

Sonic pour CASIO Graph100

Version 0.24b

Julien PATTE - 2004

I. ABOUT THIS PROJECT

"Sonic pour Casio Graph100" is a project started in January 2003, and which development is supposed to be going on during a couple of years. The purpose is to write a program with C++ and ASM inspired from the games of the Sonic Team (SEGA) and ported on the Casio Graph100/AFX calculator. Because I'm actually a student in Applied Sciences at university in Brussels, i can't assign as many time as I would to this project, and this is why its development is pretty slow.

This is why the present version is certainly not a definitive version: it isn't really a game, it is actually an incomplete (but playable) "beta" version with some temporary stuff and unfortunately some known bugs.

This version is public so anyone can give me comments, suggestions or event bug reports. The aim is to finally produce a game that many people will enjoy, so what you have here is only a "preview" of what will be the game someday in its definitive version.

As I said, it is possible that you see some bugs in the game. Many of them have no direct consequences, but there is anyway a certain probability that some of them incite the calc to crash, and sometimes (but it's quite rare) you can lose all data's present in the main memory. Many precautions have been taken to avoid it at all costs, but it is never perfect. However, if you "correctly" use the program, there should be no problem. ;)

II. ABOUT THIS VERSION

The present version (0.24b) will become public in September 2004. This is the second public version since the release of the 0.23b the 4th October 2003.

This version contains a lot of improvements i planned to implement between July and October 2004. But it is released now, to respect the delay given by the organisers of the first official Casio AFX Competition. I have tried to do my best to make the major modifications I was planning to do during a period of times almost 3 times longer... You will soon see how the result is, and eventually compare this version with the precedent one: the evolution is there, and it is quite more a "game" now that it was 2 months ago ;)

I won't try to list the "news" for this version, because the whole source code has been reviewed, and also all the different parts of the game (display, memory access, timers...) have been improved. I prefer to let you discover how it is now :)

Because of the lack of time, the number of "maps" (or levels) available to play now is shamefully low. I'm really sorry about that, but I thought it would be better to review the whole code than to produce more maps. Fortunately, this is not so bad 'cause there is no limit for the number of levels supported by the game, you just have to load a file made by the editor to get able to play it.

I will take some time to create new levels, it won't need any update to be able to play the maps I will produce soon ;) My purpose is also to make the editor available for anyone, so anyone who's interested in it will be able to develop his own levels and to share them on the web; so the interest of the game will certainly be increased as well :)

Since I was planning to work on this project for one or two months longer, a 0.25b version should be released before the end of the year. I will try to integrate in this one all the things I was thinking for the current version and that I had to omit because of the lack of time, and certainly some new levels ;)

OK you wanna play now, but take a little time too to read how it works ;)

III. HOW TO PLAY

Main menu:

- Use [EXE] to select an option, [ESC] to quit the game and the keys [+] and [-] to adjust the contrast.
- "Nouv. Jeu" allows you to choose the "zone" you want to play. A "zone" can be divided into different "acts"; the zones and the acts can follow themselves if they are available on the calc.
- "Reprendre" brings you back to the beginning of the act you were playing before quitting the game last time.
- "Quitter". Well... I think this should quit the game, but I'm not sure :p

Selection of the zone (or map):

- Sonic's arm can scroll up or down the list of the zones (and you will see there isn't many different zones for now :s)
- Use [F1], [F2] or [EXE] to start the selected zone.
- The [F3] and [F4] keys were supposed to show you some information's about the zone, but it isn't available in this version yet ;)
- The keys [F5] and [F6] bring you back to the main menu.

Selection of the character you want to control:

...

Oh yes, for now you can only play with Sonic (the hedgehog), so there is no menu needed, you won't see it until another version :D

During the game:

- The purpose is to find the end of the act, represented by a "spinning" panel you will have to touch to go to the next zone.

You can gather the rings dispersed on the map to win extra points and life's. They will also protect you if you are hit by some enemies; you lose a life if you haven't any ring at this time.

The game ends when the number of life's you have falls down to zero.

- Try also to find the bonus on the map that you can destroy to win more rings, shield, extra life's etc...

- Use the key [LEFT] and [RIGHT] to make the character run on the screen. [DOWN] can make the character crouch.

- Use [SHIFT] to jump and to attack the enemies. If you press [SHIFT] many times when the character sit down, he will starts to spin and will run very fast if you ease the key [DOWN].

The indicators at the top or at the bottom of the screen show you:

- the actual score
- the time you have to find the end of the act
- the rings you have caught
- your life's.

The key [F1] recalls the indicators if they had been masked to make the field vision "larger".

- [MENU] pauses the game and shows a new menu.

The game menu:

- "Reprendre" returns to the game.

- "Indics Haut/Bas" allows you to choose the position of the indicators (top or bottom)

- "Mouv Oui/Non" says if the indicators can be automatically masked to clear the vision field, or if you prefer to keep them always visible.

- "Cont" is for setting the contrast.

- "Quitter" quits the game and brings you back to the main menu of the calculator. You will be able to go back to the act you left if you run the program again.

IV. PRECAUTIONS

I said it, and I say it again: this is a beta, a test version, so this is certainly not 100% stable.

The game requires a huge amount of memory to be able to load the selected map correctly. Try to preserve at least 80~100 kb in the main memory (think to backup your data's and programs before using the game the first time). If there is not enough memory to load the game, you will see an error code (see below). But there is still a certain risk that your data's will be erased by the game, so be careful (backups are safe).

If you have a file explorer for the AFX, you will see that the game uses a lot of external files. Among them, there are some that are very important for the game, like `MENUS.SON`, `SONIC.RFL`, `IMAGES.RFL`, `OBJETS.RFL` and naturally `SONIC.EXE`. All this files can be placed in any drive (even separated) but never into directories.

Be careful with them, don't forget to join them with `SONIC.EXE` if you don't use the CFX and please, please, do NOT try to modify them because it would simply crash the calc if an error occurs.

Maybe you will see sometimes that some items on the maps are missing if you start a new level (plants, bonus, enemies, etc). If this happens, quit the game and restart it. This is caused by the memory saturation; there is no place enough to manage more items on the map. This may cause a crash (without any data losses) if you go on, but disappears if you restart the program.

I must declare I couldn't be taken as responsible of possibly losses of data's that could appear when you use this program. Think about saving your data's to protect yourself ;)

NOTE: I strongly recommend not compressing the executables with UPX, to avoid the decompression time when you start the game and between the game and the main menus.

V. THANKS AND GREETINGS

Many thanks to the French-talking AFX community for its help, comments, tests and backup, and in particular:

- dada66 (David Quaranta) for his software Flash100 and for GComm
- 2072 (John Wellesz) for the functions he wrote to manage memory zones
- Yves Morgan for his AFX emulator
- C@siomax (Wahb Ettoumi), X-thunder28 (Antoine Benoist), Leadfiner, Mastermage, f4kill and all the others for they help and comments! ;)

The are also some programmers of the Texas Instrument community i wish to thank a lot: Brunni, Ethaniel, GoldenCrystal, ...

Many thanks to Folken for the contacts he had with Dexxon, and to Dexxon itself to have accepted to sponsor this competition! Is this the beginning of a certain recognition of our projects?

Thanks to the Sonic Team and to SEGA for their games!

... and also thanks to AlZorK, which help has been more useful that he thinks ;)

VI. POSSIBLE ERROR CODES

Error:

- 1 - The character hasn't been correctly created
 - => The memory is full, try to restart the program
- 2 - File "SONIC.RFL" not found
 - => Don't forget to place it at the root of a drive
- 3 - Error when loading "SONIC.RFL"
 - => Corrupted file or not enough memory
- 4 - File "OBJETS.RFL" not found
 - => see 2
- 5 - Error when loading "OBJETS.RFL"
 - => see 3

6 - Error when reading the header of the map file

=> The SMP file of the level you are trying to launch is corrupted

7 - Impossible to allocate the memory needed for the map

=> Not enough memory, you must free at least 80~90 kb!!

8 - Error when decompressing the map data's

=> corrupted SMP file

9 - Unable to allocate the memory needed for textures and background

=> Not enough memory

10 - Error when decompressing graphics

=> corrupted SBG or STX file

11 - File "IMAGES.RFL" not found

=> see 2

12 - Error when loading "IMAGES.RFL"

=> see 3

VII. AND FINALLY...

I hope you'll have a lot of fun playing this game, please don't hesitate to give me your opinion about it!

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