Errata: FYSOS: The Graphical User Interface
Dated: 25 June 2020

destroy_bitmap() and get_static_bitmap()
I neglected to destroy the bitmap after I was done with the get_static_bitmap() when drawing to the screen. Therefore, each time I grabbed that bitmap to update the screen, a 1,024-byte chunk of memory was allocated along with the bitmap itself, but never freed. You might see that you will run out of memory soon.
I have the updated source code. If you request it, and your email address matches one I have on record, I will send you the updated source.

Source code change:
bitline.cpp:
void bitmap_circle():

```
// DJGPP changed the order of the sincos() parameters with
//  version 2.05+.
#if ((__DJGPP__ > 2) || ((__DJGPP__ == 2) && (__DJGPP_MINOR__ >= 5)))
  // Radians = degrees * (pi / 180)  degrees = radians * (180 / pi)
  sincos((double) start * 0.017453292, &dcos, &dsin);
#else
  // Radians = degrees * (pi / 180)  degrees = radians * (180 / pi)
  sincos(&dcos, &dsin, (double) start * 0.017453292);
#endif
```

strings.cpp:
void string_set():

```
// Newer versions of DJGPP don't like a NULL pointer passed
//  to the strlen() function.
Change:
  if (len == -1)
    len = strlen(str) + 1;

to:
  if (str && (len == -1))
    len = strlen(str) + 1;
  else
    len = 0;
```

font_in_range()
If you use a font with more than 128 chars, i.e.: a char value can be 128 or greater, you will need to pass that char to font_int_range() as an integer, not a char. Sending it as a char

will convert 128 to -128 and font_in_range() will return FALSE. Therefore, change the following in font.cpp:

```
        info = font_in_range(font, *text);
```

to

```
        info = font_in_range(font, (int) (bit8u) *text);
```

and anywhere else font_in_range() is used and may send a value that is greater than or equal to 128 as the second parameter.

Source code change:

video.cpp: vid_get_mode_info: line 187:

Remove the erroneous switch statement. Newer GCC compilers will not compile the encompassed code due to the erroneous switch statement, in turn not setting the ‘info’ structure.