My_Project PROJECT TECHNICAL DOCUMENTATION

19/05/2024

Part 1

Project

Project

General information

My_Project	

Directory	D:\My UNEX Projects\My_Project
First window	WIN_Login
Associated analysis	D:\My UNEX Projects\My_Project\My_Project.ana\My_Project.wda
Associated UML model	D:\My UNEX Projects\My_Project\Template.uml
Skin template	250 Phoenix

Project

List of project elements

Name	Caption
WIN_Cadastro_de_Usuarios	
WIN_Chat	
WIN_Contador	
WIN_Equacao2Grau	
WIN_FormGefin	
WIN_FormGefin05	
WIN_FormUsuarios	
WIN_Home	
WIN_Home_Table	
WIN_Login	
WIN_Menu	
WIN_ProjetoSemestrePassado	
WIN_SomaNumeros	
WIN_TableGefin	
WIN_TableUsuarios	
WIN_Vendedor	
WIN_Welcome	
Carro	
CarroLuxo	

Name	Caption
Cls_Mensagens	
Cls_Movimentos	
Cls_Usuarios	
Movimentos_05	

Statistics	
Number of windows:	17
Number of classes:	6

Project

List of Custom-Folders

Custom-Folder		Name
Aula03		WIN_Contador
		WIN_Menu
		WIN_ProjetoSemestrePassado
		WIN_SomaNumeros
		WIN_Vendedor
		WIN_Welcome
Aula04		WIN_Equacao2Grau
Aula05		WIN_FormGefin05
Aula05Class		Carro
		CarroLuxo
		Movimentos_05
Aula06		WIN_FormGefin
		WIN_TableGefin
Aula06Class		Cls_Movimentos
Aula09		WIN_FormUsuarios
		WIN_TableUsuarios
Aula09Class		Cls_Usuarios
Aula11		WIN_Cadastro_de_Usuarios
		WIN_Chat
		WIN_Home

Custom-Folder		Name
		WIN_Home_Table
		WIN_Login
Aula11Class		Cls_Mensagens

Project

Code

Initialization of My_Project

```
CONSTANT
    //CNS_Link_WebService = "https://177.99.170.11:443"
    //CNS_Link_WebService = "https://localhost:8026"
END

gsLink_WebService is string = "https://177.99.170.11:443"
//gsLink_WebService is string = "https://localhost:8026"

gpclUsuarioLogado is Cls_Usuarios

//b1 is boolean = true
//num1 is int = 20 // inteiro de 4 bytes
//valor1 is real = 50.5
//texto1 is a string = "Linguagem W"
//Hoje1 is a Date = Today()// dia de hoje
//Hora1 is Time = Now()// horário atual
//
//IF texto1 = "01000" AND texto1 = "SP" THEN
//   num1++
//END
//
//IF texto1 = "01000" OR texto1 = "90000" THEN
//   valor1 = valor1 * 3
//END
//
//valor1 = 5 + 7          // valor = 12
//valor1 = valor1 - 6 // valor =  6
//valor1 = 5 * 2          // valor = 10
//valor1 = valor1 / 2 // valor =  5
//valor1 ++               // valor =  6
//valor1 --               // valor =  5
//valor1 += 12            // valor = 17
//valor1 -= 11            // valor =  6
//
//IF valor1 > 60 THEN
//   num1 += 1
//ELSE
//   num1 += 1
//END
//
//SWITCH Valor1
//   CASE 1 : Info(1)            // sintaxe 1
//   CASE 2 : Info("2a") ; Info("2b")   // sintaxe 2
//   CASE 3 :              // sintaxe 3
//       Info("3a")
```

```
//        Info("3b")
//   CASE 4 :                 // sintaxe 4
//        Info("4a")
//        Info("4b")
//   OTHER CASE:
//        //não faz nada
//END
//
//contador is int = 1
//WHILE contador <= 10
//   info(contador)
//   contador++
//END
//
//FOR i = 1 TO 10
//   Info(i)
//END

//meuCarro is Carro = new Carro()
//
//meuCarro.cor = "Branco"
//meuCarro.marca = "Wolkswagen"
//meuCarro.modelo = "T-Cross"
//
//meuCarro.Ligar()
//meuCarro.Acelerar()
//meuCarro.Desligar()

//HReqSolicitar   is httpRequest
//HReqSolicitar..URL                    = "http://localhost/usuarios/lista"
//HReqSolicitar..Method                 = httpGet
//HReqSolicitar..ContentType            = "application/json"
//HReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate
//
//HResRetorno is httpResponse = RESTSend(HReqSolicitar)
//jRetorno is json = HResRetorno..Content
//
//trace(jRetorno)
```

Part 2

Analysis

Analysis

Chart

TB_Movimentos
- mov_ID
- mov_descricao
- mov_cadastro
- mov_vencimento
- mov_valor
- mov_quitado
- mov_tipo_lan

TBL_Usuarios
- TBL_UsuariosID
- UsuNome
- UsuSenha
- UsuEmail
- UsuCelular

TBL_Mensagens
- TBL_MensagensID
- MsgUsuOrigem
- MsgUsuDestino
- MsgDataEnvio
- MsgHoraEnvio
- MsgConteudo
- MsgLida

Analysis

General information

My_Project.wda	

Directory	D:\My UNEX Projects\My_Project\My_Project.ana\
Data file directory	Application directory

Generation #	Nb files	Nb items	Nb links	Nb connections	Nb groups
7	3	20	0	1	0

Analysis

Item dictionary

Item	Type	Size	Unique Key	Key with Duplicates	Used by...
mov_cadastro	Date (yyyymmdd)				TB_Movimentos
Mov_descricao	String	100			TB_Movimentos
Mov_ID	Automatic identifier (8		✓		TB_Movimentos
mov_quitado	Boolean				TB_Movimentos
mov_tipo_lan	1-byte integer				TB_Movimentos
mov_valor	Currency				TB_Movimentos
mov_vencimento	Date (yyyymmdd)				TB_Movimentos
MovimentosID					<Unused>
MsgConteudo	String	144			TBL_Mensagens
MsgDataEnvio	Date (yyyymmdd)				TBL_Mensagens
MsgHoraEnvio	Time (hhmm)				TBL_Mensagens
MsgLida	Boolean				TBL_Mensagens
MsgUsuDestino	Unsigned 8-byte integer				TBL_Mensagens
MsgUsuOrigem	Unsigned 8-byte integer				TBL_Mensagens
TBL_MensagensID	Automatic identifier (8		✓		TBL_Mensagens
TBL_UsuariosID	Automatic identifier (8		✓		TBL_Usuarios
UsuCelular	String	50			TBL_Usuarios
UsuEmail	String	50			TBL_Usuarios
UsuNome	String	50			TBL_Usuarios
UsuSenha	String	50			TBL_Usuarios

Analysis

Connections

Connection	Data source	User	Provider	Conn Timeout* [1]	Exec. Timeout* [1]
MyConnection1 **MyConnection1**	MyAnalysis		WinDevSQLite	30	30

[1] Conn Timeout* : Connection timeout   Exec. Timeout* : Execution timeout

Analysis

Files and items

	Abbreviation	Automatic ID	Generation #	Record size	exceeding 2GB	Spaces * [1]	Replication	Write Log * [1]	Read/Write Log * [1]	Security * [1]	Data encrypt.	Index encrypt.	Memo encrypt.	Memo compression	Type
TBL_Mensagens		✓	2	193	✓					✓	✓	✓	✓		HFSQL Classic
TBL_Usuarios		✓	2	221	✓					✓	✓	✓	✓		HFSQL Classic

[1] Spaces * : Complete strings with spaces   Write Log * : Logging write operations
Read/Write Log * : Log read and write operations   Security * : High security mode

TBL_Mensagens

Files and items

General information

TBL_Mensagens	TBL_Mensagens

Name on disk	TBL_Mensagens.fic

TBL_Mensagens file items

	Caption	Type	Size	Unique Key	Key with Duplicates	Direction	Default value
TBL_MensagensID	ID	Automatic identifier (8 bytes)		✓		↗	
MsgUsuOrigem	MsgUsuOrigem	Unsigned 8-byte integer					0
MsgUsuDestino	MsgUsuDestino	Unsigned 8-byte integer					0
MsgDataEnvio	MsgDataEnvio	Date (yyyymmdd)					
MsgHoraEnvio	MsgHoraEnvio	Time (hhmm)					
MsgConteudo	MsgConteudo	String	144				
MsgLida	MsgLida	Boolean					0

TBL_Usuarios

Files and items

General information

TBL_Usuarios	TBL_Usuarios

Name on disk	TBL_Usuarios.fic

TBL_Usuarios file items

	Caption	Type	Size	Unique Key	Key with Duplicates	Direction	Default value
TBL_UsuariosID	Identifier of TBL_Usuarios	Automatic identifier (8 bytes)		✓		↗	
UsuNome	UsuNome	String	50				
UsuSenha	UsuSenha	String	50				
UsuEmail	UsuEmail	String	50				
UsuCelular	UsuCelular	String	50				

Part 3

WINDEV window

WIN_Login

Image
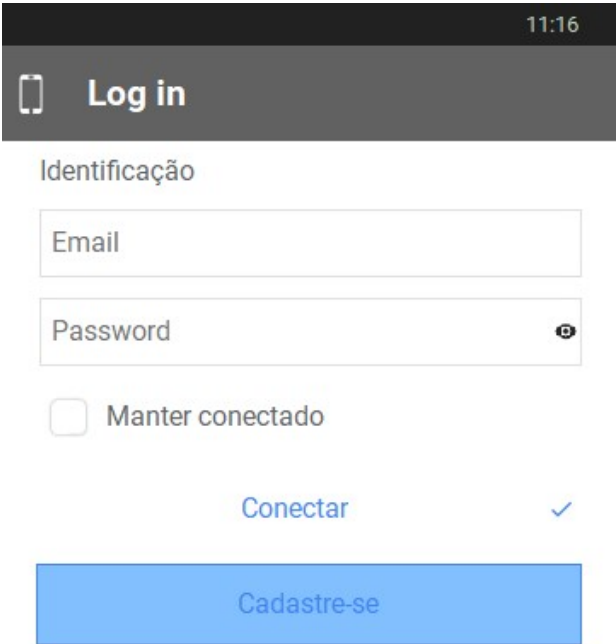
WIN_Login

General information

WIN_Login	

Physical file	D:\My UNEX Projects\My_Project\WIN_Login.wdw
Created by	AMO
Date created	06/09/2016 04:36:17
Last modified by	PEDRO
Last modified	17/05/2024 16:34:28
Title	BR: Log in

X position	0	Y position	0	Width	360	Height	318

Visible	✓	Title bar		Status Bar	✓
9-slice scaling		Resizable		Move/Background	✓
Automatic Scrollbar	✓				
Indep. HFSQL ctx.					

Initial state	Active
Hover cursor	0
Screenshot	Yes
Nb Options main menu	0
Size unit	Desktop OR mobile platform
Window orientation	Locked in portrait mode
Opacity	100
Action Bar	Yes
Sheet mode	No
Transp. system bar	<None>
Offset for sensor	Yes
Border type	Double
Ignore dark theme	No
Pull to refresh	No
Opening mode (Mobile)	Maximized at opening
PopOver (iPad)	No
Widget mode	No
Widget refresh	0
Automatic validation.	0
Cap. + Time left	Yes
Virtual keyboard mode	No
Markdown text	No
Context menu mode.	<None>
U.M.C.	No
Animation	Automatic
Width of sliding left window	0
Width of sliding right window	0
Swipe of sliding left window	Yes
Swipe of sliding right window	Yes
Sliding Window effect	Cover: the sliding window covers the current window

Window statistics

Ab	Edit control	2	Abc	Caption	1
Ok	Button	2	☑	Check Box	1
☑	Check Box option	1		Action bar	1

Number of elements in window: 8

WIN_Login

Information on controls

Window : WIN_Login

Edit control

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Input type	Multiline	RTF format	Password	Required input	Blank if zero	NULL if empty	File assisted input	Automatic erase	End of automatic input	Horizontal scroll	Vertical scroll	Horz. scrollbar	Vert. scrollbar
EDT_Email	20	38	320	44	0	✓	Active	✓	Text					✓					✓			
EDT_Password	20	90	320	44	0	✓	Active	✓	Text			✓		✓			✓		✓			

Caption

	X position	Y position	Width	Height	Plane	Visible	Initial state	Horz. alignment	Vert. alignment	RTF format	Default animation
STC_Identification	20	8	320	22	0	✓	Active	Left	Top		

Button

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Button type
BTN_Cadastro	20	248	320	48	0	✓	Active	✓	Normal
BTN_Connect	20	192	320	48	0	✓	Active	✓	Normal

Check Box

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Nb. columns	Proportional column	Three states
CBOX_Checkbox	20	142	320	42	0	✓	Active	✓	1	✓	

Window : WIN_Login

Button : BTN_Cadastro

Caption	BR: Cadastre-se
Tab order	5
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Nb. image states	1
Nb. background states	5
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring

Anchor rate to right	300	Anchor rate bottom	1000	Horz. anchor rate	400	Vert. anchor rate	1000

Button : BTN_Connect

Caption	BR: Conectar
Tab order	4
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>

Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\Templates\WM\250 Phoenix\Phoenix_Pict_Save_16_5@dpi1x.png
Nb. image states	1
Background image	BR: D:\My UNEX Projects\My_Project\Templates\WM\250 Phoenix\Phoenix_Btn_Ok@dpi1x.png
Nb. background states	5
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring

Anchor rate to right	300	**Anchor rate bottom**	1000	**Horz. anchor rate**	400	**Vert. anchor rate**	1000

Check Box : CBOX_Checkbox

Caption	BR: &Check box
Initial value	0
Tab order	3
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Vert. alignment	Top
Auto height of options	Yes
Compact option	Yes
Opacity	100
Vista style	No
Bar type	Caption and sub-caption
Required input	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Persistent value	No
Multiline option	No
Markdown text	No
Context menu mode.	<None>
Native control	No
Image	D:\My UNEX Projects\My_Project\Templates\WM\250 Phoenix\Phoenix_CBox@dpi1x.png
Nb. image states	1

Image width	64
Nb. animation steps	1

Anchoring

Anchor rate to right	300	**Anchor rate bottom**	1000	**Horz. anchor rate**	400	**Vert. anchor rate**	1000

Edit control : EDT_Email

Tab order	1
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	22
Inside width	318
Hint text if empty	BR: Email
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	Yes
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No

Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.UsuEmail
Euro management	No

Anchoring

Anchor rate to right	300	**Anchor rate bottom**	1000	**Horz. anchor rate**	400	**Vert. anchor rate**	1000

Edit control : EDT_Password

Tab order	2
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	22
Inside width	318
Hint text if empty	BR: Password
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	Yes
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No

Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.UsuSenha
Euro management	No

Anchoring

Anchor rate to right	300	**Anchor rate bottom**	1000	**Horz. anchor rate**	400	**Vert. anchor rate**	1000

Caption : STC_Identification

Caption	BR: Identificação
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Opacity	100
Min font size	0
Input type	Text
Input mask	BR: 0
Ellipsis mode	<None>
Transform &	No
Blank if zero	Yes
Markdown text	No

Anchoring

Anchor rate to right	300	**Anchor rate bottom**	1000	**Horz. anchor rate**	400	**Vert. anchor rate**	1000

WIN_Login

Code

Global declarations of WIN_Login

```
PROCEDURE MyWindow()

ControladorUsuario is Cls_Usuarios = new Cls_Usuarios()
```

End of initialization of WIN_Login

```
//if InTestMode() = true then
    EDT_Email = "pedro.borges@ftc.edu.br"
    EDT_Password = "primeirocampeaomundial"
//   ExecuteProcess(BTN_Connect,trtClick)
//end
```

WIN_Login

Control code

Click BTN_Cadastro

```
OpenMobileWindow(WIN_Cadastro_de_Usuarios,Null,"Inserir")
```
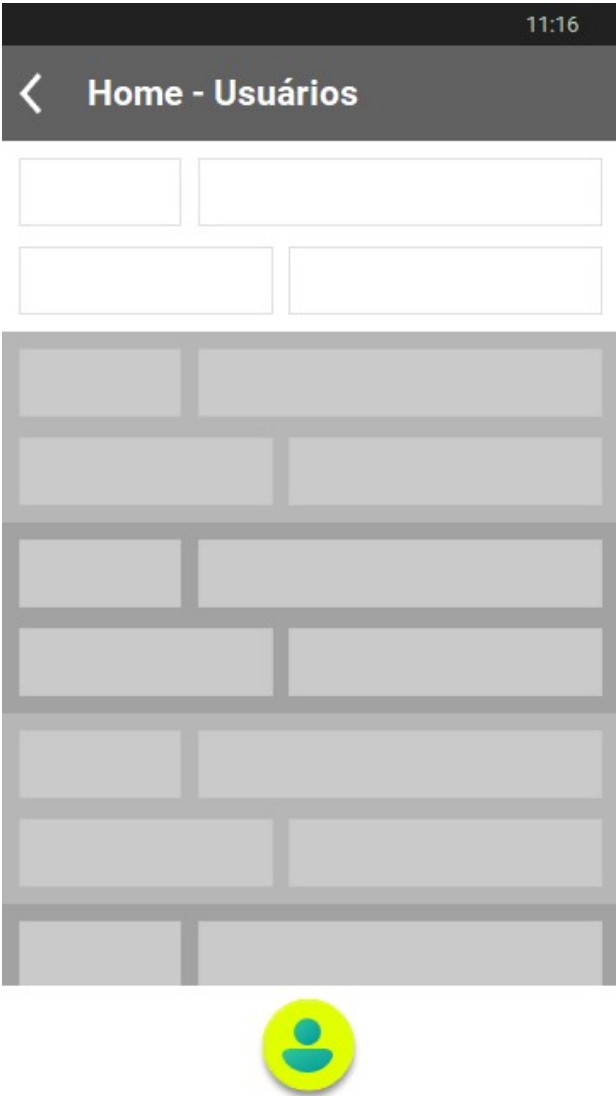
Click BTN_Connect

```
ScreenToFile(WIN_Login)

IF ControladorUsuario.login() = True THEN
    gpclUsuarioLogado = ControladorUsuario
    OpenMobileWindow(WIN_Home)
END
```

WIN_Home

Image

WIN_Home

General information

WIN_Home	

Physical file	D:\My UNEX Projects\My_Project\WIN_Home.wdw
Created by	PEDRO
Date created	22/03/2024 21:01:56
Last modified by	PEDRO

Last modified	17/05/2024 19:26:52
Title	BR: Home - Usuários

X position	0	Y position	0	**Width**	360	**Height**	569

Visible	✓	Title bar	✓ Status Bar
9-slice scaling		Resizable	✓ Move/Background
Automatic Scrollbar	✓		
Indep. HFSQL ctx.			

Initial state	Active
Hover cursor	0
Screenshot	Yes
Nb Options main menu	0
Size unit	Desktop OR mobile platform
Window orientation	Locked in portrait mode
Opacity	100
Action Bar	Yes
Sheet mode	No
Transp. system bar	<None>
Offset for sensor	No
Border type	Double
Ignore dark theme	No
Pull to refresh	No
Opening mode (Mobile)	Maximized at opening
PopOver (iPad)	No
Widget mode	No
Widget refresh	0
Automatic validation.	0
Cap. + Time left	Yes
Virtual keyboard mode	No
Markdown text	No
Context menu mode.	<None>
U.M.C.	No
Animation	Automatic
Width of sliding left window	0
Width of sliding right window	0
Swipe of sliding left window	Yes
Swipe of sliding right window	Yes
Sliding Window effect	Cover: the sliding window covers the current window

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Window statistics

Ab	Edit control	4	Ok	Button	1
	Looper	1		Action bar	1

Number of elements in window: 7

WIN_Home

Information on controls

Window : WIN_Home

Button

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Button type
BTN_AtualizarDados	153	504	54	54	0	✓	Active	✓	Normal

Looper

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key
LOOP_Usuarios	0	0	360	496	0	✓	Active	✓

Looper : LOOP_Usuarios

Edit control

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Input type	Multiline	RTF format	Password	Required input	Blank if zero	NULL if empty	File assisted input	Automatic erase	End of automatic input	Horizontal scroll	Vertical scroll	Horz. scrollbar	Vert. scrollbar
EDT_TBL_UsuariosID	8	8	97	44	0	✓	Read-on	✓	Numeric					✓			✓		✓			
EDT_UsuCelular	8	60	151	44	0	✓	Read-on	✓	Text					✓			✓		✓			
EDT_UsuEmail	167	60	185	44	0	✓	Read-on	✓	Text					✓			✓		✓			
EDT_UsuNome	113	8	239	44	0	✓	Read-on	✓	Text					✓			✓		✓			

Window : WIN_Home

Button : BTN_AtualizarDados

Tab order	2
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	Yes
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\WON_Basic-User 1@dpi1x.png
Nb. image states	5
Nb. background states	1
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring		Right and bottom					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Looper : LOOP_Usuarios

Tab order	1
Hover cursor	0
UI changes by the user	According to window
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Max. row height	0
Row height	112
Column width	360
Direction	Vertical
Resizable row height	No
Resizable column width	No

Multi-selection	No
Scrollbar tooltip	Yes
Per-pixel scrolling	Yes
Touch scrolling	Yes
Fast scrolling	No
Slide	<No action>
Respects width IW left swipe	No
Left swipe event on scroll	Yes
Respects width IW right swipe	No
Right swipe event on scroll	Yes
Row movement	<Forbidden>
Horz. scrollbar	Automatic
Vert. scrollbar	Automatic
Selection mode	Single selection
Pull to refresh	No
Add additional elements	No
Max. nb of additional elements	10000
1 IW per row	No
Unload IW per row	When the row is not visible anymore
iOS Selection Compat. 20	No
Same content/row	No
Reuse controls	According to platform
Cascading input	No
Nb. columns	1
Hide bar	Yes
Display/Scrollbar	No
Collapsible Breaks	Yes
Markdown text	No
Context menu mode.	<None>
Display mode	Standard (grid)
Column anchoring	Variable column width
Gallery: Automatic Popup	Yes
Fill source	Variable
Max Nb Rec	0
Browse	Automatic
Browsed file	:arrUsuarios
Stored item	:arrUsuarios
Add/Delete in variable	Yes
Save on exit	Yes

Anchoring	Width and height						
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Looper : LOOP_Usuarios

Edit control : LOOP_Usuarios.EDT_TBL_UsuariosID

Tab order	1
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	10
Inside width	95
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 9999999999
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>

Data binding	:arrUsuarios.TBL_UsuariosID
Euro management	No

Anchoring	Right					
Anchor rate to right	500	Anchor rate bottom	1000	Horz. anchor rate	1000	Vert. anchor rate	1000

Edit control : LOOP_Usuarios.EDT_UsuCelular

Tab order	3
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	10
Inside width	149
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No

Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrUsuarios.UsuCelular
Euro management	No

Anchoring	Right

Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Usuarios.EDT_UsuEmail

Tab order	4
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	168
Inside width	184
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes

Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrUsuarios.UsuEmail
Euro management	No

Anchoring	Right						
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Usuarios.EDT_UsuNome

Tab order	2
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	115
Inside width	237
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No

Required input (hint): Style	Yes			
Invalid input: Icon	No			
Invalid input: Text	No			
Invalid input: Style	Yes			
With focus	Yes			
Input history	No			
Activates keyboard	Yes			
Keyboard button	<Automatic>			
Smartphone mode	No			
Multiple values (tokens)	No			
Allow duplicates	No			
Deletable token	Yes			
Persistent value	No			
Markdown text	No			
Context menu mode.	<None>			
Data binding	:arrUsuarios.UsuNome			
Euro management	No			

Anchoring		Right				
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

WIN_Home

Code

Global declarations of WIN_Home

```
PROCEDURE MyWindow()
arrUsuarios is array of Cls_Usuarios
```

End of initialization of WIN_Home

```
arrUsuarios = Cls_Usuarios.home()

LOOP_Usuarios.Display()
```

Focus gain of WIN_Home

```
arrUsuarios = Cls_Usuarios.home()

LOOP_Usuarios.Display()
```

WIN_Home

Control code

Click BTN_AtualizarDados

```
OpenMobileWindow(WIN_Cadastro_de_Usuarios,gpclUsuarioLogado,"Alterar")
```

Select a row in LOOP_Usuarios

```
clUsuario is Cls_Usuarios = LOOP_Usuarios..Value
OpenMobileWindow(WIN_Chat,clUsuario)
```

Add a token in EDT_TBL_UsuariosID (LOOP_Usuarios)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_TBL_UsuariosID (LOOP_Usuarios)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_TBL_UsuariosID (LOOP_Usuarios)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuCelular (LOOP_Usuarios)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuCelular (LOOP_Usuarios)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_UsuCelular (LOOP_Usuarios)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuEmail (LOOP_Usuarios)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuEmail (LOOP_Usuarios)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
```

```
RETURN True
```

Click on a token of EDT_UsuEmail (LOOP_Usuarios)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuNome (LOOP_Usuarios)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuNome (LOOP_Usuarios)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_UsuNome (LOOP_Usuarios)

```
PROCEDURE ClickToken(MyToken is Token)
```

WIN_Cadastro_de_Usuarios

Image

WIN_Cadastro_de_Usuarios

General information

WIN_Cadastro_de_Usuarios	

Physical file	D:\My UNEX Projects\My_Project\WIN_Cadastro_de_Usuarios.wdw
Created by	PEDRO
Date created	19/04/2024 20:00:02
Last modified by	PEDRO

Last modified	17/05/2024 19:24:43
Title	BR: Cadastro de Usuários

X position	0	Y position	0	Width	360	Height	569

Visible	✓	Title bar			✓	Status Bar	
9-slice scaling		Resizable			✓	Move/Background	
Automatic Scrollbar	✓						
Indep. HFSQL ctx.							

Initial state	Active
Hover cursor	0
Screenshot	Yes
Nb Options main menu	0
Size unit	Desktop OR mobile platform
Window orientation	Locked in portrait mode
Opacity	100
Action Bar	Yes
Sheet mode	No
Transp. system bar	<None>
Offset for sensor	No
Border type	Double
Ignore dark theme	No
Pull to refresh	No
Opening mode (Mobile)	Maximized at opening
PopOver (iPad)	No
Widget mode	No
Widget refresh	0
Automatic validation.	0
Cap. + Time left	Yes
Virtual keyboard mode	No
Markdown text	No
Context menu mode.	<None>
U.M.C.	No
Animation	Automatic
Width of sliding left window	0
Width of sliding right window	0
Swipe of sliding left window	Yes
Swipe of sliding right window	Yes
Sliding Window effect	Cover: the sliding window covers the current window

Window statistics

Ab	Edit control	5	0k	Button	3
	Action bar	1			

Number of elements in window: 9

WIN_Cadastro_de_Usuarios

Information on controls

Window : WIN_Cadastro_de_Usuarios

Edit control

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Input type	Multiline	RTF format	Password	Required input	Blank if zero	NULL if empty	File assisted input	Automatic erase	End of automatic input	Horizontal scroll	Vertical scroll	Horz. scrollbar	Vert. scrollbar
EDT_TBL_UsuariosID	53	8	240	63	0	✓	Read-on	✓	Numeric					✓		✓	✓		✓			
EDT_UsuCelular	53	292	240	63	0	✓	Active	✓	Text					✓		✓	✓		✓			
EDT_UsuEmail	53	221	240	63	0	✓	Active	✓	Text					✓		✓	✓		✓			
EDT_UsuNome	53	79	240	63	0	✓	Active	✓	Text					✓		✓	✓		✓			
EDT_UsuSenha	53	150	240	63	0	✓	Active	✓	Text			✓		✓			✓		✓			

Button

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Button type
BTN_Alterar	90	411	167	40	0	✓	Active	✓	Normal
BTN_Deletar	90	459	167	40	0	✓	Active	✓	Normal
BTN_Inserir	90	363	167	40	0	✓	Active	✓	Normal

Window : WIN_Cadastro_de_Usuarios

Button : BTN_Alterar

Caption	BR: Alterar
Tab order	7
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\edit@dpi1x.png
Nb. image states	5
Background image	BR: D:\My UNEX Projects\My_Project\Templates\WM\250 Phoenix\Phoenix_Btn_Std@dpi1x.png
Nb. background states	5
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1
Anchoring	Right

Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Button : BTN_Deletar

Caption	BR: Deletar
Tab order	8
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Left indent	0
Opacity	100

Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\WON_Basic-Error@dpi1x.png
Nb. image states	5
Background image	BR: D:\My UNEX Projects\My_Project\Templates\WM\250 Phoenix\Phoenix_Btn_Std@dpi1x.png
Nb. background states	5
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring		Right					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Button : BTN_Inserir

Caption	BR: Inserir
Tab order	6
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\WON_Basic-Add@dpi1x.png
Nb. image states	5
Background image	BR: D:\My UNEX Projects\My_Project\Templates\WM\250 Phoenix\Phoenix_Btn_Std@dpi1x.png
Nb. background states	5
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring		Right					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : EDT_TBL_UsuariosID

Caption	BR: Código
Tab order	1
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Right
Inside X position	53
Inside width	240
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: +9 999 999 999 999 999 999
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.TBL_UsuariosID

Euro management	No

Anchoring	Right

Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : EDT_UsuCelular

Caption	BR: Celular
Tab order	5
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	53
Inside width	240
Opacity	100
Markdown read-only	No
Input size	50
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No

Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.UsuCelular
Euro management	No

Anchoring		Right					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : EDT_UsuEmail

Caption	BR: E-mail
Tab order	4
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	53
Inside width	240
Opacity	100
Markdown read-only	No
Input size	50
Input mask	BR: 27
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes

With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.UsuEmail
Euro management	No

Anchoring	Right

Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : EDT_UsuNome

Caption	BR: Nome
Tab order	2
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	53
Inside width	240
Opacity	100
Markdown read-only	No
Input size	50
Input mask	BR: 2
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No

Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.UsuNome
Euro management	No

Anchoring		Right					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : EDT_UsuSenha

Caption	BR: Senha
Tab order	3
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	53
Inside width	240
Opacity	100
Markdown read-only	No
Input size	50
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes

Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:ControladorUsuario.UsuSenha
Euro management	No

Anchoring		Right					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

WIN_Cadastro_de_Usuarios

Code

Global declarations of WIN_Cadastro_de_Usuarios

```
PROCEDURE MyWindow(LOCAL gpclUsuario is Cls_Usuarios, LOCAL gsAcao is string)

ControladorUsuario is Cls_Usuarios = new Cls_Usuarios()
```

End of initialization of WIN_Cadastro_de_Usuarios

```
SWITCH gsAcao
    CASE "Inserir"
        BTN_Alterar..Visible = False
        BTN_Deletar..Visible = False
        EDT_TBL_UsuariosID..Visible = False
    CASE "Alterar"
//      ControladorUsuario.ler(gnIdUsuario)
        ControladorUsuario = gpclUsuario
```

```
        FileToScreen()
        BTN_Inserir..Visible = False
        BTN_Deletar..Visible = False
    OTHER CASE

END
```

WIN_Cadastro_de_Usuarios

Control code

Initialization of BTN_Alterar

```
// Version 1
// Description
// New button to add or create elements
```

Click BTN_Alterar

```
ScreenToFile(WIN_Cadastro_de_Usuarios)

ControladorUsuario.alterar()

FileToScreen(WIN_Cadastro_de_Usuarios)

Close()
```

Initialization of BTN_Deletar

```
// Version 1
// Description
// New button to add or create elements
```

Click BTN_Deletar

```
ScreenToFile(WIN_Cadastro_de_Usuarios)

ControladorUsuario.deletar()

FileToScreen(WIN_Cadastro_de_Usuarios)

Close()
```

Click BTN_Inserir

```
ScreenToFile(WIN_Cadastro_de_Usuarios)

ControladorUsuario.inserir()

FileToScreen(WIN_Cadastro_de_Usuarios)

Close()
```

Add a token in EDT_TBL_UsuariosID

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_TBL_UsuariosID

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_TBL_UsuariosID

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuCelular

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuCelular

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_UsuCelular

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuEmail

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuEmail

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_UsuEmail

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuNome

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuNome

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_UsuNome

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_UsuSenha

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_UsuSenha

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_UsuSenha

```
PROCEDURE ClickToken(MyToken is Token)
```

WIN_Chat

Image
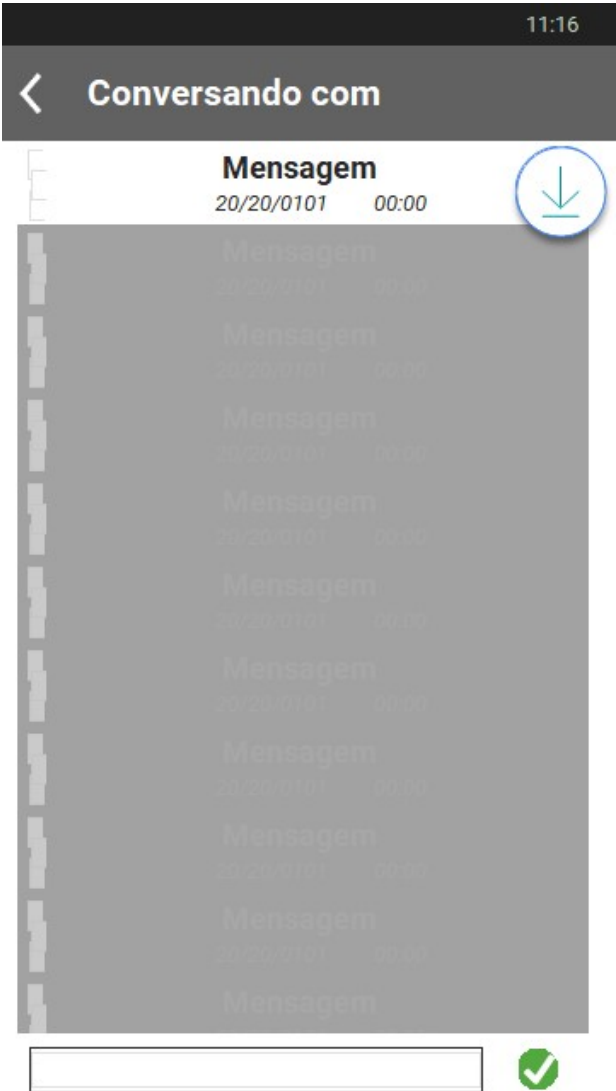
WIN_Chat

General information

WIN_Chat	

Physical file	D:\My UNEX Projects\My_Project\WIN_Chat.wdw
Created by	PEDRO
Date created	22/03/2024 21:01:56
Last modified by	PEDRO

Last modified	19/05/2024 08:03:44
Title	BR: Conversando com

X position	0	Y position	0	Width	360	Height	569

Visible	✓	Title bar	✓ Status Bar
9-slice scaling		Resizable	✓ Move/Background
Automatic Scrollbar	✓		
Indep. HFSQL ctx.			

Initial state	Active
Hover cursor	0
Screenshot	Yes
Nb Options main menu	0
Size unit	Desktop OR mobile platform
Window orientation	Locked in portrait mode
Opacity	100
Action Bar	Yes
Sheet mode	No
Transp. system bar	<None>
Offset for sensor	No
Border type	Double
Ignore dark theme	No
Pull to refresh	No
Opening mode (Mobile)	Maximized at opening
PopOver (iPad)	No
Widget mode	No
Widget refresh	0
Automatic validation.	0
Cap. + Time left	Yes
Virtual keyboard mode	No
Markdown text	No
Context menu mode.	<None>
U.M.C.	No
Animation	Automatic
Width of sliding left window	0
Width of sliding right window	0
Swipe of sliding left window	Yes
Swipe of sliding right window	Yes
Sliding Window effect	Cover: the sliding window covers the current window

Window statistics

Ab	Edit control	7	Ok	Button		2
	Looper	1		Action bar		1

Number of elements in window: 11

WIN_Chat

Information on controls

Window : WIN_Chat

Edit control

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Input type	Multiline	RTF format	Password	Required input	Blank if zero	NULL if empty	File assisted input	Automatic erase	End of automatic input	Horizontal scroll	Vertical scroll	Horz. scrollbar	Vert. scrollbar
EDT_EnviarMsg	16	532	266	27	0	✓	Active	✓	Text					✓			✓		✓			

Button

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Button type
BTN_EnviarMensagem	286	532	58	27	0	✓	Active	✓	Normal
BTN_Floating	301	3	54	54	0		Active	✓	Normal

Looper

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key
LOOP_Mensagens	9	0	335	524	0	✓	Active	✓

Looper : LOOP_Mensagens

Edit control

	X position	Y position	Width	Height	Plane	Visible	Initial state	TAB Key	Input type	Multiline	RTF format	Password	Required input	Blank if zero	NULL if empty	File assisted input	Automatic erase	End of automatic input	Horizontal scroll	Vertical scroll	Horz. scrollbar	Vert. scrollbar
EDT_MsgConteudo	10	3	310	27	0	✓	Read-on	✓	Text	✓				✓			✓					
EDT_MsgDataEnvio	114	26	94	22	0	✓	Read-on	✓	Date					✓			✓		✓			
EDT_MsgHoraEnvio	205	26	48	22	0	✓	Read-on	✓	Time					✓			✓		✓			
EDT_MsgUsuDestino	6	15	11	22	0		Read-on	✓	Numeric					✓			✓		✓			
EDT_MsgUsuOrigem	5	27	11	22	0		Read-on	✓	Numeric					✓			✓		✓			
EDT_TBL_MensagensI	4	3	11	22	0		Read-on	✓	Numeric					✓			✓		✓			

Window : WIN_Chat

Button : BTN_EnviarMensagem

Tab order	4
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	Yes
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\send@dpi1x.png
Nb. image states	5
Nb. background states	1
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring		Right and bottom					
Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Button : BTN_Floating

Caption	BR: +
Tab order	2
Hover cursor	0
UI changes by the user	According to window
On/Off	No
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	Yes
Hide while scrolling	No
Left indent	0
Opacity	100
Default animation	Yes
Ellipsis mode	<None>
Markdown text	No
Context menu mode.	<None>
Apple button	Disabled
Sign In with Apple button - Style	White
Apple Location button - Icon	Filled arrow icon
Apple Location button - Text	"Current Location"
Image	BR: D:\My UNEX Projects\My_Project\refresh@dpi1x.png
Nb. image states	5
Nb. background states	1
Stretch background image	Custom 9-slice scaling
Nb. animation steps	1

Anchoring		Right					
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : EDT_EnviarMsg

Tab order	3
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	17
Inside width	264
Opacity	100

Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Euro management	No

Anchoring	Right and bottom

Anchor rate to right	500	**Anchor rate bottom**	1000	**Horz. anchor rate**	0	**Vert. anchor rate**	1000

Looper : LOOP_Mensagens

Tab order	1
Hover cursor	0
UI changes by the user	According to window
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Max. row height	0
Row height	49
Column width	335
Direction	Vertical
Resizable row height	No

Resizable column width	No
Multi-selection	No
Scrollbar tooltip	Yes
Per-pixel scrolling	Yes
Touch scrolling	Yes
Fast scrolling	No
Slide	<No action>
Respects width IW left swipe	No
Left swipe event on scroll	Yes
Respects width IW right swipe	No
Right swipe event on scroll	Yes
Row movement	<Forbidden>
Horz. scrollbar	Automatic
Vert. scrollbar	Automatic
Selection mode	Single selection
Pull to refresh	No
Add additional elements	No
Max. nb of additional elements	10000
1 IW per row	No
Unload IW per row	When the row is not visible anymore
iOS Selection Compat. 20	No
Same content/row	No
Reuse controls	According to platform
Cascading input	No
Nb. columns	1
Hide bar	Yes
Display/Scrollbar	No
Collapsible Breaks	Yes
Markdown text	No
Context menu mode.	<None>
Display mode	Standard (grid)
Column anchoring	Variable column width
Gallery: Automatic Popup	Yes
Fill source	Variable
Max Nb Rec	0
Browse	Automatic
Browsed file	:arrMensagens
Add/Delete in variable	Yes
Save on exit	Yes

Anchoring	Width and height						
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Looper : LOOP_Mensagens

Edit control : LOOP_Mensagens.EDT_MsgConteudo

Note for technical documentation
BR: Mensagem
BR: Mensagem

Initial value	BR: Mensagem
Tab order	2
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Center
Inside X position	19
Inside width	310
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 0
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No

Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrMensagens.MsgConteudo
Euro management	No

Anchoring		Width and height					
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Mensagens.EDT_MsgDataEnvio

Initial value	BR: 01012020
Tab order	4
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	123
Inside width	94
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: JJ/MM/AAAA
Return format	AAAAMMJJ
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No

Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrMensagens.MsgDataEnvio
Euro management	No

Anchoring	<None>						
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Mensagens.EDT_MsgHoraEnvio

Initial value	BR: 0000
Tab order	5
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	216
Inside width	46
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: HH:MM
Return format	HHMMSS
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes

Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrMensagens.MsgHoraEnvio
Euro management	No

Anchoring	<None>						
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Mensagens.EDT_MsgUsuDestino

Tab order	3
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	17
Inside width	9
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 9999999999
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>

Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrMensagens.MsgUsuDestino
Euro management	No
Anchoring	<None>

Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Mensagens.EDT_MsgUsuOrigem

Tab order	6
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>
Horz. alignment	Left
Inside X position	16
Inside width	9
Opacity	100
Markdown read-only	No

Input size	0
Input mask	BR: 9999999999
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrMensagens.MsgUsuOrigem
Euro management	No

Anchoring	<None>						
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

Edit control : LOOP_Mensagens.EDT_TBL_MensagensID

Tab order	1
Hover cursor	0
Synchronizing shared information	No
UI changes by the user	According to window
Calendar button	No
Delete button	<None>
TAB Key	Yes
Height Paral. Rate	0
Y Paral. Rate	0
Pinned	No
Hide while scrolling	No
Anchor to content	<None>

Horz. alignment	Left
Inside X position	15
Inside width	9
Opacity	100
Markdown read-only	No
Input size	0
Input mask	BR: 9999999999
Bound in tooltip	No
Bound in the hint text	Yes
Ellipsis mode	<None>
Check spelling	Yes
Horz. scrollbar	Never
Vert. scrollbar	Never
Blocking validation	No
Required input (error): Style	Yes
Required input (error): Text	No
Required input (error): Icon	No
Required input (hint): Icon	No
Required input (hint): Text	No
Required input (hint): Style	Yes
Invalid input: Icon	No
Invalid input: Text	No
Invalid input: Style	Yes
With focus	Yes
Input history	No
Activates keyboard	Yes
Keyboard button	<Automatic>
Smartphone mode	No
Multiple values (tokens)	No
Allow duplicates	No
Deletable token	Yes
Persistent value	No
Markdown text	No
Context menu mode.	<None>
Data binding	:arrMensagens.TBL_MensagensID
Euro management	No

Anchoring		<None>					
Anchor rate to right	1000	**Anchor rate bottom**	1000	**Horz. anchor rate**	1000	**Vert. anchor rate**	1000

WIN_Chat

Code

Global declarations of WIN_Chat

```
PROCEDURE MyWindow(LOCAL gpclUsuarioDestino is Cls_Usuarios)
arrMensagens is array of Cls_Mensagens

WIN_Chat..Title += Upper(ExtractString(gpclUsuarioDestino.UsuNome,1," "))
```

End of initialization of WIN_Chat

```
pCarregarMensagens()
```

WIN_Chat

Control code

Click BTN_EnviarMensagem

```
clMensagem is Cls_Mensagens = Cls_Mensagens.inserir(gpclUsuarioLogado.TBL_UsuariosID,...
                                                    gpclUsuarioDestino.TBL_UsuariosID,...
                                                    EDT_EnviarMsg..Value)
arrMensagens.Add(clMensagem)
LOOP_Mensagens.Display()
EDT_EnviarMsg = ""
```

Initialization of BTN_Floating

```
// Version 1
// Description
// Floating add button. This button is pinned to keep the same position relative to the screen.
```

Click BTN_Floating

```
arrMensagens = Cls_Mensagens.chat(gpclUsuarioLogado.TBL_UsuariosID,gpclUsuarioDestino.TBL_UsuariosID)

LOOP_Mensagens.Display()
```

Add a token in EDT_EnviarMsg

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_EnviarMsg

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_EnviarMsg

```
PROCEDURE ClickToken(MyToken is Token)
```

Display a row in LOOP_Mensagens

```
IF LOOP_Mensagens[LOOP_Mensagens].EDT_MsgUsuOrigem = gpclUsuarioLogado.TBL_UsuariosID THEN
    //   LOOP_Mensagens[LOOP_Mensagens].BackgroundColor = DarkGreen
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgConteudo.BackgroundColor = DarkGreen
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgConteudo.Color = White
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgConteudo.HorizontalAlignment = haRight

    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgDataEnvio.BackgroundColor = DarkGreen
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgDataEnvio.Color = White
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgDataEnvio..X += 118

    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgHoraEnvio.BackgroundColor = DarkGreen
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgHoraEnvio.Color = White
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgHoraEnvio..X += 118
ELSE
//   LOOP_Mensagens[LOOP_Mensagens].BackgroundColor = LightGray
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgConteudo.BackgroundColor   = LightGray
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgConteudo.Color             = Black
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgConteudo.HorizontalAlignment = haLeft

    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgDataEnvio.BackgroundColor   = LightGray
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgDataEnvio.Color             = Black
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgDataEnvio..X -= 104

    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgHoraEnvio.BackgroundColor   = LightGray
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgHoraEnvio.Color             = Black
    LOOP_Mensagens[LOOP_Mensagens].EDT_MsgHoraEnvio..X -= 104
END
```

Add a token in EDT_MsgConteudo (LOOP_Mensagens)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_MsgConteudo (LOOP_Mensagens)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_MsgConteudo (LOOP_Mensagens)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_MsgDataEnvio (LOOP_Mensagens)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_MsgDataEnvio (LOOP_Mensagens)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_MsgDataEnvio (LOOP_Mensagens)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_MsgHoraEnvio (LOOP_Mensagens)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_MsgHoraEnvio (LOOP_Mensagens)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_MsgHoraEnvio (LOOP_Mensagens)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_MsgUsuDestino (LOOP_Mensagens)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_MsgUsuDestino (LOOP_Mensagens)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_MsgUsuDestino (LOOP_Mensagens)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_MsgUsuOrigem (LOOP_Mensagens)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_MsgUsuOrigem (LOOP_Mensagens)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_MsgUsuOrigem (LOOP_Mensagens)

```
PROCEDURE ClickToken(MyToken is Token)
```

Add a token in EDT_TBL_MensagensID (LOOP_Mensagens)

```
PROCEDURE AddToken(MyToken is Token)

//RETURN False to prevent from adding the token
RETURN True
```

Delete a token in EDT_TBL_MensagensID (LOOP_Mensagens)

```
PROCEDURE DeleteToken(MyToken is Token)

//RETURN False to prevent from deleting the token
RETURN True
```

Click on a token of EDT_TBL_MensagensID (LOOP_Mensagens)

```
PROCEDURE ClickToken(MyToken is Token)
```

WIN_Chat

Procedures

Local procedure pCarregarMensagens

```
PROCEDURE pCarregarMensagens()

arrMensagens = Cls_Mensagens.chat(gpclUsuarioLogado.TBL_UsuariosID,gpclUsuarioDestino.TBL_UsuariosID)

LOOP_Mensagens.Display()
```

Part 4

Class

Cls_Usuarios

Code

Declaration of Cls_Usuarios

```
Cls_Usuarios is Class
    TBL_UsuariosID    is 8-byte int    = 0        //Identifier of TBL_Usuarios
    UsuNome           is  string       = ""       //UsuNome
    UsuSenha          is  string       = ""       //UsuSenha
    UsuEmail          is  string       = ""       //UsuEmail
    UsuCelular        is  string       = ""       //UsuCelular
END
```

Method alterar

```
PROCEDURE alterar()

jRequisicao is JSON
jRequisicao.UsuNome       = :UsuNome
jRequisicao.UsuSenha  = :UsuSenha
jRequisicao.UsuEmail  = :UsuEmail
jRequisicao.UsuCelular    = :UsuCelular

ReqSolicitar is httpRequest
ReqSolicitar..URL                    = gsLink_WebService + "/usuarios/alterar/" + :TBL_UsuariosID
ReqSolicitar..Method                 = httpPut
ReqSolicitar..ContentType            = "application/json"
ReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate
ReqSolicitar..Content                = jRequisicao

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
    jRetorno is JSON          = ResRetorno..Content

    :TBL_UsuariosID  = jRetorno.TBL_UsuariosID
    :UsuNome         = jRetorno.UsuNome
    :UsuSenha            = jRetorno.UsuSenha
    :UsuEmail            = jRetorno.UsuEmail
    :UsuCelular      = jRetorno.UsuCelular

    ToastDisplay("Usuário alterado com sucesso",toastLong,vaMiddle,haCenter)

    RETURN True
ELSE
    ToastDisplay("Usuário não encontrado",toastLong,vaMiddle,haCenter)

    RETURN False
END
```

Constructor

```
PROCEDURE Constructor( )
```

Method deletar

```
PROCEDURE deletar()
```

```
ReqSolicitar is httpRequest
ReqSolicitar..URL                    = gsLink_WebService + "/usuarios/deletar/" + :TBL_UsuariosID
ReqSolicitar..Method                 = httpDelete
ReqSolicitar..ContentType            = "application/json"
ReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 204 THEN
    ToastDisplay("Usuário deletado com sucesso",toastLong,vaMiddle,haCenter)

    RETURN True
ELSE
    ToastDisplay("Usuário não encontrado",toastLong,vaMiddle,haCenter)

    RETURN False
END
```

Destructor

```
PROCEDURE Destructor()
```

Method home

```
PROCEDURE PUBLIC GLOBAL home()

arrUsuarios is array of Cls_Usuarios
clUsuario is Cls_Usuarios
ReqSolicitar is httpRequest
ReqSolicitar..URL                    = gsLink_WebService + "/usuarios/home"
ReqSolicitar..Method                 = httpGet
ReqSolicitar..ContentType            = "application/json"
ReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
    jRetorno is JSON = ResRetorno..Content
    nQuant is int = jRetorno..Count

    FOR i = 1 TO nQuant
        clUsuario = new Cls_Usuarios()
        clUsuario:TBL_UsuariosID  = jRetorno[i].TBL_UsuariosID
        clUsuario:UsuNome         = jRetorno[i].UsuNome
        //clUsuario:UsuSenha        = jRetorno[i].UsuSenha
        clUsuario:UsuEmail        = jRetorno[i].UsuEmail
        clUsuario:UsuCelular      = jRetorno[i].UsuCelular

        ArrayAdd(arrUsuarios,clUsuario)
    END

ELSE
    ToastDisplay("Erro ao buscar os usuários." + ResRetorno.StatusCode,toastLong,vaMiddle,haCenter)
    ArrayAdd(arrUsuarios,gpclUsuarioLogado)

END

RETURN arrUsuarios
```

Method inserir

```
PROCEDURE inserir()

jRequisicao is JSON
jRequisicao.UsuNome        = :UsuNome
```

```
jRequisicao.UsuSenha  = :UsuSenha
jRequisicao.UsuEmail = :UsuEmail
jRequisicao.UsuCelular    = :UsuCelular

ReqSolicitar is httpRequest
ReqSolicitar..URL                     = gsLink_WebService + "/usuarios/inserir"
ReqSolicitar..Method                  = httpPost
ReqSolicitar..ContentType             = "application/json"
ReqSolicitar..IgnoreError             = httpIgnoreInvalidCertificate
ReqSolicitar..Content                 = jRequisicao

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
    jRetorno is JSON = ResRetorno..Content

    :TBL_UsuariosID  = jRetorno.TBL_UsuariosID
    :UsuNome = jRetorno.UsuNome
    :UsuSenha     = jRetorno.UsuSenha
    :UsuEmail     = jRetorno.UsuEmail
    :UsuCelular  = jRetorno.UsuCelular

    ToastDisplay("Usuário inserido com sucesso",toastLong,vaMiddle,haCenter)

    RETURN True
ELSE
    ToastDisplay("Erro ao inserir o usuário",toastLong,vaMiddle,haCenter)

    RETURN False
END
```

Method ler

```
PROCEDURE ler(LOCAL nId is int)

ReqSolicitar is httpRequest
ReqSolicitar..URL                     = gsLink_WebService + "/usuarios/ler/" + nId
ReqSolicitar..Method                  = httpGet
ReqSolicitar..ContentType             = "application/json"
ReqSolicitar..IgnoreError             = httpIgnoreInvalidCertificate

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
    jRetorno is JSON = ResRetorno..Content

    :TBL_UsuariosID  = jRetorno.TBL_UsuariosID
    :UsuNome = jRetorno.UsuNome
    :UsuSenha     = jRetorno.UsuSenha
    :UsuEmail     = jRetorno.UsuEmail
    :UsuCelular  = jRetorno.UsuCelular

    ToastDisplay("Usuário localizado com sucesso",toastLong,vaMiddle,haCenter)

    RETURN True
ELSE
    ToastDisplay("Erro ao localizar o usuário",toastLong,vaMiddle,haCenter)

    RETURN False
END
```

Method lista

```
PROCEDURE PUBLIC GLOBAL lista()
```

```
arrUsuarios is array of Cls_Usuarios
clUsuario is Cls_Usuarios
ReqSolicitar is httpRequest
ReqSolicitar..URL                    = gsLink_WebService + "/usuarios/lista"
ReqSolicitar..Method                 = httpGet
ReqSolicitar..ContentType            = "application/json"
ReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate

ResRetorno    is httpResponse  = RESTSend(ReqSolicitar)


IF ResRetorno.StatusCode = 200 THEN
     jRetorno is JSON  = ResRetorno..Content
     nQuant        is int  = jRetorno..Count

     FOR i = 1 TO nQuant
          clUsuario = new Cls_Usuarios()
          clUsuario:TBL_UsuariosID  = jRetorno[i].TBL_UsuariosID
          clUsuario:UsuNome         = jRetorno[i].UsuNome
          clUsuario:UsuSenha          = jRetorno[i].UsuSenha
          clUsuario:UsuEmail          = jRetorno[i].UsuEmail
          clUsuario:UsuCelular      = jRetorno[i].UsuCelular

          ArrayAdd(arrUsuarios,clUsuario)
     END
END


RETURN arrUsuarios
```

Method login

```
PROCEDURE login(): boolean

jRequisicao is JSON
jRequisicao.UsuSenha  = :UsuSenha
jRequisicao.UsuEmail  = :UsuEmail

ReqSolicitar is httpRequest
ReqSolicitar..URL                    = gsLink_WebService + "/usuarios/login"
ReqSolicitar..Method                 = httpPost
ReqSolicitar..ContentType            = "application/json"
ReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate
ReqSolicitar..Content                = jRequisicao

ResRetorno    is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
     jRetorno is JSON = ResRetorno..Content

     IF jRetorno.login = True THEN
          :TBL_UsuariosID = jRetorno.TBL_UsuariosID
          :UsuNome = jRetorno.UsuNome
          :UsuCelular = jRetorno.UsuCelular

          RETURN True
     ELSE
          ToastDisplay("Dados inválidos.",toastLong,vaMiddle,haCenter)
          RETURN False
     END
ELSE
     ToastDisplay("Erro ao efetuar login. Dados inválidos.",toastLong,vaMiddle,haCenter)
     RETURN False
END
```

Cls_Mensagens

Code

Declaration of Cls_Mensagens

```
Cls_Mensagens is Class
        TBL_MensagensID is 8-byte int = 0 //ID
        MsgUsuOrigem is 8-byte unsigned int = 0 //MsgUsuOrigem
        MsgUsuDestino is 8-byte unsigned int = 0 //MsgUsuDestino
        MsgDataEnvio is Date //MsgDataEnvio
        MsgHoraEnvio is Time //MsgHoraEnvio
        MsgConteudo is ANSI string = "" //MsgConteudo
        MsgLida is boolean = False //MsgLida
END
```

Method chat

```
PROCEDURE PUBLIC GLOBAL chat(LOCAL nUsuOri is int, LOCAL nUsuDest is int)

arrMensagens is array of Cls_Mensagens
clMensagens is Cls_Mensagens

jRequisicao is JSON
jRequisicao.MsgUsuOrigem  = nUsuOri
jRequisicao.MsgUsuDestino = nUsuDest

ReqSolicitar is httpRequest
ReqSolicitar..URL                   = gsLink_WebService + "/mensagens/conversa"
ReqSolicitar..Method                = httpPost
ReqSolicitar..ContentType           = "application/json"
ReqSolicitar..IgnoreError           = httpIgnoreInvalidCertificate
ReqSolicitar..Content               = jRequisicao

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
    jRetorno is JSON = ResRetorno..Content
    nQuant is int = jRetorno..Count

    FOR i = 1 TO nQuant
        clMensagens = new Cls_Mensagens()
        clMensagens:TBL_MensagensID       = jRetorno[i].TBL_MensagensID
        clMensagens:MsgUsuOrigem       = jRetorno[i].MsgUsuOrigem
        clMensagens:MsgUsuDestino      = jRetorno[i].MsgUsuDestino
        clMensagens:MsgDataEnvio       = jRetorno[i].MsgDataEnvio
        clMensagens:MsgHoraEnvio       = jRetorno[i].MsgHoraEnvio
        clMensagens:MsgConteudo          = jRetorno[i].MsgConteudo

        ArrayAdd(arrMensagens,clMensagens)
    END
END

RETURN arrMensagens
```

Constructor

```
PROCEDURE Constructor( )
```

Destructor

```
PROCEDURE Destructor()
```

Method inserir

```
PROCEDURE PUBLIC GLOBAL inserir(LOCAL nUsuOri is int, LOCAL nUsuDest is int, LOCAL sConteudo is string)

clMensagem is Cls_Mensagens

jRequisicao is JSON
jRequisicao.MsgUsuOrigem  = nUsuOri
jRequisicao.MsgUsuDestino = nUsuDest
jRequisicao.MsgConteudo        = sConteudo[[ TO 144]]

ReqSolicitar is httpRequest
ReqSolicitar..URL                    = gsLink_WebService + "/mensagens/inserir"
ReqSolicitar..Method                 = httpPost
ReqSolicitar..ContentType            = "application/json"
ReqSolicitar..IgnoreError            = httpIgnoreInvalidCertificate
ReqSolicitar..Content                = jRequisicao

ResRetorno   is httpResponse  = RESTSend(ReqSolicitar)

IF ResRetorno.StatusCode = 200 THEN
    sAux is string
    jRetorno is JSON = ResRetorno..Content

    clMensagem = new Cls_Mensagens()
    clMensagem:TBL_MensagensID          = jRetorno.TBL_MensagensID
    clMensagem:MsgUsuOrigem             = jRetorno.MsgUsuOrigem
    clMensagem:MsgUsuDestino         = jRetorno.MsgUsuDestino
    clMensagem:MsgDataEnvio             = Replace(jRetorno.MsgDataEnvio,"-","")
    sAux = jRetorno.MsgHoraEnvio
    clMensagem:MsgHoraEnvio             = Replace(sAux[[ TO 8]],":","")
    clMensagem:MsgConteudo              = jRetorno.MsgConteudo
END

RETURN clMensagem
```
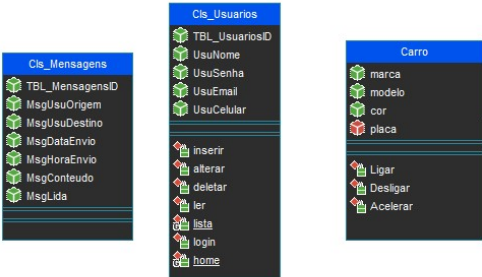
Part 5
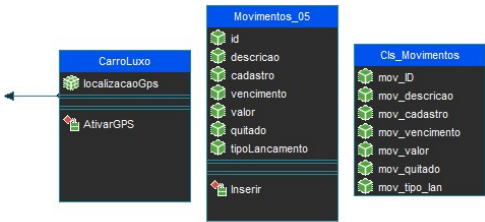
UML model

UML model

General information

Model name	Template
Model location	D:\My UNEX Projects\My_Project\Template.uml

Class diagram

Diagram

Class diagram

Class diagram

List of elements

Name	Type	Caption
CarroLuxo	Class	
Movimentos_05	Class	
Cls_Movimentos	Class	
Cls_Mensagens	Class	
Cls_Usuarios	Class	
Carro	Class	

CarroLuxo

Type	**:**	Class
ancestor class	**:**	Carro

Attribute

Visibility	Global	Name	Type	Initial value
		localizacaoGps	advanced	

operation

Visibility	Global	Virtual	Abstract	Name	Return type
				AtivarGPS	

		Public			Protected			Private

Movimentos_05

Type	**:**	Class

Attributes

Visibility	Global	Name	Type	Initial value
		id	int	0
		descricao	string	
		cadastro	date	
		vencimento	date	
		valor	currency	
		quitado	int	0
		tipoLancamento	int	0

operation

Visibility	Global	Virtual	Abstract	Name	Return type
				Inserir	
Parameter 1			arrMov	array	In/Out

		Public			Protected			Private

Cls_Movimentos

Type	**:**	Class

Attributes

Visibility	Global	Name	Type	Initial value
		mov_ID	8-byte int	
		mov_descricao	ANSI string	
		mov_cadastro	date	
		mov_vencimento	date	

Visibility	Global	Name	Type	Initial value
		mov_valor	currency	
		mov_quitado	boolean	
		mov_tipo_lan	1-byte int	

Operations

Visibility	Global	Virtual	Abstract	Name	Return type
				Inserir	
				Alterar	
				Remover	
				buscar	

Parameter 1		nIdMovimento		int		Entry	

		Public			Protected			Private

Cls_Mensagens

Type	**:**	Class

Attributes

Visibility	Global	Name	Type	Initial value
		TBL_MensagensID	8-byte int	0
		MsgUsuOrigem	8-byte unsigned int	0
		MsgUsuDestino	8-byte unsigned int	0
		MsgDataEnvio	date	
		MsgHoraEnvio	time	
		MsgConteudo	ANSI string	
		MsgLida	boolean	0

Operations

Visibility	Global	Virtual	Abstract	Name	Return type
	✓			chat	array
Parameter 1				nUsuOri	int	Entry
Parameter 2				nUsuDest	int	Entry
	✓			inserir	object
Parameter 1				nUsuOri	int	Entry
Parameter 2				nUsuDest	int	Entry
Parameter 3				sConteudo	string	Entry

		Public			Protected			Private

Cls_Usuarios

Type   :   Class

Attributes

Visibility	Global	Name	Type	Initial value
		TBL_UsuariosID	8-byte int	0
		UsuNome	string	
		UsuSenha	string	
		UsuEmail	string	
		UsuCelular	string	

Operations

Visibility	Global	Virtual	Abstract	Name	Return type
				inserir	boolean
				alterar	boolean
				deletar	boolean
				ler	boolean
Parameter 1				nId	int	Entry
	✓			lista	array

Visibility	Global	Virtual	Abstract	Name	Return type
				login	boolean
	✓			home	array

		Public			Protected			Private

Carro

Type   **:**   Class

Attributes

Visibility	Global	Name	Type	Initial value
		marca	string	
		modelo	string	
		cor	string	
		placa	string	

Operations

Visibility	Global	Virtual	Abstract	Name	Return type
				Ligar	
				Desligar	
				Acelerar	

		Public			Protected			Private

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