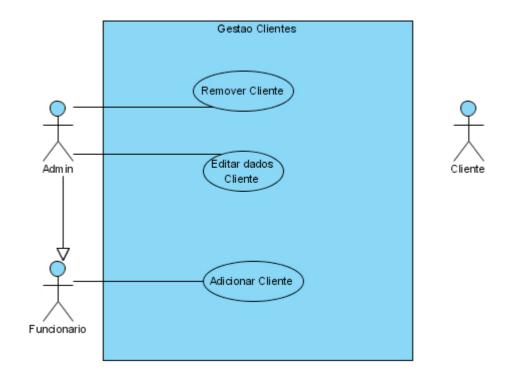
### **Editar Funcionario**

Super Use Case					
Author	Ri	Ricardo Ferreira			
Date	26	/Nov/2009 18:15:59			
<b>Brief Description</b>					
Preconditions	(nı	umero funcionarios <= 1) AND (Login	com privilegios de Admin)		
Post-conditions					
		Actor Input	System Response		
	1		Lista funcionarios existentes		
	2	Seleciona funcionario			
Flow of Events	3		Mostra dados do funcionario		
	4	Altera dados do funcionario			
	5		Verifica alteracao		
	6		Altera dados		
		Actor Input	System Response		
	1				
	2				
Exception	3				
	4				
	5		Menssagem Erro("Username existente")		
	6		Volta 3)		

### **Adicionar Funcionario**

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	26	26/Nov/2009 18:08:30		
<b>Brief Description</b>				
Preconditions				
Post-conditions	(nı	umero funcionarios + 1) AND (Login com	privilegios de Admin)	
		Actor Input	System Response	
	1		Pede Username e Pass	
Flow of Events	2	Introduz dados		
	3		Verifica dados	
	4		Insere funcionario no sistema	
		Actor Input	System Response	
	1			
Exception	2			
	3		Menssagem Erro("Username ja existente")	
	4		Volta 1)	

### Use Case - Gestão Clientes



### **Adicionar Cliente**

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	26	/Nov/2009 18:34:00		
Brief Description				
Preconditions	Lo	gin		
Post-conditions	nu	mero clientes + 1		
		Actor Input	System Response	
	1		Pede dados cliente	
Flow of Events	2	Introduz dados cliente		
	3		Verifica dados	
	4		Adiciona cliente ao sistema	
		Actor Input	System Response	
	1			
Exception	2			
-	3		Menssagem Erro("Cliente ja existente")	
	4		Volta 1)	

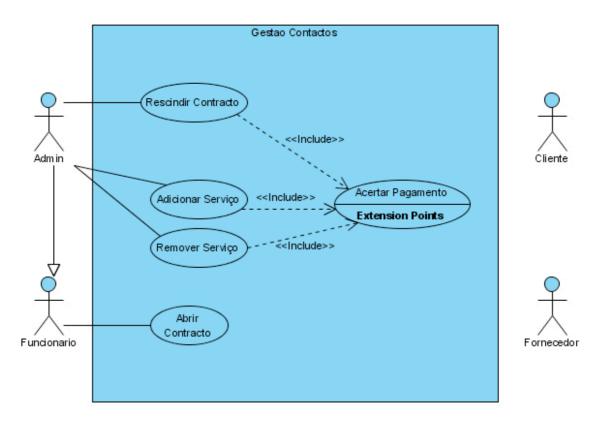
### **Editar Cliente**

Super Use Case				
Author	Ric	Ricardo Ferreira		
Date	26	/Nov/2009 18:37:00		
Brief Description				
Preconditions	(nı	ımero clientes <= 1) AND (Login con	n privilegios de Admin)	
Post-conditions				
		Actor Input	System Response	
	1		Lista os clientes no sistema	
	2	Selecciona cliente		
Flow of Events	3		Mostra dados do cliente	
	4	Altera dados do cliente		
	5		Verifica dados	
	6		Alteracao realizada no sistema	
		Actor Input	System Response	
	1			
	2			
Exception	3			
	4			
	5		Menssagem Erro("Cliente ja existente")	
	6		Volta a 3)	

### **Remover Cliente**

Super Use Case					
Author	Rie	Ricardo Ferreira			
Date	26	26/Nov/2009 18:41:28			
Brief Description					
Preconditions	(nu	umero clientes <= 1) AND (Login con	n privilegios de Admin)		
Post-conditions	nu	mero clientes - 1			
		Actor Input System Response			
	1		Lista clientes		
	2	Selecciona cliente			
Flow of Events	3		Pede confirmação		
	4	Confirma			
	5		Verifica se existem contractos abertos		
	6		Elimina cliente do sistema		
		Actor Input	System Response		
	1				
	2				
Exception	3		Fecha janela de remocao de clientes		
	4				
	5		Menssagem Erro("Este cliente tem contractos abertos não pode ser eliminado")		
	6				

### **Use Case - Gestão Contractos**



### **Rescindir Contracto**

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	30	/Nov/2009 21:55:26		
<b>Brief Description</b>				
Preconditions	(Lo	gin com privilegios de Admin) AND (num	ero contractos >=1)	
Post-conditions				
		Actor Input	System Response	
	1		Lista clientes com contractos no sistema	
	2	Selecciona cliente		
Flow of Francis	3		Lista contractos activos	
Flow of Events	4	Selecciona contracto		
	5		Pede confirmação da rescisão	
	6		Acerta pagamento	
	7		Marca contracto com rescindido	

### Adicionar Serviço

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	30	/Nov/2009 22:02:54		
<b>Brief Description</b>				
Preconditions	(Lo	(Login com privilegios de Admin) AND (numero contractos >=1)		
Post-conditions				
		Actor Input	System Response	
	1		Lista clientes com contractos no sistema	
	2	Selecciona cliente		
Flow of Events	3		Lista servicos	
	4	Selecciona servicos		
	5		Acerta pagamento	
	6		Adiciona servicos ao contracto	

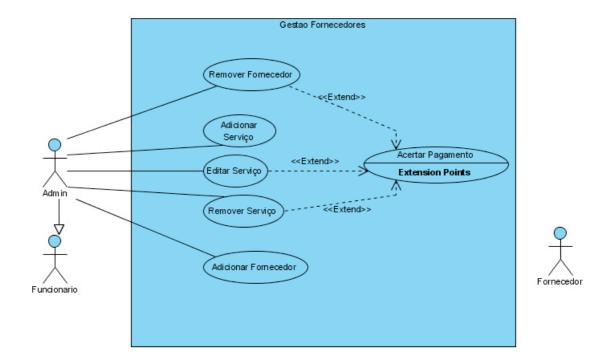
### Remover Serviço

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	30	/Nov/2009 22:06:40		
<b>Brief Description</b>				
Preconditions	(Lo	(Login com privilegios de Admin) AND (numero contractos >=1)		
Post-conditions				
		Actor Input	System Response	
	1		Lista clientes com contractos no sistema	
	2	Selecciona cliente		
Flow of Events	3		Lista servicos	
	4	Selecciona servicos		
	5		Acerta pagamento	
6 Remove servicos ao			Remove servicos ao contracto	

### **Abrir Contracto**

Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	30	/Nov/2009 15:36:10		
Brief Description				
Preconditions		(Login com privilegios Admin) AND (numero fornecedores >=1) AND (numero clientes >=1)		
Post-conditions	nu	numero contractos = numero contractos + 1		
		Actor Input	System Response	
	1		Listar clientes	
	2	Seleccionar clientes		
	3		Listar fornecedores	
Flow of Events	4	Seleccionar fornecedor		
	5		Listar servicos	
	6	Seleccionar servicos		
	7		Regista contracto	
	8		Calcula pagamento necessario	

### **Use Case – Gestão Fornecedores**



### Remover Fornecedor

Super Use Case			
Author	Ricardo Ferreira		
Date	30	//Nov/2009 21:18:21	
Brief Description			
Preconditions	(n	umero fornecedores >=1) AND Login	com privilegios de Admin
Post-conditions			
		Actor Input	System Response
	1		Lista os fornecedores existentes
	2	Selecciona fornecedor	
Flow of Events	3		Pede confirmacao
	4		Verifica acertos nos pagamentos
	5		Remove fornecedor do sistema
	6		Remove serviços associados
		Actor Input	System Response
Eveention	1		
Exception	2		
	3		Volta a 1)
		Actor Input	System Response
	1		
Alternative	2		
Alternative	3		
	4		Acerta pagamentos
	5		Volta 5)

### Adicionar Serviço

Super Use Case					
Author	Ri	cardo Ferreira			
Date	30	/Nov/2009 21:28:53			
<b>Brief Description</b>					
Preconditions	(L	ogin com privilegios de Admin) A	AND (nume	ro fornecedores >=1)	
Post-conditions					
		Actor Input		System Response	
	1			Lista fornecedores no sistema	
	2	Selecciona fornecedor			
	3			Pede dados:	
Flow of Events				-Gama do servico	
				-Tipo de servico	
				-Preco	
	4	Introduz dados			
	5			Adiciona servico a tabela do fornecedor	
		Actor Input	System Response		
Exception	1				
	2				
	3	Menssagem Erro("Tipo de servico ja e neste fornecedor")		gem Erro("Tipo de servico ja existente rnecedor")	
	4		Volta 3)		

### Remover Serviço

Super Use Case						
Author	Ri	Ricardo Ferreira				
Date	30	30/Nov/2009 21:42:10				
Brief Description						
Preconditions	(L	(Login com privilegios Admin) AND (numero fornecedores >=1)				
Post-conditions						
		Actor Input	System Response			
	1		Lista fornecedores no sistema			
	2	Selecciona fornecedor				
Flow of Events	3		Lista servicos do fornecedor			
FIOW OF EVERIES	4	Selecciona servico				
	5		Pede confirmação de remoção			
	6		Verifica remocao			
	7		Remove o servico do sistema			
		Actor Input	System Response			
	1		7 270			
Exception	2					
Exception	3					
	4					
	5		Volta 3)			
		Actor Input	System Response			
	1		0.000			
	2					
Alternative	3					
	4					
	5					
	6		Verifica se existem contractos com este servico			
	7		Acerta pagamento			
	8		Volta 7)			

### Editar Serviço

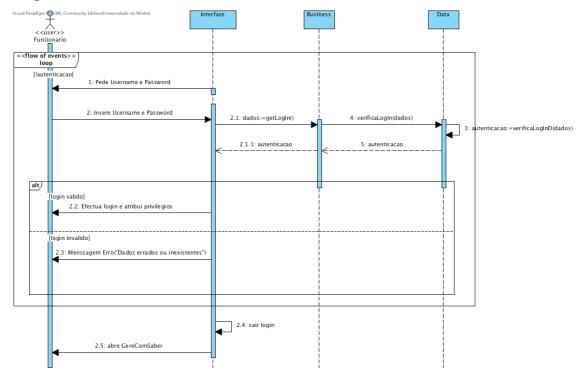
Super Use Case				
Author	Ri	Ricardo Ferreira		
Date	30	30/Nov/2009 21:35:24		
Brief Description				
Preconditions	(n	umero fornecedores>=1) AND (Log	jin com privilegios de Admin)	
Post-conditions				
		Actor Input	System Response	
	1		Lista fornecedores no sistema	
	2	Selecciona fornecedor		
	3		Lista servicos existentes	
Flow of Events	4	Selecciona servico		
	5		Mostra os dados do servico	
	6	Altera os dados do servico		
	7		Verifica alteracao	
	8		Regista alteracao do servico	
		Actor Input	System Response	
	1			
	2			
	3			
Exception	4			
	5			
	6			
	7		Menssagem Erro("Servico ja existente")	
	8		Volta 5)	
		Actor Input	System Response	
	1			
	2			
	3			
	4			
Alternative	5			
	6			
	7		Verifica se existem contractos com este servico	
	8		Acerta pagamento	
	9		Volta 8)	

### **Adicionar Fornecedor**

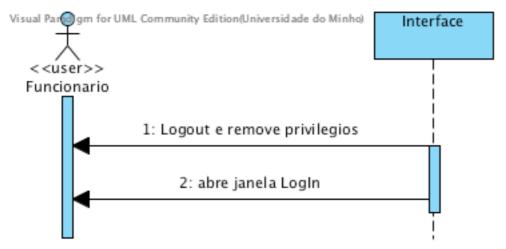
Super Use Case			
Author	Ricardo Ferreira		
Date	30/Nov/2009 21:1	14:13	
Brief Description			
Preconditions	Login com privile	gios de Admin	
Post-conditions			
		Actor Input	System Response
	1		Pede dados relativos ao fornecedor:
			-Nome
			-NIF
Flow of Events			-Morada
			-Tipo
	2 Insere os da	dos	·
	3		Valida os dados
	4		Sistema regista o fornecedor
		Actor Input	System Response
	1		
Exception	2		
	3		Menssagem Erro("Fornecedor ja
			existente")
	4		Volta a 1)

## Diagramas de Sequencia (implementação)

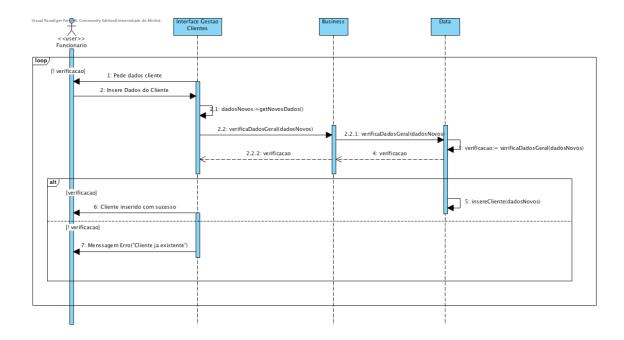
#### Login



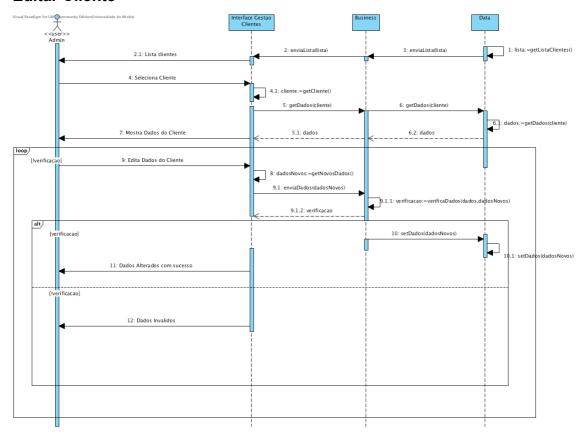
### Logout



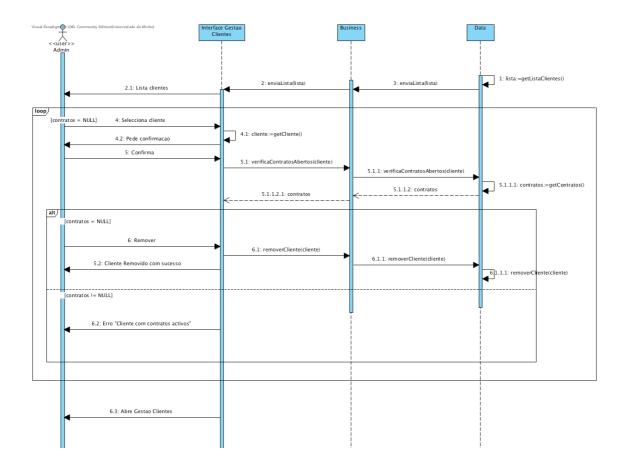
#### **Adicionar Cliente**



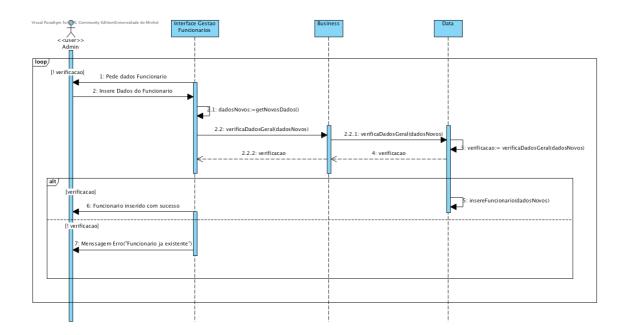
#### **Editar Cliente**



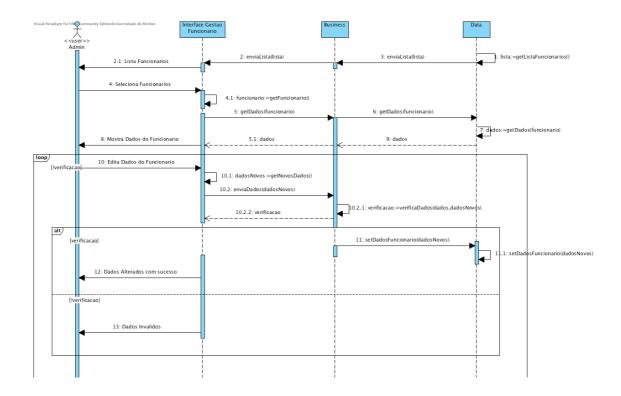
#### **Remover Cliente**



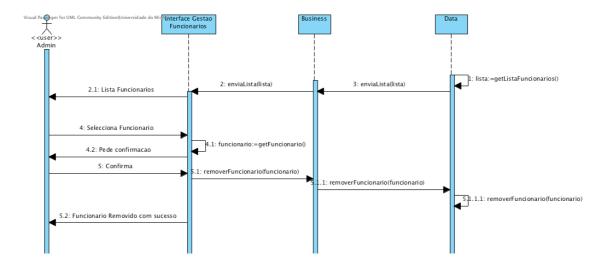
#### Adicionar Funcionário



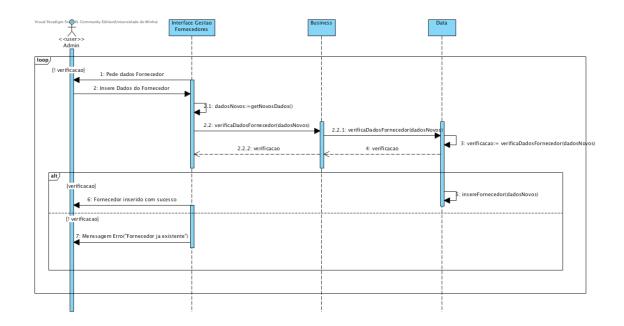
#### **Editar Funcionário**



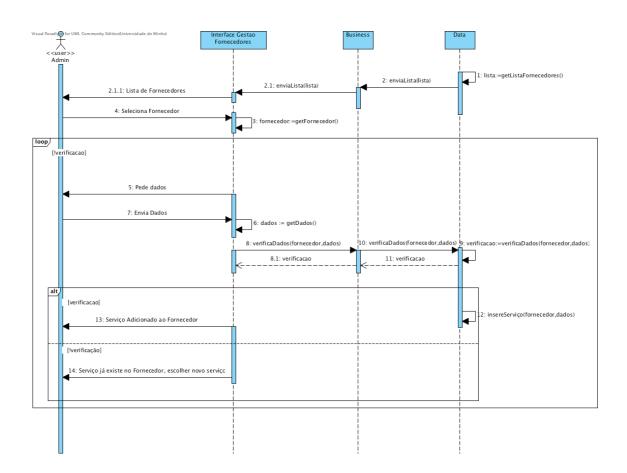
#### Remover Funcionário



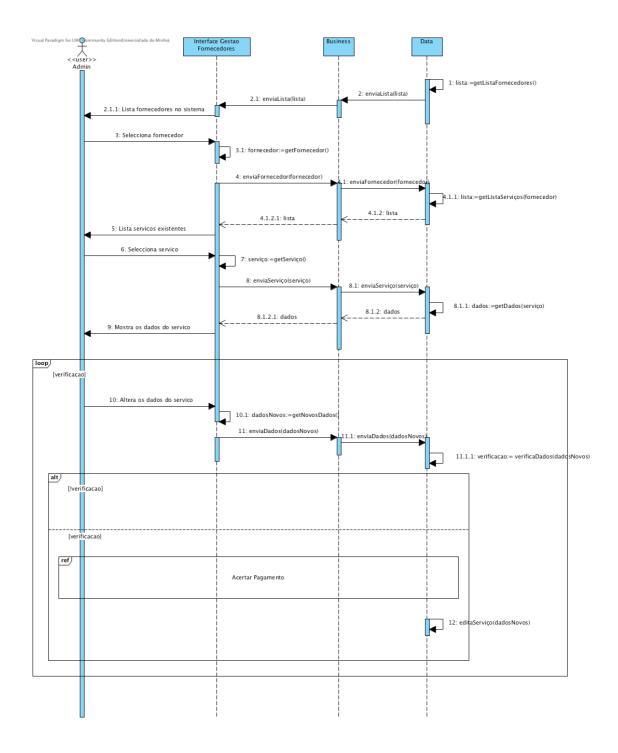
#### **Adicionar Fornecedor**



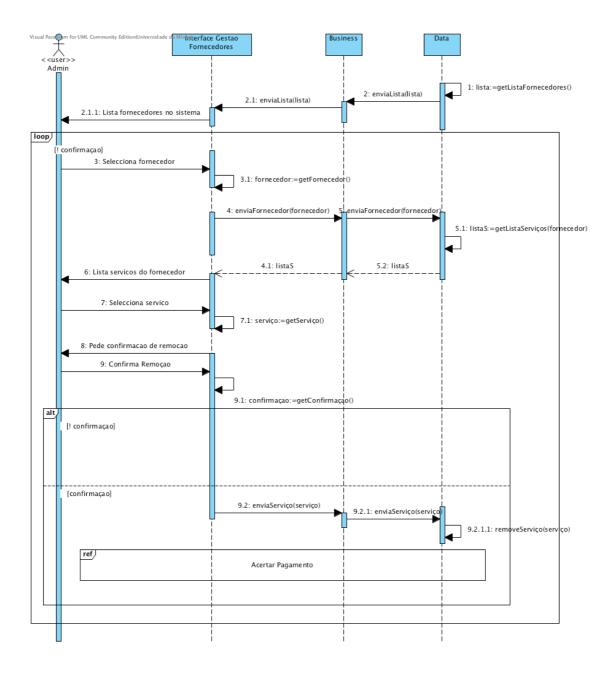
#### Adicionar Serviço



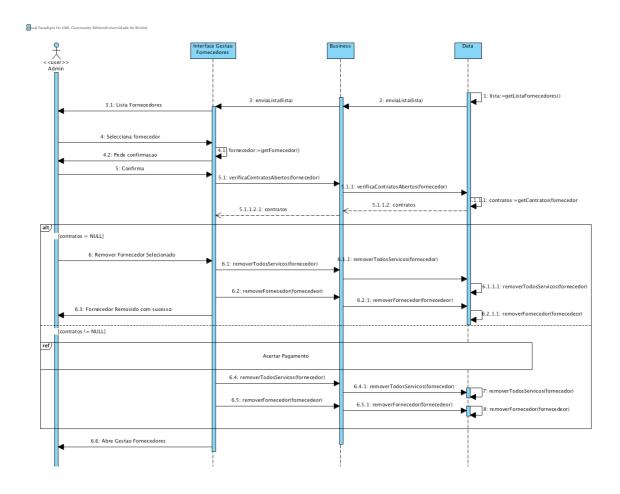
### **Editar Fornecedor**



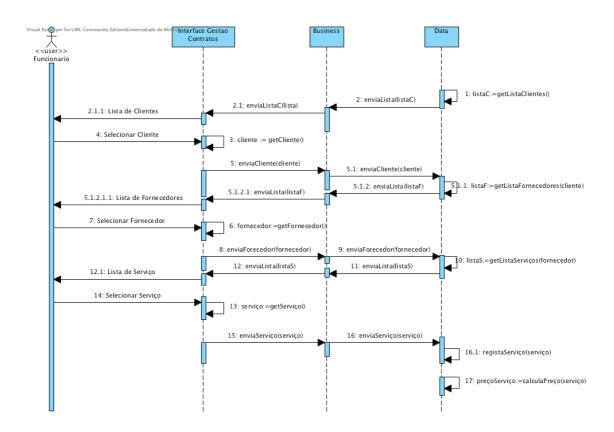
#### Remover Serviço



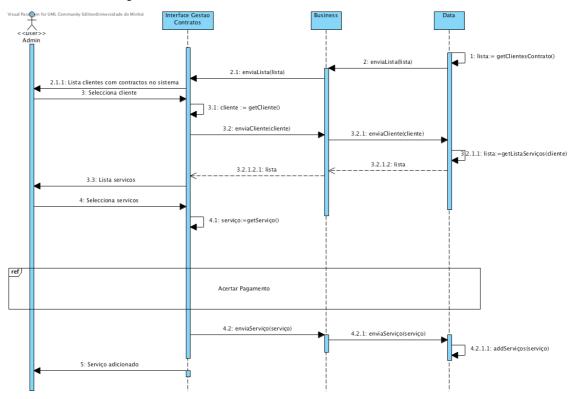
#### **Remover Fornecedor**



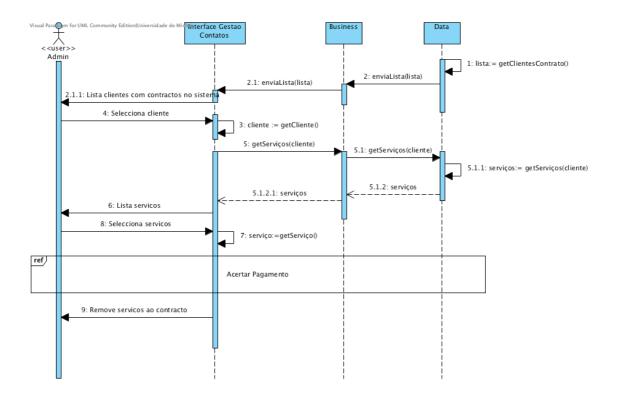
#### **Abrir Contrato**



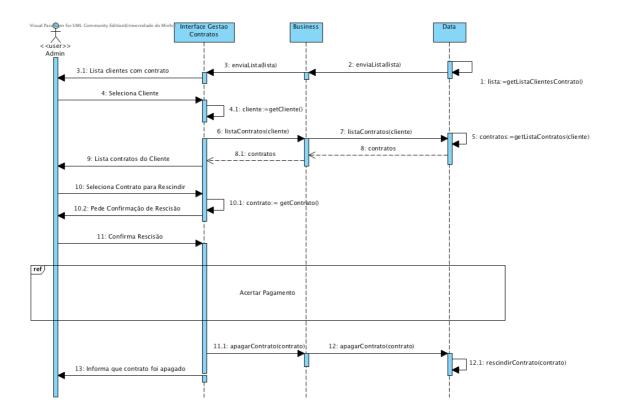
### Adicionar Serviço



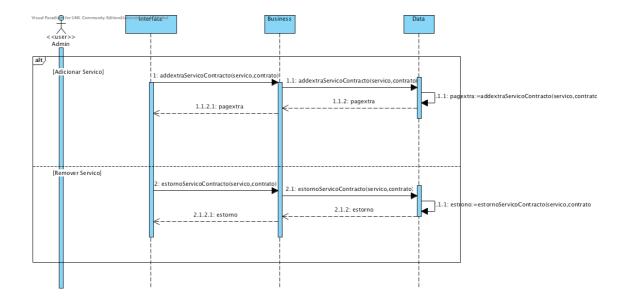
#### Remover Serviço



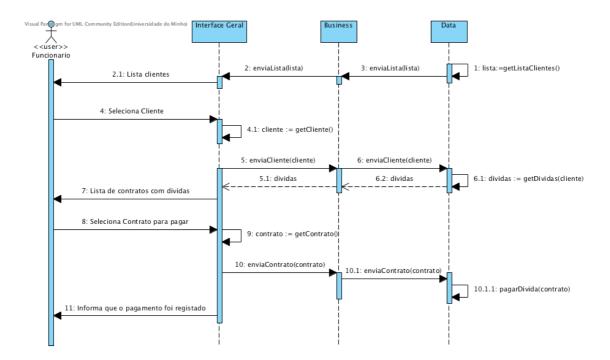
#### **Rescindir Contrato**



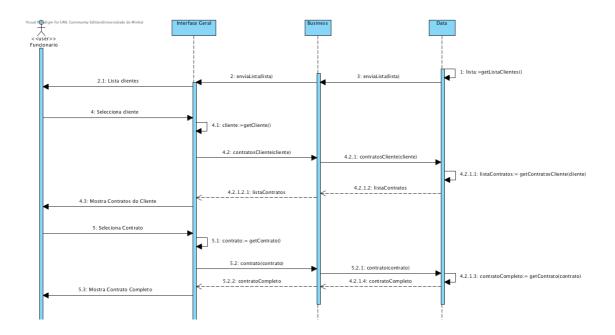
### **Acertar Pagamento**



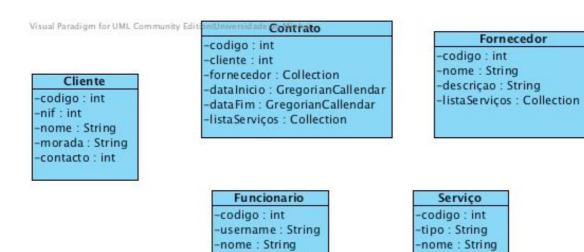
### **Gerar Pagamento**



#### **Ver Contrato**



### Diagrama de Classes



-password : String

-privilegios : int

-preço : float