```
1
    //18111C Master
    //----
2
                       ______
3
    // Gest TFT.c
    4
5
    //
6
    //
7
       Auteur
    //
       Date
    //
8
    // Version :
// Modifications : MDS 26.09.2022
9
10
11
    //
       Desciption :
12
    //
            Gestion du TFT de la carte Ticketing Master 1811C
13
    //
14
15
    #include "app.h"
16
    #include "Gest TFT.h"
17
    #include "DefineLCD.h"
18
    #include "Gest Menu.h"
19
20
21
22
    #include <sys/attribs.h>
    #include "system definitions.h"
23
24
    #include <stdio.h>
25
    #include <stdlib.h>
26
27
    void TFT Init (void)
28
    {
29
30
        tft begin();
31
        setRotation(1);
32
        tft fillScreen(ILI9341 BLACK);
33
        TFT Font debug ();
34
35
36
    }
37
38
39
40
    void TFT Menu Principal (void)
41
42
        //tft_fillScreen(ILI9341_BLACK);
        //tft_fillRect(10,10,300,220,0x221F);
43
44
        //tft_setTextSize(2);
        tft setTextSize(1);
45
46
        tft setCursor(15,15);
47
        tft setTextColor(ILI9341 WHITE);
48
        tft_writeString("Ticketing Martins");
49
        tft drawFastHLine(10,31,300,ILI9341 WHITE);
        tft_drawFastHLine(10,32,300,ILI9341_WHITE);
50
51
        //tft_setTextSize(3);
52
        tft setTextSize(1);
53
        tft setCursor(90,50);
54
        tft_writeString("Liste");
55
        tft_setCursor(90,100);
        tft_writeString("Config");
56
57
    }
58
59
    void TFT_Font_debug (void)
60
61
62
        /*tft fillScreen(ILI9341 WHITE);
63
        tft drawFastHLine(23,30,10,ILI9341 BLUE);
64
        tft drawFastHLine(19,31,18,ILI9341 BLUE);
65
        tft_drawFastHLine(17,32,22,ILI9341_BLUE);
66
        tft_drawFastHLine(15,33,26,ILI9341_BLUE);
67
        tft_drawFastHLine(14,34,28,ILI9341_BLUE);
68
        tft_drawFastHLine(12,35,32,ILI9341_BLUE);
69
        tft_drawFastHLine(11,36,34,ILI9341_BLUE);
        tft_drawFastHLine(10,37,36,ILI9341_BLUE);
70
71
        tft_drawFastHLine(9,38,38,ILI9341_BLUE);
        tft_drawFastHLine(8,39,40,ILI9341_BLUE);
        tft_drawFastHLine(8,40,40,ILI9341_BLUE);
```

```
74
          tft drawFastHLine(7,41,42,ILI9341 BLUE);
 75
          tft drawFastHLine(7,42,42,ILI9341 BLUE);
 76
          tft drawFastHLine(6,43,44,ILI9341 BLUE);
 77
          tft drawFastHLine(6,44,44,ILI9341 BLUE);
 78
          tft drawFastHLine(6,45,44,ILI9341 BLUE);
 79
          tft drawFastHLine(6,46,44,ILI9341 BLUE);
 80
          tft drawFastHLine(5,47,46,ILI9341 BLUE);
 81
          tft drawFastHLine(5,48,46,ILI9341 BLUE);
 82
          tft drawFastHLine(5,49,46,ILI9341 BLUE);
 83
          tft_drawFastHLine(5,50,46,ILI9341_BLUE);
 84
          tft_drawFastHLine(5,51,46,ILI9341_BLUE);
 85
          tft drawFastHLine(5,52,46,ILI9341 BLUE);
          tft drawFastHLine(5,53,46,ILI9341 BLUE);
 86
 87
          tft drawFastHLine(5,54,46,ILI9341 BLUE);
 88
          tft drawFastHLine(5,55,46,ILI9341 BLUE);
 89
          tft drawFastHLine(5,56,46,ILI9341 BLUE);
          tft drawFastHLine(6,57,44,ILI9341 BLUE);
 90
 91
          tft drawFastHLine(6,58,44,ILI9341 BLUE);
 92
          tft_drawFastHLine(6,59,44,ILI9341_BLUE);
          tft_drawFastHLine(6,60,44,ILI9341_BLUE);
 93
 94
          tft_drawFastHLine(7,61,42,ILI9341 BLUE);
 95
          tft_drawFastHLine(7,62,42,ILI9341 BLUE);
          tft_drawFastHLine(8,63,40,ILI9341 BLUE);
 96
          tft drawFastHLine(8,64,40,ILI9341 BLUE);
 97
 98
          tft drawFastHLine(9,65,38,ILI9341 BLUE);
 99
          tft drawFastHLine(10,66,36,ILI9341 BLUE);
          tft drawFastHLine(11,67,34,ILI9341 BLUE);
100
101
          tft drawFastHLine(12,68,32,ILI9341 BLUE);
102
          tft drawFastHLine(14,69,28,ILI9341 BLUE);
103
          tft drawFastHLine(15,70,26,ILI9341 BLUE);
104
          tft drawFastHLine(17,71,22,ILI9341 BLUE);
105
          tft drawFastHLine(19,72,18,ILI9341 BLUE);
106
          tft drawFastHLine(23,73,10,ILI9341 BLUE);
          tft setTextSize(3);
107
108
          tft setCursor(12,42);
109
          tft setTextColor(ILI9341 WHITE);
110
          tft_writeString("Es");
111
112
          tft_drawFastHLine(48,25,5,ILI9341 BLUE);
113
          tft_drawFastHLine(46,26,9,ILI9341_BLUE);
          tft_drawFastHLine(45,27,11,ILI934\overline{1} BLUE);
114
115
          tft_drawFastHLine(44,28,13,ILI9341_BLUE);
116
          tft_drawFastHLine(44,29,13,ILI9341_BLUE);
117
          tft drawFastHLine(43,30,15,ILI9341 BLUE);
118
          tft drawFastHLine(43,31,15,ILI9341 BLUE);
119
          tft drawFastHLine(43,32,15,ILI9341 BLUE);
120
          tft drawFastHLine(43,33,15,ILI9341 BLUE);
121
          tft drawFastHLine(43,34,15,ILI9341 BLUE);
          tft_drawFastHLine(44,35,13,ILI9341 BLUE);
122
          tft_drawFastHLine(44,36,13,ILI9341_BLUE);
123
          tft_drawFastHLine(45,37,11,ILI9341_BLUE);
124
          tft_drawFastHLine(46,38,9,ILI9341 BLUE);
125
          tft_drawFastHLine(48,39,5,ILI9341 BLUE);
126
          tft setTextSize(2);
127
128
          tft setCursor(46,26);
129
          tft setTextColor(ILI9341 WHITE);
130
          tft writeString("+");
131
          tft setTextSize(1);
132
          tft setCursor(18,75);
133
          tft setTextColor(ILI9341 BLUE);
134
          tft writeString("ETML");
135
136
          tft setTextSize(4);
137
          tft setCursor(20,120);
138
          tft setTextColor(ILI9341 BLACK);
139
          tft writeString("Bienvenue !");*/
140
141
142
143
144
          //Si tft setTextSize n'est pas 1 affiche rien
145
          //tft_fillRect ne fonctionne pas
146
          //tft fillScreen ne fonctionne pas;
```

```
147
148
149
150
          tft fillRect(10,10,300,220,ILI9341 WHITE);
1.51
         // tft setTextSize(2);
152
          tft setTextSize(1);
          tft_setTextColor(ILI9341 WHITE);
153
154
          tft_setCursor(10,10);
          tft_writeString("Initializing");
155
156
          tft_drawFastHLine(10,31,300,ILI9341_WHITE);
157
          tft_drawFastHLine(10,32,300,ILI9341_WHITE);
158
         // tft setTextSize(1);
159
160
161
                tft setCursor(10,50);
      //
162
                tft writeString("SD Is Plugged:");
163
      //
      //
164
                tft setCursor(10,70);
165
      //
                tft writeString("SD Mount:");
166
      //
167
      //
                tft setCursor(10,90);
168
      //
                tft writeString("Student file found:");
169
      //
170
      //
               tft setCursor(10,110);
171
      //
                tft writeString("Getting list of students:");
172
      //
173
      //
                tft setCursor(10,130);
174
      //
                tft writeString("Students found:");
175
176
      //
                tft setCursor(10,50);
177
      //
                tft writeString("checking link:");
178
      //
179
      //
                tft setCursor(10,70);
180
      //
                tft writeString("Students link:");
181
182
183
      }
184
185
      void TFT_SD_PLUG_OK (void)
186
187
          tft_setTextSize(1);
          tft_setTextColor(ILI9341 WHITE);
188
          tft_setCursor(95,50);
189
190
          tft writeString("OK");
191
      }
192
193
      void TFT_SD_Mount_OK (void)
194
195
          tft setTextSize(1);
196
          tft_setTextColor(ILI9341 WHITE);
197
          tft setCursor(65,70);
198
          tft writeString("OK");
199
      }
200
201
      void TFT_Student_File_Detected (void)
202
203
          tft setTextSize(1);
204
          tft setTextColor(ILI9341 WHITE);
205
          tft setCursor(125,90);
206
          tft_writeString("OK");
207
208
209
210
      void TFT List Of Students OK (void)
211
212
          tft_setTextSize(1);
213
          tft setTextColor(ILI9341 WHITE);
214
          tft_setCursor(160,110);
215
          tft_writeString("OK");
216
      }
217
218
      void TFT_Students_Found (char T_Nb_Students [3])
219
```

```
220
          tft setTextSize(1);
221
          tft setTextColor(ILI9341 WHITE);
222
          tft setCursor(100,130);
223
          tft writeString(T Nb Students);
224
      1
225
226
      void TFT Cheking Link (void)
227
      {
228
          tft setTextSize(1);
          tft_setTextColor(ILI9341 WHITE);
229
          tft_setCursor(95,150);
230
          tft writeString("OK");
231
232
233
      }
234
235
      void TFT Students Link (int Nb Link)
236
      {
237
          char T Nb Students [3];
          sprintf(T Nb Students,"%d",Nb Link);
238
239
          tft setTextSize(1);
240
          tft_setTextColor(ILI9341_WHITE);
241
          tft setCursor(95,170);
242
          tft writeString(T Nb Students);
243
      }
244
245
      void TFT Init OK (void)
246
      {
247
          //tft setTextSize(2);
248
          tft setTextSize(1);
249
          tft setTextColor(ILI9341 WHITE);
250
          tft setCursor(10,190);
251
          tft writeString("OK tap green");
252
          tft setCursor(10,220);
253
          tft writeString("Re Init tap Red");
254
      }
255
256
257
      void TFT Aff List (int I, char StudentName [15])
258
      {
259
          //tft_setTextSize(2);
260
          tft setTextSize(1);
          tft_setTextColor(ILI9341 WHITE);
261
262
          tft_setCursor(30,(35+((I-1)*20)));
263
          tft writeString(StudentName);
264
      }
265
266
      void TFT_aff_list_more (int I)
267
      {
268
          char more [9];
269
          sprintf(more, "more %d v", I);
270
          //tft_setTextSize(2);
271
          tft setTextSize(1);
272
          tft setTextColor(ILI9341 WHITE);
273
          tft_setCursor(20,215);
274
          tft_writeString(more);
275
      }
276
277
      void TFT_Cursor_MenuPrincipale (void)
278
279
          static int LastCursorPos = 0;
280
          tft setTextSize(4);
281
          switch (MenuSelected)
282
283
               case SELECTED NONE:
284
285
                   if(LastCursorPos != 0)
286
                   {
287
                       //clear L'ancien Curseur
288
                       tft_fillRect(40,LastCursorPos,20,28,0x221F);
289
                   }
290
                   break;
291
               }
              case SELECTED_LIST:
292
```

```
293
               {
294
                   if(LastCursorPos != 0)
295
296
                       //clear L'ancien Curseur
297
                       tft fillRect(40,LastCursorPos,20,28,0x221F);
298
                   }
299
                   tft setCursor(40,50);
300
                   tft writeString(">");
301
                   LastCursorPos = 50;
302
                   break;
303
               }
              case SELECTED Configuration:
304
305
               {
306
                   if(LastCursorPos != 0)
307
                   {
308
                       //clear L'ancien Curseur
309
                       tft fillRect (40, LastCursorPos, 20, 28, 0x221F);
310
                   }
311
                   tft setCursor(40,100);
312
                   tft writeString(">");
313
                   LastCursorPos = 100;
314
                   break:
315
              }
316
          }
317
      }
318
      void TFT Font List(void)
319
320
      {
321
          //tft fillScreen(ILI9341 BLACK);
322
          //tft fillRect(10,10,300,220,0x221F);
323
          //tft setTextSize(2);
324
          tft setTextSize(1);
325
          tft setCursor(15,15);
          tft setTextColor(ILI9341 WHITE);
326
327
          tft writeString("List");
328
          tft_drawFastHLine(10,31,300,ILI9341_WHITE);
329
          tft_drawFastHLine(10,32,300,ILI9341_WHITE);
330
          //tft setTextSize(2);
331
          tft_setTextSize(1);
332
          tft_setCursor(15,35);
          tft_setTextColor(ILI9341 WHITE);
333
334
          tft writeString(">");
335
      }
336
337
      void TFT Font config(void)
338
339
          //tft fillScreen(ILI9341 BLACK);
340
          //tft fillRect(10,10,300,220,0x221F);
341
          //tft setTextSize(2);
342
          tft_setTextSize(1);
343
          tft setCursor(15,15);
          tft_setTextColor(ILI9341 WHITE);
344
345
          tft writeString("config");
346
          tft_drawFastHLine(10,31,300,ILI9341_WHITE);
347
          tft_drawFastHLine(10,32,300,ILI9341_WHITE);
348
          tft setTextSize(1);
349
          tft setCursor(15,35);
350
          tft setTextColor(ILI9341 WHITE);
351
          tft writeString(">");
352
      }
353
354
      void TFT aff all students (void)
355
356
          int I;
357
          tft_setTextSize(1);
358
          tft_setCursor(25,35);
359
          tft setTextColor(ILI9341 WHITE);
360
          for(I =0; I < I Nbstudents; I ++)</pre>
361
          {
362
               tft_writeString(Students_Info[I].StudentName);
363
               tft setCursor(25,35+((I+1)*10));
364
          }
365
      }
```

```
366
367    void TFT_Update_Config_cursor (int pos)
368    {
369
370  }
```