Troubleshooting Common Errors in DS Game Maker

Introduction

While this is not a complete list of all possible DS Game Maker 5 (DSGM) errors, it is one that overviews some of the more common issues and what to do when they occur. Please note that these errors do not relate to installation issues of DSGM and instead may occur during the development of your games. Hope this helps, and keep creating!

- DigitalDesignDude

Graphics Related Errors

Undefined Reference to Sprite Error

```
C:\Windows\system32\cmd.exe

C:\DSGMTempNewProject2836361\make
Build process start for project "DSGMTempNewProject2836361"...

$pr_Sprite.bin
main.c

Linking...
main.o: In function `Set_Sprite':
c:\DSGMTempNewProject2836361\sinclude\squareWorks.h:23: undefined reference to `Sprite':
main.o: In function `PA_WaitForUBL':
c:\devkitPro\PAlib\sinclude\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\square\squ
```

About

• The above command prompt error message is normally seen after adding a new background, sprite or sprite frames to an existing sprite and then compiling your game.

How to Fix

- From the "Tools" tab menu and under "Advanced" options, run the "Signify Graphics Change" command.
- When you go to compile or test creating your game again the error should no longer appear.

Sprite or Background Has More Than 256 Colors Error

```
C:\DSGMTempNewProject2836361\gfx\PAGfx.exe

PAGfx Converter v0.10 -- by Mollusk -- resurrected by fincs -- forum.palib.info
If you have suggestions, problems or anything please come to the PAlib forums

Converting PAGfx.ini
Spr.png
Sprite_1.png
Sprite_2.png
Transparent Color: Magenta

3 sprites:
   Spr: 256colors, 32x64, Pal: DSGMPal0_Pal, -> Spr_Sprite
   Sprite_1: 256colors, 64x192, Pal: DSGMPal1_Pal,
   Error: Palette DSGMPal1 has more than 256 colors. Please use some different pal ettes or reduce your file's color depth
Press any key to continue...
```

About

- Command prompt Error Message is seen when using a sprite or background that has over 256 different colours.
- DSGM cannot use sprites or backgrounds with more than 256 colours. The simple fix is
 to reduce the number of colours in your images using an image editor or by saving your
 images as PNG-8 files which only allows for a maximum of 256 colours.

Errors Messages During Gameplay

Not Enough Vram to Load All Your Sprites

```
File Utility Options Help

Sorry, but there's not enough VRAM to load all your sprites! Load less sprites or use PA_CloneSprite or PA_CreateGfx and PA_CreateSpriteFromGfx to optimize the space used. Alternatively you can use 16c sprites.

Desolé, mais là il n'y a plus assez de VRAM pour charger les sprites ! Charge moins de sprites, ou alors sers-toi de PA_CloneSprite ou PA_CreateGfx et PA_CreateSpriteFromGfx pour optimiser la place nécessaire. Tu peux aussi utiliser des 16c sprites.
```

About

This error can occur for a variety of reasons but basically it happens when your game is
using or trying to load too many resources at once and so you run out of VRAM that's
available on the Nintendo Ds.

How to Fix

- Use smaller backgrounds in your game. DSGM games can usually only run 1024x1024 max-sized backgrounds without crashing.
- Do not use the "Change Sprite" action block to switch between animation frames of a sprite. Instead, use the "Animate" action block to animate a single sprite that's linked to an object.
- Do not use more than 128 objects in a room at once since that is the limit for DSGM.

C Code and DBAS Coding Syntax Errors

Important - The Main Cause of Syntax Errors in DSGM

It's important to know when hand typing your own code that DSGM can support the C programming language and its own beginner-friendly language known as DBAS (Dynamic BASic) in the same script. This actually can cause unintentional syntax errors that you normally wouldn't have when writing C code since DSGM may mistake your code for mistyped DBAS code instead. Therefore, you are forced to remove certain spaces and make other modifications to your C code in order to get your game to compile without errors. Below I go over some of those modifications that have to be made, but I'm sure there are many more situations that I'm not aware of that require similar edits.

Expected ')' Before '{' or Errors Caused By Extra Spaces

```
C:\DSGMTempNewProject32442542>make
Build process start for project "DSGMTempNewProject32442542"...
...
main.c
In file included from c:/DSGMTempNewProject32442542/source/main.c:6:0:
c:/DSGMTempNewProject32442542/include/GameWorks.h: In function 'Object_1Step_Event':
c:/DSGMTempNewProject32442542/include/GameWorks.h:28:8: error: 'a' undeclared (first use in this function)
c:/DSGMTempNewProject32442542/include/GameWorks.h:28:8: note: each undeclared identifier is reported only once
for each function it appears in
c:/DSGMTempNewProject32442542/include/GameWorks.h:28:12: error: 'b' undeclared (first use in this function)
c:/DSGMTempNewProject32442542/include/GameWorks.h:28:14: error: expected ')' before '{' token
c:/DSGMTempNewProject32442542/include/GameWorks.h:36:1: error: expected expression before '}' token
make[1]: *** [main.o] Error 1
make: *** [build] Error 2
C:\DSGMTempNewProject32442542>pause
Press any key to continue . . . _
```

About

 This error normally occurs when you have either missing or have extra round or curly brackets in your code. But this can also be caused by DSGM not recognizing your C Code like in the below case.

Example of Fixing this Error

If you use the following code in an "Execute Code" action block or script you will get the above error message when compiling your game.

```
int a = 2;
int b = 1;

if (a > b) {
    PA_OutputText(Bottom_Screen, 1, 1, "A is greater than B");
}else if (b > a) {
    PA_OutputText(Bottom_Screen, 1, 1, "B is greater than A");
}else {
    PA_OutputText(Bottom_Screen, 1, 1, "A is equal to B");
}
```

This code is written correctly in C Code, but since DSGM is a bit fussy we have to make some modifications that we normally wouldn't have to in other coding environments in order to remove the error messages. The modifications have been highlighted below.

```
int a=2;
int b=1;

if(a > b) {
    PA_OutputText(Bottom_Screen, 1, 1, "A is greater than B");
}else if(b > a) {
    PA_OutputText(Bottom_Screen, 1, 1, "B is greater than A");
}else {
    PA_OutputText(Bottom_Screen, 1, 1, "A is equal to B");
}
```

All I did was remove the spaces around the equals signs when declaring my variables and remove the space behind the "if" in the if statements to get this code to compile without errors.

There are likely other cases where similar edits have to be made in order to get your code to be error-free. So by using some trial and error try removing different spaces in your code and also try to pinpoint what part of the code is causing errors by removing all your code and adding it back into DSGM in chunks while compiling the game each time you add a chunk until you find the code that is causing the errors.

Main is Normally a non-static function Error

```
C:\DSGMTempNewProject32442542>make
Build process start for project "DSGMTempNewProject32442542"...

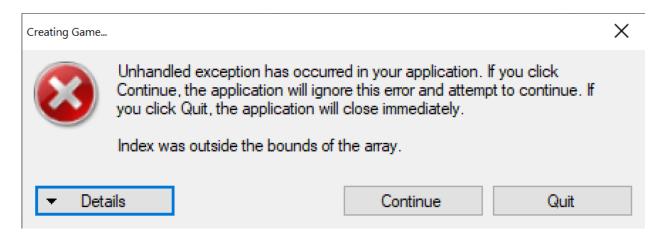
main.c
c:/DSGMTempNewProject32442542/source/main.c: In function 'Object_1Step_Event':
c:/DSGMTempNewProject32442542/source/main.c:9:5: warning: 'main' is normally a non-static function
c:/DSGMTempNewProject32442542/source/main.c:72:1: error: expected declaration or statement at end of input
make[1]: *** [main.o] Error 1
make: *** [build] Error 2

C:\DSGMTempNewProject32442542>pause
Press any key to continue . . .
```

About

 Very often this error is caused by having unclosed or extra round or curly brackets in your code and so you'll likely have to double-check your code to ensure you have written "if" and "else" statements in the way that DSGM accepts as shown previously in this document.

Index was Outside the Bounds of the Array Error



About

- Usually occurs as soon as you press the compile or test game button after editing or adding more code to an "Execute Code" action block.
- Dismiss this error message by pressing the "Continue Button" otherwise DSGM will close and you will lose all your unsaved changes.

Example of Fixing this Error

- I usually get this error whenever I have an indent on a blank line anywhere in my code. So go through and find any blank lines in your code and remove them to ensure that you don't have a random indent character on a blank line.
- Should that not fix this issue, remove all the code that you were recently editing and add
 it back into DSGM in chunks, compiling the game between each chunk added until you
 find the code that is causing the error.