

```

1 //18111C_Master
2 //-----
3 // Gest_Menu.c
4 //-----
5 //
6 //
7 // Auteur      :
8 // Date        :
9 // Version     :
10 // Modifications : MDS 26.09.2022
11 // Description  :
12 //      Gestion des bouton et du menu de la carte Ticketing Master 1811C
13 //
14 /*-----*/
15
16 #include "app.h"
17 #include "Mc32gest_RS232.h"
18 #include "Data_Code.h"
19 #include "Gest_Menu.h"
20 #include "app_SDCard.h"
21 // #include "system_config.h"
22
23 bool CNA0IsEnable = true;    //Bouton Decline
24 bool CNA1IsEnable = true;    //Bouton Reset Tickets
25 bool CNA7IsEnable = true;    //Bouton Accept
26 bool CNA8IsEnable = true;    //Bouton OK
27 bool CNB3IsEnable = true;    //Bouton Down
28 bool CNB4IsEnable = true;    //Bouton UP
29 bool CNB13IsEnable = true;   //Bouton ESC
30
31 bool flagUpPressed = false;
32 bool flagDownPressed = false;
33 bool flagEscPressed = false;
34 bool flagOkpressed = false;
35 bool flagACCPressed = false;
36 bool flagDECLPressed = false;
37 bool flagRESETpressed = false;
38
39 int Nb_Students_In_List ;
40 uint32_t List [];
41
42
43 void Gest_Menu ()
44 {
45     U_32 Target_ADD, TX_Data, RX_Data, ADD_Source;
46     static int tmp = 0;
47     int SizeTX, SizeRX;
48     static int I,J,PosCursorConfig;
49
50     switch (MenuList)
51     {
52         /*****
53          /*
54          /*
55          /*
56          /*
57          /*
58          /*
59          /*
60          /*
61          /*
62          /*
63          /*
64          /*
65          /*
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70          /*
71          /*
72          /*
73          /*
74          /*
75          /*
76          /*
77          /*
78          /*
79          /*
80          /*
81          /*
82          /*
83          /*
84          /*
85          /*
86          /*
87          /*
88          /*
89          /*
90          /*
91          /*
92          /*
93          /*
94          /*
95          /*
96          /*
97          /*
98          /*
99          /*
100         */
101         MENU_MenuPrincipal
102         */
103         /*****
104
105     case MENU_MenuPrincipal:
106     {
107         if (appButtons.But_UP)
108         {
109             if(MenuSelected == SELECTED_LIST)
110             {
111                 MenuSelected = SELECTED_Configuration;
112             }
113             else
114             {
115                 MenuSelected --;
116             }
117             TFT_Cursor_MenuPrincipale ();
118             ClearALLButtons ();
119         }
120         else if (appButtons.But_Down)
121         {
122             if(MenuSelected == SELECTED_Configuration)

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73         {
74             MenuSelected = SELECTED_LIST;
75         }
76     else
77     {
78         MenuSelected ++;
79     }
80     TFT_Cursor_MenuPrincipale ();
81     ClearALLButtons ();
82 }
83 else if (appButtons.But_OK)
84 {
85     if(MenuSelected != SELECTED_NONE)
86     {
87         MenuList = MenuSelected;
88         if(MenuSelected == SELECTED_LIST)
89         {
90             TFT_Font_List();
91             if(Nb_Students_In_List > 9)
92             {
93                 TFT_aff_list_more (Nb_Students_In_List - 9);
94             }
95         }
96         else if(MenuSelected == SELECTED_Configuration)
97         {
98             MenuList = MENU_Config;
99             PosCursorConfig = 0;
100             TFT_Font_config();
101             TFT_aff_all_students();
102         }
103     }
104     ClearALLButtons ();
105 }
106 break;
107 }
108
109 case MENU_List:
110 {
111     if (Nb_Students_In_List > 0)
112     {
113         for(I = 1; I < Nb_Students_In_List; I ++)
114         {
115             if(I > 8)
116             {
117                 I = Nb_Students_In_List;
118             }
119             for (J = 0; J < 9; J++)
120             {
121                 if(Students_Info[J].ID == List[I-1])
122                 {
123                     TFT_Aff_List(I,Students_Info[J].StudentName);
124                     J = 10;
125                 }
126             }
127         }
128     }
129     MenuList = Idle;
130     break;
131 }
132
133 case Idle:
134 {
135     if(appButtons.But_ESC)
136     {
137         MenuList = MENU_MenuPrincipale;
138         TFT_Cursor_MenuPrincipale ();
139         TFT_Menu_Principal ();
140         ClearALLButtons ();
141     }
142     if(appButtons.But_ACC)
143     {
144
145

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146         TFT_Font_List();
147         if(Nb_Students_In_List > 9)
148         {
149             TFT_aff_list_more (Nb_Students_In_List - 9);
150         }
151         MenuList = MENU_List;
152         I = I_Nbstudents;
153         ClearALLButtons();
154     }
155     if(appButtons.But_DECL)
156     {
157
158
159         TFT_Font_List();
160         if(Nb_Students_In_List > 9)
161         {
162             TFT_aff_list_more (Nb_Students_In_List - 9);
163         }
164         ClearALLButtons();
165         I = I_Nbstudents;
166         MenuList = MENU_List;
167     }
168     if(appButtons.But_Reset_Tick)
169     {
170
171     //
172     //         TFT_Font_List();
173     //         if(Nb_Students_In_List > 9)
174     //         {
175     //             TFT_aff_list_more (Nb_Students_In_List - 9);
176     //         }
177     //         ClearALLButtons();
178     //         I = I_Nbstudents;
179     //         MenuList = MENU_List;
180     }
181     break;
182 }
183
184 case MENU_Config:
185 {
186     if(appButtons.But_UP)
187     {
188         if(PosCursorConfig != 0)
189         {
190             PosCursorConfig ++;
191             TFT_Update_Config_cursor (PosCursorConfig);
192         }
193         ClearALLButtons();
194     }
195     else if(appButtons.But_Down)
196     {
197         if(PosCursorConfig < I_Nbstudents)
198         {
199             PosCursorConfig --;
200             TFT_Update_Config_cursor (PosCursorConfig);
201         }
202         ClearALLButtons();
203     }
204     else if(appButtons.But_OK)
205     {
206
207         ClearALLButtons();
208     }
209     else if(appButtons.But_ESC)
210     {
211
212         ClearALLButtons();
213     }
214     break;
215 }
216
217 case MENU_Initialisation:
218 {

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219         Menu_loading_init ();
220     }
221     break;
222 }
223 }
224
225
226 void Init_Menu (void)
227 {
228     ClearALLButtons();
229     MenuList = MENU_Initialisation;
230     MenuSelected = SELECTED_NONE;
231 }
232
233 void MenuChange (MENU NewMenu)
234 {
235     MenuList = NewMenu;
236 }
237
238 void ClearALLButtons (void)
239 {
240     appButtons.But_Down = false;
241     appButtons.But_ESC = false;
242     appButtons.But_OK = false;
243     appButtons.But_UP = false;
244     appButtons.But_DECL = false;
245     appButtons.But_Reset_Tick = false;
246     appButtons.But_ACC = false;
247 }
248
249 void Menu_loading_init (void)
250 {
251     int I = 0;
252     int J = 0;
253     int Rx_Taille;
254     U_32 Rx_Message;
255     U_32 AddSource;
256     U_32 TX_Message;
257     U_32 AddTarget;
258     static int init_status = 0;
259
260
261
262     switch (init_status)
263     {
264     case 0:
265     {
266         if(SDCARDPLUGED)
267         {
268             TFT_SD_PLUG_OK ();
269             init_status ++;
270         }
271         else
272         {
273             init_status = 6;
274         }
275         break;
276     }
277     case 1:
278     {
279         if(SDCARDMOUNTED)
280         {
281             TFT_SD_Mount_OK ();
282             init_status ++;
283         }
284         break;
285     }
286     case 2:
287     {
288         if(SDCARDFILEFOUND)
289         {
290             TFT_Student_File_Detected();
291             init_status ++;

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292     }
293     break;
294 }
295 case 3:
296 {
297     if(SDCARDFILEREADED)
298     {
299         TFT_List_Of_Students_OK ();
300         TFT_Students_Found(Nbstudents);
301         init_status ++;
302     }
303     break;
304 }
305 case 4:
306 {
307     if(!Students_Info[I].IsOk )
308     {
309         TFT_Cheking_Link();
310         init_status ++;
311         break;
312     }
313     break;
314 }
315 }
316 case 5:
317 {
318     J = 0;
319     for(I = 0; I < I_Nbstudents; I ++)
320     {
321         if (Students_Info[I].IsOk == true)
322         {
323             J++;
324         }
325     }
326     TFT_Students_Link (J);
327     init_status ++;
328     TFT_Init_OK ();
329     break;
330 }
331 case 6:
332 {
333     if(appButtons.But_ACC)
334     {
335         MenuList = MENU_MenuPrincipal;
336         TFT_Cursor_MenuPrincipale ();
337         TFT_Menu_Principal ();
338         ClearALLButtons();
339         init_status = 0;
340     }
341     else if (appButtons.But_DECL)
342     {
343         init_status = 0;
344         TFT_Font_debug();
345         ClearALLButtons();
346     }
347     break;
348 }
349 }
350 }
351
352
353
354 //interruption lors de changement d'etat sur les boutons
355 void __ISR(_CHANGE_NOTICE_VECTOR, ipl3AUTO) _IntHandlerChangeNotification(void)
356 {
357     APP_UpdateState(APP_STATE_GEST_MENU);
358
359     //Bouton DECLINE
360     if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_0) && (
361         CNA0IsEnable))
362     {
363         flagDECLPressed = true;
364     }

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364
365 //Bouton RESET TICKET
366 if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_1) && (
CNA1IsEnable))
367 {
368     flagRESETpressed = true;
369 }
370
371 //Bouton ACCEPT
372 if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_7) && (
CNA7IsEnable))
373 {
374     flagACCPressed = true;
375 }
376
377 //Bouton OK
378 if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_8) && (
CNA8IsEnable))
379 {
380     flagOkpressed = true;
381 }
382
383 //Bouton DOWN
384 if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_B, PORTS_BIT_POS_3) && (
CNB3IsEnable))
385 {
386     flagDownPressed = true;
387 }
388
389 //Bouton UP
390 if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_B, PORTS_BIT_POS_4) && (
CNB4IsEnable))
391 {
392     flagUpPressed = true;
393 }
394
395 //Bouton ESC
396 if (PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_B, PORTS_BIT_POS_13) && (
CNB13IsEnable))
397 {
398     flagEscPressed = true;
399 }
400
401 /*****
402 if (flagDECLPressed)
403 {
404     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_0))
405     {
406         appButtons.But_DECL = true;
407         flagDECLPressed = false;
408     }
409 }
410 if (flagRESETpressed)
411 {
412     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_1))
413     {
414         appButtons.But_Reset_Tick= true;
415         flagRESETpressed = false;
416     }
417 }
418 if (flagACCPressed)
419 {
420     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_7))
421     {
422         appButtons.But_ACC = true;
423         flagACCPressed = false;
424     }
425 }
426 if (flagOkpressed)
427 {
428     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_A, PORTS_BIT_POS_8))
429     {
430         appButtons.But_OK = true;

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```
431         flagOkpressed = false;
432     }
433 }
434
435 if (flagDownPressed)
436 {
437     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_B, PORTS_BIT_POS_3))
438     {
439         appButtons.But_Down = true;
440         flagDownPressed = false;
441     }
442 }
443
444 if (flagUpPressed)
445 {
446     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_B, PORTS_BIT_POS_4))
447     {
448         appButtons.But_UP = true;
449         flagUpPressed = false;
450     }
451 }
452
453 if (flagEscPressed)
454 {
455     if(!PLIB_PORTS_PinGet (PORTS_ID_0, PORT_CHANNEL_B, PORTS_BIT_POS_13))
456     {
457         appButtons.But_ESC = true;
458         flagEscPressed = false;
459     }
460 }
461
462 PLIB_INT_SourceFlagClear(INT_ID_0,INT_SOURCE_CHANGE_NOTICE_A);
463 PLIB_INT_SourceFlagClear(INT_ID_0,INT_SOURCE_CHANGE_NOTICE_B);
464 }
```