

GP32zine

YOUR QUICKEST GOTO 10 LINE TO THE GP32 SCENE

The first unofficial GP32 magazine



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GPVGB review
GPGames 0.6 review
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GP32:zine

Well finally I can see the outcome of my work for the last couple months. We've been working for months on this issue, setting up the design, working on the articles and talking to people on the scene. I'm pretty satisfied with what two guys can come up with in their spare time. Rico joined me a couple of weeks into the project, and I'm so satisfied with all his help. He wanted to say a few words actually, so I'll pass him on:

"Hi, I'm Rico, a guy zimba picked up off the street. I write articles for beer."

After these interesting messages, I'll just speak a bit about th GP32. I got my GP32 a couple of months back, after reading the review on GBAX.com. I was instantly in love. I arrived to the scene a two months ago, started to know people, found my way around the scene. I instantly fell in love with the scene as well. The idea of a magazine crossed my mind in a moment alone on the bathroom, and rico was one of the first to contact me, and show interest in the magazine. He wanted to join the magazine as a writer, and I took him in the first chance I got.

Now, a month or two later, the magazine is done and I can look back on a bunch of hard work and difficulties, resistance and criticism. We hope you are satisfied with the end result - and we look forward to see you in the next issues!

zimba



ON THE SCENE NEWS

Rlyeh releases new FSMS32 beta

Our all-time favorite coder, rlyeh, has blessed upon the world, a new beta of Fsms32. His brilliant one day coding wonder - that he released a short while ago - has now reached a new version. This version promises a buckload of new and exiting features including autofire, double buffering, vsync, frameskip, gamma plus a whole new untested multi-player RF mode!

Rlyeh also optimized the code to reach higher levels of speed and compatibility. The emulator still run at a blazing 100% speed, and runs almost any game, picture perfect - with crystal-delivered sound. How can we not be satisfied? Now if only Rlyeh would get to work on his Genesis emulator... (z)

British GP32 meet-up!

At last! The time we've all been waiting for is here. Finally a chance to meet up with all the internet nerds you've been sharing your soul with for the last period of time. Axeman from GP32x.com is organizing a huge meet-up in the british city of Bath. He promises loads of GP32 goodies from his laptop, and a SMC PCMCIA reader/writer so that all the hungering GP32-lovers can get completely satisfied.

Axeman (and yours truly) will take pictures of your lovely faces, and will document the whole thing, both by digital camera, and with one of those fancy new things the youth always run around with...a video camera. GP32:zine will most likely have a representative at the scene, so you can expect a full walkthrough of the entire meet-up.

You can sign up for the meet-up right here:
<http://www.gp32zone.co.uk/>
(z)

ON THE SCENE NEWS

GP Cinema announced!

JoyGP has announced a brand new movieplayer for GP32. GP Cinema, as it is cleverly named, is a successor to Moviepark, which we all enjoyed to bits. Moviepark had a lot of limits, bugs and had unoptimized, sloppy code.

Moviepark didn't allow movies beyond 10 frames per second (fps), it only allowed Divx 4.12 and Xvix encoding - to the grief of thousands of user all around the world. To encode video for the player, you had to have a good knowledge on encoding video, plus it was a fifty-fifty chance to get the movie to work on Moviepark. On the bug side, the program also had a lot to offer. Users of Moviepark was given a half-working encoding program for the PC, Movielink, which crashed most of the time.

On the GP32 side, Moviepark ran at a blazing 66mhz, with no chance of choosing higher framerates. Running at 132 or even 133 mhz would without a doubt enable higher framerates, smoother playback and better sound. Instead, users were left with a half-complete movie player, heavily unoptimized and packed with limits. GP Cinema is here to change this impression of movieplaying on the GP.

**Impossible?
GP Cinema says no!**



ON THE SCENE NEWS

Doom v.6 released

Craig has released his newest update of the Doom GP32-port, GPDoom. On top of the already fabulous and near-perfect game, Craig adds more menu-options, tweaks the code and provides us with a couple minor bug-fixes. The sixth version introduces a brand new level select feature, so now we can jump into the story, at any level we want. We're also given a fine difficulty option, so for those chickens out there - me included - you can now play at the easiest setting.

The game actually 'feels right' now, the speed is really great, full speed on most areas, a bit slower on open areas, but overall some brilliant coding done by Craig. It feels just like playing Doom on the PC - albeit the tricky controls of the GP32 - and is coming extremely close to perfect. The lack of music (I'm really missing the old heavy-metal tunes, those were the days) and multiplayer is sad, but let's hope Craig can pull something off - or at least release the source to the community.

Overall a really great conversion of an already lovely game, ten times worth the download, so if you don't have it I heavily suggest you get yourself together and on to GBAX.com for the download. (z)

What a beautiful picture...



FEATURE

GP32 in a nutshell



THE GP32 has never been a good platform for commercial games. Look at your game store; you won't find it. Look around websites and you'll be lucky to find an online shop stocking one. You won't find GP32 news on handheld sites, find out about new commercial games, buy accessories for it, or change its colours.

Then again, the GP32 was never about commercialism.

In the world of open-source freedom versus closed-source control, the GamePark32 is definitely the 'Linux' of handhelds. No other handheld has previously allowed such openness – a PC link, the power to send files to the GP32, the power to write your own games. It is thanks to this freedom that the handheld has become so popular, and that other handhelds coming out are copying its strategy.

Who would have thought a small, relatively unknown Korean company that is mainly shunned in its home country could produce such a masterpiece? That a product, exclusive to Korea and with virtually no marketing, could be imported to countries worldwide and gain tens of thousands of users?

Let's look at the handheld: a good processor almost ten times the speed of the GameBoy Advance. Customisable firmware, huge

LCD screen, SMC capability. While you could say the current 128MB maximum storage space leaves something to be desired, it is certainly more useful than the GBA's cartridge system. You can buy commercial games on SMCs, but GP32 users can also download them directly from "JoyGP" for a fee, and save packaging, handling and media costs in the process.

Thanks to the open-source SDK layout, there are numerous options for developers ranging from a free GCC-based development kit to a \$1000 ARM SDT. Even *NIX and MacOS users can develop for the GamePark32 and send games to it. This one key difference that sets the GP apart from other handhelds quickly led to a productive development community that has produced many gems.

The GamePark32 can emulate almost any 16-bit console or less. The NES and Master System are almost perfectly emulated; Genesis (Mega Drive) and SNES a good speed with room for improvement. Other consoles and computers from the Vectrex and GameBoy to the Atari ST and ColecoVision are emulated. With one single emulator, you can play thousands of new games on the GP32.

Let's not forget the homegrown games. Puzzle, arcade games and even music sequencing software

can be found, and what if you can't find something you want? Make it yourself!

In addition the GP32 features built-in MP3 playback and, after purchasing it, a DivX player! Nothing is bound to impress friends more than full movie playback, smooth and with clear sound.

Finally, the community is unparalleled. Anybody who developed for the Amiga will be right at home in a relatively small but infinitely helpful group. There are three main sites and countless others, great FAQs, tutorials, and boards that boast hundreds of users who answer questions on a daily basis.

For those of you who own a GP32: Well done! This kind of open, powerful and possibility-packed console has never existed before. For those of you thinking of buying one, I heartily recommend it. It's cheap for its power, it can run (literally) thousands of games and its user base is growing by the day. You won't regret it.

- Rico

Rico is a staff member of the major GP32 sites, GP32Xtreme and GP32emu. He is also the author of a popular series of coding tutorials and an enthusiastic GP programmer.



FEATURE

NES EMULATORS - HEAD TO HEAD

THE NES seems to be a popular choice for emulator authors. No other platform has had so many emulators concurrently except the GameBoy - where GPVGB undoubtedly reigns supreme. But with the NES it is different; three new emulators have sprung up in the space of a couple of months. Let's meet our contenders:

fNes32 by rlyeh is a complete rewrite of the original emulator he wrote long ago. The new versions aren't as strongly based on the old InfoNES core, and feature rlyeh's trademark perfectionism in features like SRAM support, crystal sound and blazing fast ROM list loading.

NesterGP by Scherzo is a port of Nester, a popular NES emulator for Windows and Dreamcast. Innovations include screen stretching, save states, Game Genie support (well, version 1.2 has this removed) and an integrated GoodNames database.

LittleJohn GP by Yoyo is a hybrid with sources including Nester, Nofrendo, ShatBox and FCA. It features alternating 2-player support, autofire and fastforward, to name but a few.

There are also other emulators released or in the works, such as the direct InfoNES port by Anders Granlund. These aren't covered in this article.

All these emulators claim to be full-speed. However, compatibility also counts. I tested six major NES titles to see how each emulator coped: Megaman 6, The Legend of Zelda, Super Mario Bros. 3, Kirby's Adventure, Kid Icarus and Castlevania 3. I'll also be comparing other factors like save times and rom list loading times thanks to a directory with 275 roms in it.

fNES32

As soon as you start fNes, you are greeted with its beautiful splash screen, which gives you an instinct of quality. The program took 39 seconds to load my roms, but *did* provide a status bar. Second time around, the list showed up instantly. The GUI is very nice. The program takes ROMs from /GPMM/NES only, but this isn't too inconvenient as the rom loading is so efficient. L and R scroll extra-fast to get through the list, and GoodNames are shown for almost all of the ROMs (else, their filename). ZIPped roms showed up fine, too. My only complaint - the scrolling speed is fine for browsing, but actually selecting the rom can prove tricky sometimes.

Onto the games: ROM loading is instant. Megaman 6, Super Mario Bros. 3 and Kid Icarus, worked seemingly perfectly - damn near close to the original. In particular, the sound struck

me as indistinguishable from the real thing. Since sound seems to be something hard to emulate these days, this is a great achievement. Rlyeh recently added the DPCM digital channel to further increase sound quality. Zelda ran fine, except for a messed up vertical transition, but this doesn't detract from the gameplay. Similarly, Kirby's Adventure has a problem with rendering the status bar, but the main game plays fine. fNes has no savestates, but the SRAM is conveniently saved upon quitting to the rom list (L+R). Reselect the rom, and the SRAM is loaded. fNes also doesn't support some other features, but of course the main thing is compatibility, which fNes does well, with support for tons of mappers. Unfortunately, Castlevania III runs extremely slowly (unplayable) so it is the only one of the six games that doesn't work on fNes. Overall, we have a great emulator with perfect sound, great enthusiasm and high playability, but a few beta hitches.

LittleJohn GP

This emulator shocked me with the rom loading speed - barely 5 seconds. However, most importantly, it doesn't give you any GoodNames by default. So I selected 'Analyse cached roms' and after 38 seconds of status-

bar action, the names helpfully appeared. The rom names aren't built-in to the release - you must get the NesToy database file, included on LJGP's site. Selecting roms is a little easier with LJ, plus there is a speed-scroll function. LJGP supports dirs and subdirs anywhere within GPMM, and ZIPs.

LJGP ran Zelda and Kirby's Adventure without the problems of fNes. It did, however, show palette problems on the right

side of the screen with SMB 3 that were slightly distracting. Castlevania III ran well, with minor flickering problems. Kid Icarus and Megaman 6 worked well, as expected. One strong feature of LJ is its menu, accessible with L+R during gameplay. It features tons of options including alternate 2-player, gamma controls etc. My only complaint is that it takes a few seconds to get from a game back to the rom-selector, but this really isn't an issue. To

save, you simply select 'save' from the menu, picking one of ten savestates - very handy in many NES games that came without a save feature. To sum up, compatibility is strong with LJGP, and combined with its many original features, it is a very promising emulator. Pity that SMB 3, a major game, isn't perfectly emulated, but you can't ask for the world...

Another strange feeling I got was that the input wasn't as smooth

SCREENS:



as fNes, when playing Zelda direction changes seemed jerky. Not sure specifically why I had this, though.

NesterGP

Weighing in as the largest of the three emulators, NesterGP greets you with a neat menu that allows to you to search sub-directories for roms and. Unfortunately, Nester only gets the full rom names for the roms visible on-screen. When you scroll down, you get long pauses (especially when using left/right to fast-scroll). I calculated the total time

of name generation to be about 40 seconds, on par with the others. An option to scan all roms at start up would be nicer. Also, while scrolling down the emu sometimes crashed, so I had to restart.

As for games: Zelda and Kid Icarus ran at full speed with impressive sound and no bugs, but unfortunately this speed wasn't universal. Megaman 6 was very jerky, with Megaman moving 3 pixels each screen update. While playable, it reminded me of snes9xgp's recent beta, which was a similar speed, but

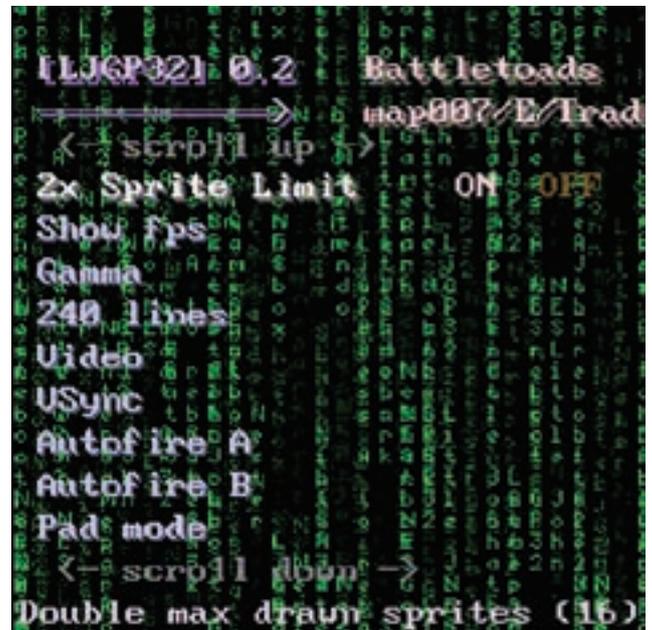
that's the SNES. Castlevania III also ran flawlessly, but slow. Kirby and Mario ran with a little frameskip, but overall very similar to frameskip 0. However the SMB palette bug returns - must be a core proble, as LJ shares it. The GUI menu allows you to lower jerkiness (frameskip) at the expense of game speed, and save states.

Although the emulator flawed, many games work great, and the screen-stretching is brilliant. Lots of potential here, I hope it continues to improve.

At a glance

	v.	Filesize	ROM load	ROM list saved	Subdir fileselector	ZIP	GoodNames	SRAM	Save states	Screen stretching	2 player	Fastforward	Autofire	Compatibility
fNes32	6/28/03	297 KB	39 sec	X		X	X	X						4 / 5
NesterGP	1.2	986 KB	40+ sec	X	X	X	X	X	X	X				5 / 5
LittleJohn GP	0.2	248 KB	43 sec	X	X	X	X	X	X		X	X	X	5 / 5

SCREENS:



Overall

The key mappings were logical due to the similarity between the NES controller and the GP32 pad, and even the L+R combo to access the menu has become a standard between emulators. This means an average user can use any of the three without being inconvenienced. But which one ranks best? Let's find out:

Compatibility: NesterGP/LittleJohn GP generally had fewer problems, choking only on SMB. But fNes supports older roms - tied here.

Speed: fNes/LittleJohn GP was the quickest to start and at playing most games, except for fNes didn't run CVIII, and LJGP was slower on average (but not by much).

Playability: LittleJohn GP for its many extra features and 10 save states, hands down. NesterGP's screen stretch is also welcomed.

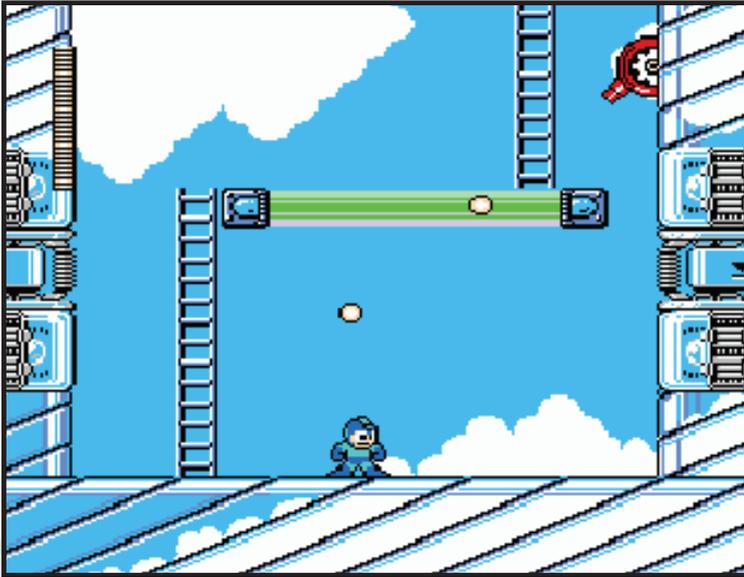
Sound: fNes had the best sound overall, although they all pulled it off well.

Overall: LittleJohn GP
- decent compatibility, tons of features and the smallest filesize.

Who thought 250 KB could bring you such joy? fNes trails only because of the lack of extra features at the moment.

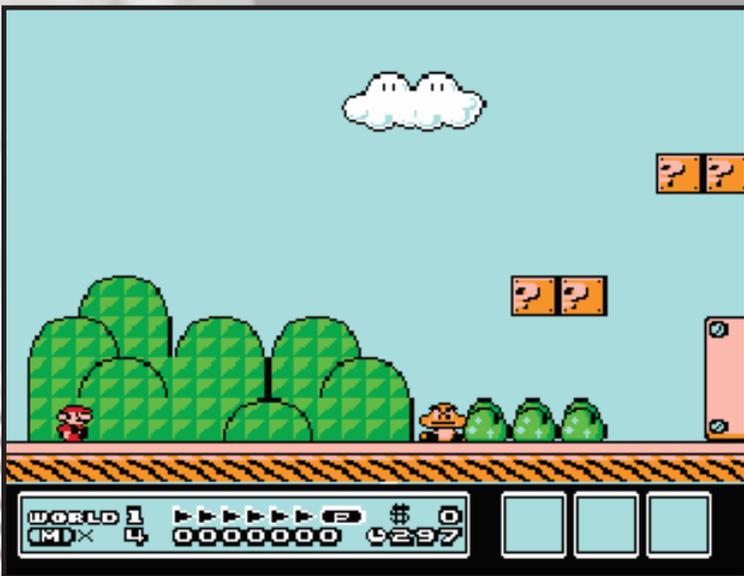
Well there you have it? LJGP wins. However, fNes is in beta. The final version may fix the bugs and have new features (rlyeh in fact said he had found patches to fix some bugs already). So stay tuned. Another thing is, rarer roms are more likely to work on fNes than any other emulator.

NES GAMES



Ah the days... The old days when Megaman was the hottest. When the Mario Brothers still aired on TV, and when people walked around in cowboy jackets and listened to Michael Jackson. These are the times of Megaman. Most people know the Megaman series - or Rockman, as the Japanese name went. Megaman is a fast-paced platform game with everything that comes along with it. Blasting high-tech enemies, avoiding the returning shots and fighting bosses on massive levels. Megaman has all this, plus more. One of Megaman's neatest features is the ability to receive new and better weapons after completing a level. While this is not new in our standards, it was almost revolutionary at the time. The game features good sounds and music, and is challenging, without being impossible.

8/10



It's a me! Ma-a-r-r-iooooo! Who's not familiar with Mario? An introduction is not really needed for this game as most people know it already. The Mario Series was the games that started it all. Every single side scrolling platform game, evolves from the dwarf-sized plumber jumping on enemies in an attempt to rescue Peach from the hands of evil Bowser. The games are among the most brought games ever, and has fed Nintendo with the cash they needed to become the console giant, that they are today. The old NES versions of the game, is the best versions of Mario, featuring (at the time) lovely graphics, good sound and a whole bunch of cute enemies. If you haven't tried Mario yet, choose one of the following options: A: Kill yourself B: Join the Foreign Legion.

10/10



Ask any NES owner what his favourite games were, and he'll probably mention the traditional - Mario, Zelda. However quite a fair few will mention River City Ransom. A more cartoon version of Streets of Rage, RCR was a better game in many respects and is still fun to play today. The graphics were the best around at the time, the gameplay simple - roam the streets beating people up. Flexibly, you could pick up chains, crowbars or even people and throw them about in your path of carnage. Animation is smooth and special moves abound, although a few combos are annoying to pull off. Even neater is the ability to spend money at shops for moves and weapons. It might just have two buttons - punch and kick - but it boasts great replayability and is emulated great on all of the NES emus. Try it out!

9/10

INTERVIEW

Conducted by Richard Harris (rico)

GP32zine: *I'm talking with Toris, member of Combustion Studios (with NoBrain2k) and author of the popular GP32 game 'Gloop'. Toris, please introduce yourself. How long have you been in the GP32 scene?*

Toris: Hi, well, I'm Toris, I've been in the GP32 scene about 2 months now, mainly learning C++ and Arm ASM, and, of course, coding Gloop

GP32zine: *Did you learn C/C++ through GP32 coding, or have you always known it?*

Toris: I'd started learning about 2 weeks before I found out about the GP32, and learnt both C++ and basic ASM through coding Gloop

GP32zine: *Gloop was recently entered into the 15-day GBAX contest, and is currently winning the polls! (it has actually won the compo now -ed) Was the game hard to code, given the GP32's ropey SDK?*

Toris: Well, the game was certainly a large learning curve going from simple languages such as Blitz Basic and DIV Games Studio to C++ and ASM, but once I got to grips with the language, the game itself wasn't too bad. The SDK did cause a few problems to start with, but I have now replaced all the 16-bit GFX functions with my own custom ASM.

GP32zine: *Would you advise other people making their own GP32 games to drop some of the SDK functions and replace them with their own?*

Toris: Once you get to grips with the SDK and know GP32 coding in general, then yes, code your own! It's great fun! Look around for the Samsung s3c2400x doc on samsung.com, find out the known problems with the chip (mainly writing too much to memory causes LCD flickering/sound crackling), then read about the rest of it, accessing the LCD etc... then play about. Making your own custom ASM routines can also speed up your game, as the SDK ones aren't entirely optimised

GP32zine: *Excellent advice. Getting back to the subject of your games, how did you think up Gloop's gameplay?*

Toris: Well, it was based upon a game that I found in the shareware section of a PC Gamer demo CD, I believe it was called Overflow. I then thought up some new ideas, with the help of DarkWolfNine and #gp32, such as the level editor, Anti-Gravity etc...

TORIS



Toris is the author of 'Gloop', a puzzle styled game, similar to Lemmings. You have to guide a certain amount of liquid - in this case, gooey slime - to a pre-specified exit point. The game is highly addictive, and features beautiful graphics and a wonderful gameplay. It just won the GBAX 15-day coding contest, and Toris was awarded amongst other things, a coloured GP32 (!), and lots of other amazing goodies. Congratulations from GP32:zine to you, Toris. Great game!

You can read about the competition right here: <http://www.gbax.com/>

GP32zine: *Have you got any plans to expand on Gloop or add new features?*

Toris: I have, I'm currently looking into adding a lot of new things, and selling it cheaply on JoyGP, thanks to a few peoples kind suggestions that it could become commercial ;) - Things to be added would range from moving platforms, lasers, speed of gloop release, to changing gloop colours, campaigns (instead of level selection at the moment), and speeding up the cursor (!). If the JoyGP idea falls through, look forward to another free release!

GP32zine: *Other than Gloop, do you have any other project ideas in mind?*

Toris: Well, I'm always fond of weird puzzle-ish games, so once I've finished Gloop, I'm thinking about a game, where you control a constantly bouncing ball, you would have to collect certain items, avoid obstacles, etc.. It's still in planning, and I'm not very good at explaining ideas, so please excuse the fact it sounds totally bizarre :P

Then perhaps a simple raycaster engine, I really want to learn the basics of 3D, and think that would probably be the best place to start.

GP32zine: *Well I'm sure a lot of people will be looking forward to your next release. Onto another subject... You've played the 15-day entries. Besides your own, which entries impressed you the most?*

Toris: Technically, 15 Day Crap, and Tunnel Demo. Tunnel demo could make a great game with a little work, I really hope the author continues! 15 Day Crap is a very addictive game already, takes a bit of getting used to (and being told how crap you are!), but it's great once you get the hang of it. Gameplay wise, I really like Falldown, greatly addictive game. GPsmack is also a great music utility for portable music creation ;)

GP32zine: *Ok, well I've said all I have to say. Do you have anything else to add?*

Toris: Well, thanks to everyone out there for making the GP32 scene as friendly as it is. Hopefully it will continue to grow, and we'll see some more great releases in the near future!

GP32zine: *Right...thanks for your time giving the interview, and all of us at GP32:Zine wish you good luck with your future projects :)*



INTERVIEW

Conducted by Gustav Lassen (zimba)

GP32zine: *Hi, I'm talking with Metellius, the coder and designer of Squad 14. Would you like to introduce yourself for those who doesn't know you? How long have you been coding for the GP32, and how did you learn it?*

Metellius: My real name is Harald, I'm 17 years old and come from Norway. I use most of my free time on the computer, and I've learned a lot over the years I guess... :) I started programming visual basic when I was twelve, but I progressed to c++ two years ago. Since then I've done a little programming now and then, but it wasn't before very recently that I got involved in gp32 programming. I read about the Gamepark on an online magazine that described it as a cheap handheld pc, which got me interested right away. I started programming late May, and I learned it mostly by bugging |Rico at #gp32dev several times a day ;) and reading his tutorial.

GP32zine: *How would you advice people who are new to the programming scene, and would want to start making games for the GP32?*

Metellius: Bug |rico! Again, I'd have to recoment Rico's tutorial on making a tilegame. It introduces you to the basics of gp32 programming, but if you're completely new to programming, I suggest reading a book on C or C++. I started with the book "C++ How To Program" by Deitel & Deitel. Start with simple games, don't jump into anything too big, it will only discourage you from going on. After all, who can say no to another Pacman clone :)

GP32zine: *Squad 14 is a brilliant clone of the arcade classic, 1942, when did you first try out this game, and what did you think of it?*

Metellius: Actually, I don't think I remember the first time I tried 1942. I've never had a game console myself, the only time I played it was when our family visited my uncle who always let me play the game on their console. It was when I got the gp32 that I started playing the game again and realizing how much I love that kind of games, so I decided to start making a clone.

GP32zine: *You recently won second place in the GBAX competition, congratulations. Did you face any difficulties developing and designing this game?*

Metellius: There was never any major problems making it, the only thing I can think of is that I wanted to have all original art in the game. The game I submitted to the GBAX competition has mostly my artwork, except for some explosions and planes that

METELLIUS



Here's another interview with an author of a GBAX competition entry. This one is with the author of 'Squad 14', metellius. Squad 14 is a clone of the old game, 1942, a blasting arcade game, packed with fast gameplay, and beautiful sprites. The game was originally released in 1985 by Capcom, and has recently won a huge fanbase, because of the game's fabulous gameplay, and quick and (at the time) beautiful graphics. If you haven't tried 1942 yet, I seriously suggest you give it a try.

You can read a lot more about the retro classic, 1942, and it's sequels right here: <http://www.klov.net/0/1942.html>

You can read about the GBAX competition right here: <http://www.gbax.com/>

come from Spritelib, and the player plane which is made by nem. I spent a lot of time planning the game, and aimed at hard-coding values as little as possible. The end result is a game that I plan to make into a general engine for shoot-em-ups with a level editor so people can make their own little 1942 clone. :)

GP32zine: *Now that you've earned second place in the GBAX competition, what do you plan to do with Squad 14? Do you plan on developing it further, or will you stop development for another project?*

Metellius: Right now I'm packing for a weeks vacation at our summer place, but when I get back I will continue developing it. The main priority right now is adding sound to the game, and after that I need more enemies added. Some other ideas I play with is a skirmish feature that generates a random enemy fleet, boss-mode, helper planes and cheat codes. I think the most important feature to expect is the save-feature, I don't like games that require you to start at the beginning every time you want to play.

GP32zine: *What about sound effects and music, are you looking for a sound designer to do some work?*

Metellius: I have actually recieved one offer that I haven't acted on yet, but I probably will need additional sound designers once I get to that part of the game.

GP32zine: *We've seen some other interesting projects on your website, <http://www.hvaal.net/gp32/>, do you have any other secret projects in mind that you could reveal to us? Anything you would really like to develop?*

Metellius: I haven't had any big ideas for other games, except for maybe a tank game. I've stopped developing Stone Age 2K, but since I got so far on it, I probably shouldn't stop completely. But other than that, it's all about Squad:14.

GP32zine: *Finally, do you have anything you would like to say?*

Metellius: I'd like to say thanks for all the help I got from the skilled coders at #gp32dev, and if you see small shining dots around the monitor, stop coding!

GP32zine: *Right...thanks for your time giving the interview, and all of us at GP32:Zine wish you good luck with your future projects :)*

"...a game that I plan to make into a general engine for shoot-em-ups with a level editor so people can make their own little 1942 clone."

"Some other ideas I play with is a skirmish feature that generates a random enemy fleet, boss-mode, helper planes and cheat codes."



INTERVIEW

Conducted by Gustav Lassen (zimba)

GP32zine: Hi, I'm talking to Ryleh, creator of Fnes32, FMSX32, FGen32 and lots more, how are you doing?

Rlyeh: Hi zimba, nice to meet you :-) but my name is 'rlyeh'. Although i dont care since nobody writes it ok ^__^

GP32zine: Could you introduce yourself to the people that are unfamiliar with who you are? How long have you been coding, and how did you learn it?

Rlyeh: I'm a Spanish guy 24 years old aged, interested in vintage systems and also in new but small tech ones. That's probably why I port emulators of old systems for new ones like GP32. I've been coding other projects but this year seems to be exclusive for GP32 (too much ownage :-). Ah, I started to code by myself at 14 years old with some books and txt files from BBSs (included in magazines, disks from friends and old stuff like that).

GP32zine: Apart from your own emulators, what games/ programs on the GP32 takes most of your time right now?

Rlyeh: Hmm... Its strange but i dont play too much. I used to play to Frodo, Castaway, xRick (now the Gold version). Multifw and pacrom are the most useful tools/bioses I've found too.

GP32zine: What do you think of the GP32 scene as it is now, is it too small? What do you think of the emulation scene on the GP32?

Rlyeh: The GP32 scene can be resumed shortly: weak market but strong homebrew stuff. The scene itself is based in emulation mainly, which is not as bad as many people tend to claim.

GP32zine: A lot of people have been complaining about the incompleteness of a lot of the emulators around, do you think the GP32 scene is dead, or is it just asleep?

Rlyeh: People are not considering that GP32 scene is free, and besides that, there are some emulators almost finished. They should be glad with their authors instead of complaining, or they could try to code the emulators by themselves.

GP32zine: What advice would you give people who would want to start porting their own emulators?

Rlyeh: Well, I'd say them to try to port their emu insanely. The more maniac you are, the more time you spend in your task. Its the only way to get experience while porting. Have in mind that porting is not exactly the same job as

RLYEH



This is a person who need no introduction, though I'll give him one anyways. Rlyeh - as his name is properly spelled - is the author of a buckload of emulators for the GP32. Most famous is his wonderful Fnes32, which provides the glory of full speed NES emulation. Currently still under development, Fnes32 is facing heavy competition from other newcomers to the scene. Rlyeh plan to integrate lots of other features to Fnes32 in the future - read the interview for the hot stuff. Rlyeh is also the man behind a lot of other interesting emulators, Fgen32, Fmsx32, Fcol32 and the brand new Fsms32, just to name a few. There, I happily repeated things you already knew, well, what are you waiting for, read the interview!

You can find Rlyeh right here:
<http://www.retrodev.info/>



coding and you have to change your handbook tricks sometimes.

GP32zine: *You are currently putting your work into completing FNeS32, how is work on the next release coming through? What new features and bugfixes can we look forward to?*

Rlyeh: Well, im lately trying to finish fNES32 for a public release indeed. It's a big step from those who have never try the new beta since the 28/06/02 one: full speed, full sound, long names, quick fileselector, auto load/save sram, 134 mappers, movie playing/recording, multiplayer, etc... :-)

GP32zine: *The last version had almost perfect NES-emulation, do you expect it is possible play at 100% speed, with 0 frameskip, or will this never be possible?*

Rlyeh: It will be possible for sure. I'm playing 100% speed with 1 frameskip already, and I'm using 100% C. Other NES emulators have started using ASM in their code, and that will boost the speed enough as to reach the frameskip 0 (like LJGP32).

GP32zine: *You are currently facing heavy competition from other upcoming NES-emulators, like Little John 32 and NesterGP, what do you think of these emulators, and will FNeS32 have the same neat features as these two emulators have?*

Rlyeh: They're wonderful! I'm doing my emus for my own usage, or maybe to spend my spare time. Anyways, the more NES emulators we launch, the more enjoyment you get. What's wrong with releasing many NES emulators at same time? Who cares? NES is a great system! :-)

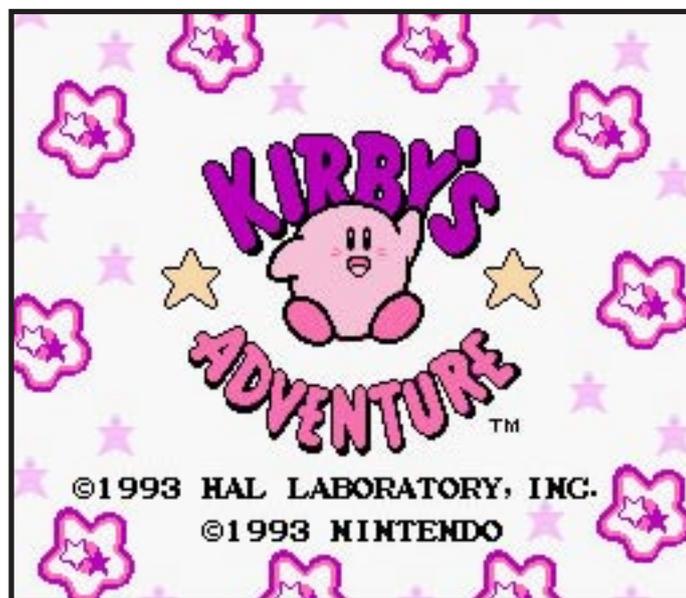
GP32zine: *You are also working on FGen32, a Genesis emulator, how is work coming along? When can we expect a beta release?*

Rlyeh: fGEN32 is running about 50% speed with frameskip 3. Beta is not expected for this month. I'm perfeccionist and I want to release some decent. It's not the rendering code what's slow, its about the m68k cpu core. It will boost up as soon as I get a replacement. This replacement would boost up also fMAME32 which is delaying too due to the same m68k core.

GP32zine: *Seeing as SNES emulation is tough, when do you think we can expect a playable Genesis emulator? Do you think FGen32 will reach full speed?*

Rlyeh: Let's cross our fingers with ZardoJones' emu. He managed to get his Genesis emu at 100% speed already :-)
About fGEN32 as i've said before, it's depending of a m68k core replacement.

SCREENS:



GP32zine: *What other systems are you looking forward to emulate? Are you working on any other interesting emulators as we speak?*

Rlyeh: If you mean unemulated systems I'd like to try SNES or GB. From the emulators I've not finished yet I'd like to finish fZX32 and fCOL32. And I'm working in a new emulator I started yesterday! fSMS32 :-)

GP32zine: *Finally, do you have any last words?*

Rlyeh: Well, I'm moving to a new home and have no inet there yet, but as usual, I'll be always glad to send my current betas to whoever asking for it. Just drop me a line at irc eventually ^__^

GP32zine: *Great, thanks for your time, and good luck with all of your emulators!*

Rlyeh: Thanks you very much for your interest zimba` and keep the spirit alive :-)

SCREENS:



INTERVIEW

TARAS

Conducted by Richard Harris (rico)

GP32zine: *Hi Taras, it's nice to be talking with you. Could you introduce yourself to the readers?*

Taras: Well... I'm a 19 year old student at Edinburgh University, studying nothing related to computers... I used to code a lot of PC apps as a hobby in my spare time, although they were in VB.

GP32zine: *You've moved on from VB - On your site, you mentioned that Air Rage was your first game in C. Did you find the GP32 development learning curve a steep one?*

Taras: Not really. I was already fairly confident in PHP, and Rico's tutorials were very useful in bridging the gap between the two languages (PHP and C).

GP32zine: *Do you think it is a good first platform for games programming?*

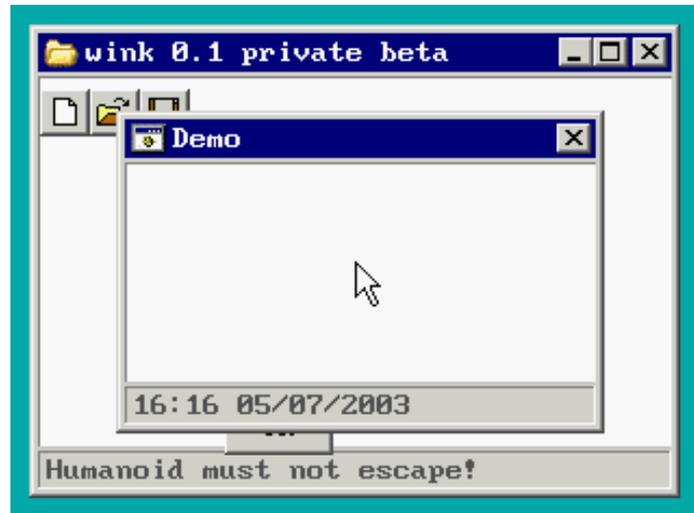
Taras: Well, I've found programming for the GP32 easier than for the PC because you don't have to worry about different processor speeds. It's also handy that there's a growing developer base; the people in #gp32dev have been extremely helpful. I suppose it's a good platform to learn C games programming on, because all the built-in commands, at least in CHN's modified devkitadv, are fairly easy to learn and use.

GP32zine: *Ok, now to bring in your new project WINK (formerly GPWinTk :D). The current beta on your page shows some windows with a mouse cursor. Where do you see this project going?*

Taras: Well, as I say on that page, I'm planning to add in total window management. Windows will be objects which can be created and deleted - and once a window has been created, WINK will automatically look after the basics, such as letting the user move the window, resize it, minimize it, and so on. Eventually, I hope to be able to create a VB-style design environment to save even more time - and maybe, one day, a tool to convert basic VB code to WINK code. I'm starting with the basics and hoping to gradually build it up. While many people would see the GP32 solely as a games console, I believe that a handheld this powerful has the potential to be a useful tool for applications, too. That's the real purpose of WINK - to foster app development on the console.

GP32zine: *Will you be making a VB-style design environment that runs under WINK itself? :D*

Taras: Sorry, that concept has blown my mind... I seriously doubt it would be possible, with my programming. But if



Who wouldn't want a Windows styled interface for the GP32? An interface you could integrate into every program you wrote? Taras is the creator of such. His WINK - currently undergoing heavy development - will provide tons of sexy features to the hungry development community. Taras is also the coder of the GBAX 15-day submission, Air Rage, which features a great gameplay, and nice graphics.

You can check out Taras' work right here:
<http://taras.gp32.org/show.php?gp32>

someone else wants to do it, I have no objections! It would be quite tricky to do without a keyboard to enter values, too...

GP32zine: *Are you going to add any more eye candy (drop shadows, menu transitions etc)?*

Taras: Of course! Unfortunately, I have to write the menus first... I am making it very easy to theme - the XP theme in the screenshot on my site was made in around an hour. Similarly, I'm going to try to add options for transitions and the like, so the developer has total control of the appearance. The project is very long-term, as I don't have a lot of time just now to code.

GP32zine: *In particular will you be using WINK for any applications of your own?*

Taras: Yes, the reason I started it was because I wanted to make some basic tools, like a calculator, notepad etc. I only realised when I started coding the calculator that it would be a lot easier for me, and for other developers, to make apps if the basic GUI components were already pre-written. It's also nice to have consistency between apps. I guess if someone had the inclination, they could make a complete OS - like Wind-Ups, only actually looking like Windows - using WINK. However, as I said before, it is totally themeable, so your programs can look like any OS - 9x, XP, Mac, KDE or anything you can be bothered to make a theme for. I suppose you could even design your own window style, like in Winamp.

GP32zine: *It appears that you want WINK to become a 'shell' program like WinGP and Wind-ups. Does this mean a WINK file manager and start menu?*

Taras: If someone codes it, then yes, there will be a start menu and file manager. At the moment, I'm really only working on the graphics side, and making the GUI function as users would expect. Obviously - since I only started coding for GP32 last month - I don't have enough knowledge to build something as advanced as a shell, but I'd certainly like to see it happen. It would be really great for the GP32 to emerge as not only an excellent games system, but as a cheap and viable alternative to PDAs - obviously, the lack of keyboard is a disadvantage, but it can be overcome. A lot of basic apps, like a calculator, or a measures conversion tool wouldn't even need a full on-screen keyboard.

Another thing I'd love to see is multi-tasking like proper Windows. I have absolutely no idea how it works, or whether it's even possible on a GP, but if it was, it would be great to be able to switch between programs. If not, it would still be possible for a workaround: the main controller file could save its state before running one of its

SCREENS:



"It would be really great for the GP32 to emerge as not only an excellent games system, but as a cheap and viable alternative to PDAs"

apps, then when a WINK app exited, instead of rebooting it could run the controller FXE again. The state would be reloaded from the saved file.

GP32zine: *Are you working on any other projects?*

Taras: Not at the moment... WINK takes up all the coding time I have, to be honest!

GP32zine: *What are your thoughts of the GP32 scene?*

Taras: There's obviously its open source nature. For me - and I'm guessing for a lot of other developers - it's more than just a cool gadget. It's the holy grail of handhelds - a powerful, portable device which you can control and manipulate in any way you like. I don't think the GP32 is ever going to seriously affect Nintendo's sales, but I also don't think it's going to die a death like the Neo Geo Pocket. If the European release gets the coverage it deserves, it has the potential to become even bigger, and more than just a footnote in handheld histories.

GP32zine: *Also there was the recent 15-day contest. Other than your entry of course :D what were your favourite games there?*

Taras: The game I've played the most is probably Gloop, but I gave up after the "Bumps" level (I like my games easy..!). Falldown is also permanently on my SMC now. I liked the various 3D demos, but it would be great to see them made into full games - certainly better than most of the official games GamePark are putting out just now.

GP32zine: *You mentioned your dislike of the commercial games - have you tried many of them? If so, did any stand out as good?*

Taras: Other than Pinball Dreams, which I enjoyed, I haven't tried them - since that would involve paying! But I've never been a fan of the Asian style of games if you know what I mean. Cute and bubbly isn't my thing.

GP32zine: *Where do you see the GP32 scene progressing in a year's time?*

Taras: I hope there are going to be a lot more 3D games that really show its potential. My EXT port is looking very empty, and hopefully that's going to change! It would be nice if Game Park put out some new hardware too - particularly a GP32-to-TV lead.

GP32zine: *Okay, well Taras, thanks for your time. Do you have anything else to add?*

Taras: Someone should make an x86 emulator, or at least port a DOS emulator :) Also, long live the GP32!!!

HOORAY!

"It's the holy grail of handhelds - a powerful, portable device which you can control and manipulate in any way you like."

INTERVIEW

Conducted by Rico

GP32zine: *I'm talking with atrkid, active GP32 community member and designer of many projects such as Battleship and RGP32. Many people know you as the founder of #gp32. Why did you decide to set the channel up?*

atrkid: Most people know me as atrkid. I've been into video gaming since I was a child, basically, since my dad was into computers, and we had these computers at home. So those were always a part of my life. Ever since, I wanted to make video games, so I played games more and more, and learned to game design. I try to help game projects when I can, and got into GP32 because I see this console as an opportunity to create our own games, which is, without the restrictions developers set on common consoles. Apart from that, i like to write articles, either video gaming or something more serious.

GP32zine: *You write articles for gp32emu, but you've also been involved in translating the site's news into French. Do you have any theories as to why the GP32 has such a high French user base?*

atrkid: Well, France is fond of retrogaming. If you have a look at other part of the emulation scene, French coders are among the most active ones. As for the French gp32 scene, it got supported by a strong fan user base in its beginning, saying it could emulate the GBA and such.

GP32zine: *Do you personally think a (working) GBA emulator will be released?*

atrkid: It really depends on what you mean by working. If you're looking for 100% or even playable emulation, it should be possible for some games, which do not used the gba's graphics CPU too much. As for 100% emulation for most games, it'd be terribly tricky. You'd have to use an asm interpreter which would adapt itself to the needs of all games, plus find a way to avoid the 8 megs or ram restriction, which means reduce the games' size by reducing sound quality and graphics (commonly done in some other scenes, it's called downsampling), and probably cache the most important information.

You could also deactivate some parts of the emulation, like zsnes offered in its older versions : no transparencies, no rotation, no backgrounds, mono sound...even so, I don't think anyone out there would be able to achieve such a task, unless they were paid for it.

ATRKID



Atrkid is the founder of #gp32, the main source of GP32 information on IRC. Most of the scene's big folks hang around there, so if you don't know about it, I suggest you fire up your IRC client, and connect to EFnet. Atrkid has worked on Battleship 32 and RGP32. He's also a writer for GP32emu.com, the major GP32 site. He writes news and he takes responsibility of translating news into French.

Atrkid can be found at #gp32 on EFNet, and on: <http://www.gp32emu.com>

GP32zine: Talking of your projects - you are working on quite a few. Would you like to summarise them for the benefit of our readers?



atrkid: I'm working for GP32emu, Battleship32, RPGP32, a shooter engine, and a platform shooter. In parallel, I'm starting a UT2003 mod project.

GP32zine: Battleship32 was entered in the recent 15-day contest... being one of your first finished GP32 games, were you happy with the game itself and how many votes it received?

atrkid: I finished some projects before, it's just the one I got the most involved with :) I'm glad the game turned out that good, because it was really problematic to turn such a slow paced game into something actually fun to play. I'm happy people laughed at the game and enjoyed it, because we didn't have that much time to develop it. I'm quite happy with the number of votes it received, because of course, some games in this compo were a lot more impressive. We're planning some updates now, like improved art, a sudden death mode, etc :)

GP32zine: The shooter, Squad14, fared much better :) Tell me about your shooter engine. Is it in the early stages?

atrkid: It's an idea we had with metellius, so that people can make their own shooter genre. so right now, it's like Squad14, but with a couple more features :) We're trying to keep development with this engine simple enough for the general user to be able to make his own games. We're also adding support for horizontal shooters. I can't can't talk about all of its design, but you can have a fairly good idea by playing Squad14.

GP32zine: You mentioned RPGP32 earlier also. Is this

the Gigas Engine, or something different? If so, how is the engine progressing? How do you see the final product?

atrkid: RPGP32 is a project we started a few months ago, with Dave and Loolarge, even though Loolarge has been working on it all by himself for the past 3 months on his spare time. Most of the needed functions are there, but we need to finish the implementation of the monster status, item effects, etc. It currently supports maps, with scrolling, characters, has its own scripting engine, people can talk, we have mod support, a nice menu system.

All of this is in 16 bits, and it has support for external sprites and scripts, so you can make your own quest, events, characters, monsters, items, spells. These are defined through an editor which is being made, for PC. Currently it supports the maps, but we need to add monsters and items. This is a different project from what you have seen in the Gigas Engine, it's more advanced, but was started earlier. But we joined with Pirotic, the coder of the Gigas engine, to make it into one engine. The final result should allow making your own RPG, with small restrictions, since basically it's going to be a classic final fantasy style engine, but enough to make your own game.



GP32zine: It looks like it'll be as configurable as RPGMaker2000, which will please many fans of the engine. Will we be seeing a demo of it soon?

atrkid: We should release a demo version soon, when the editor is finished. Then only the fighting part would need to be done. People have seen the Gigas engine, there's no need to make another map demo :)

GP32zine: Well, that's certainly a lot of projects and I wish you good luck with all of them. Do you find it easier to work on many projects at once?

atrkid: Thanks. It's not as hard as you may think. First of all, before doing anything, I wrote a precise

documentation on what steps are needed to design a game. I work only on projects I like and I would like to play, unless it's to help someone, and then I do some research on it, and make it so I'd like to play it. Most of these projects are projects I've started working on more than a year ago by myself, in theory and on paper, so it really makes the creating process easier.

The only restriction when you do such a thing is to know your team, and know what they are capable of.

“The good thing is people support each other. We actually managed to create a community, which is vital for the scene.”

If things are not well organised, then they'll stall. I'm trying to keep my ideas ahead, and look for new game concepts for future games. For example, Battleship32 was mostly designed during my English class :)

GP32zine: *What do you feel the GP32 scene is missing right now? And what are its strengths?*

atrkid: There's still a lot to do for the GP32 scene, but I feel we've accomplished a lot organizing it so far. We have good news, thanks to the developers out there, and we've managed to keep newbies away from the scene until now. The good thing is people support each other. We actually managed to create a community, which is vital for the scene.

The scene's strengths are first of all the GP32's architecture itself. It can be easily modified, and we don't suffer much from the lack of good official tools. Also, coders are very devoted to the machine, especially people like mr_spiv, mithris, or Darkfader in his time. I'm happy we also have support from the regular users, who contribute in helping people learn how to use their console, for example.

The scene is missing more organisation. for example, most newbies don't know where to start, even though we have a tutorial section in <http://faq.gp32emu.com> (And also a good FAQ is at <http://www.gp32x.com/board/index.php?showtopic=1694> -- gpz). Also, a lot of coders lack proper help, because they think only the official SDK is available. The community suffers a lot of competition at the moment. A lot of work is duplicate, and then unfinished, which really doesn't help its purpose. Also, we need to find a way to attract most of the user base to the general information, so that everyone gets it. That's our main goal now. Keeping the GP32 community an open coding community, and keep the rom kiddies away.

GP32zine: *You mentioned 'rom kiddies' ... there have*

of course been a few piracy problems. Do you think the piracy problem can be controlled? What impact do you think it has on GamePark development?

atrkid: It can be avoided up to some point. As you may see, most of the GP32 sites don't even mention these, and the chat rooms are very calm. We want to keep this place as nice as it can get, and it worked very well for more than a year. I think most people buy the console for more than the official games. I'm happy they don't make a mess out of it. I don't believe GamePark sells that many games either, or that most of the games would be bought. I think it helps advertise for the console, in a bad way.

GP32zine: *Where do you see the scene in a year's time? Are you planning anything in particular?*

atrkid: 3 scenarios:

- 1) it's the same as now: small amateur game projects, but more developed.
- 2) made some progress in the community, to help people make their own games, more engines and tools available. 3D ones for example.
- 3) it's dead, because nothing new has happened. Obviously I think 2 would be the best, but I see 1 as the most likely.

GP32zine: *Finally, what GP32 games do you like?*

atrkid: I don't like the commercial games that much, most of them aren't as good as they should be in order to compete with the other professional games. My favourite games are amateur. I really like most of the games that were released for the 15 day compo. I enjoy Gloop, Falldown, Battleship32 and Arcano.

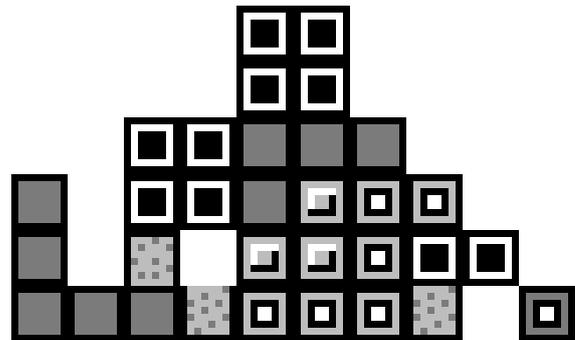
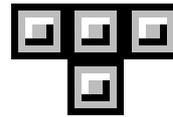
“I think we should have more 5 minute games for the amateur scene, and more professional ambitions and organization, in order to achieve bigger projects.”

GP32zine: *Any final words?*

atrkid: I think we should have more 5 minute games for the amateur scene, and more professional ambitions and organization, in order to achieve bigger projects. In the end, everyone should be able to contribute. You're free to pop by and say hi on IRC too :)

GP32zine: *You seem really committed to the scene and making it better. Once again I wish you luck with your work and thanks for taking the time to do this interview :D*

atrkid: Thanks :) Nothing would be there without the others' help.



REVIEW

GPVGB post-v.11

Type: Emulator

Author: ZardoJones and others

By: Rico

The history of GPVGB has been covered with confusion. At first ZardoJones had been working on it. However, faced with an increasing number of bugs and the lure of new projects, the emulator got passed on to other guys. And new releases are still coming out today, albeit exclusively to Korean site GPZigi.

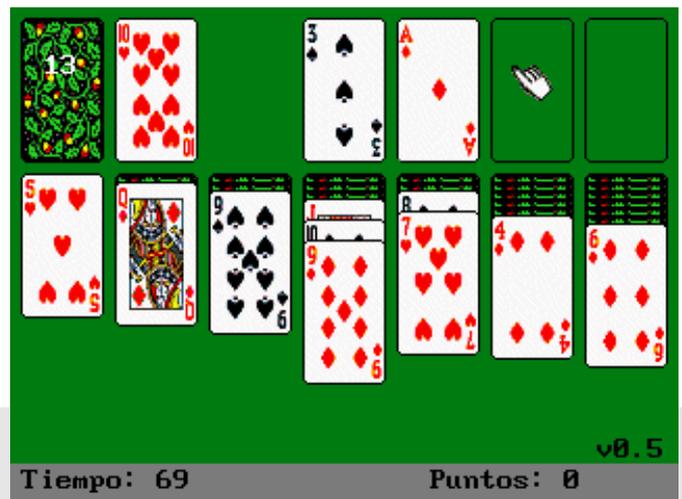
So what does this new release have to offer? Well, over its already impressive performance and compatibility - not much. The speed has been increased to 133 Mhz, which means that some games now run full speed. Unfortunately, others run too fast. Tetris DX is now a lot harder, for example. This is, in my opinion, a small price to pay for a more "complete" Gameboy emulator. Also, a few bugs have been fixed which now enable a small number of people who couldn't run GPVGB at all to play. While many of us are unaffected, this is of course an important update.

Compatibility seems to be the same as older versions - very good overall. Top games like Super Mario Bros. DX, Wario Land 3 and Donkey Kong Country run very well, fully playable and with sound scarily exactly like the real thing. SRAM save support is still here but now automatic which will come as a relief to the more forgetful among us. GPVGB also keeps from previous versions its useful screen-screatching modes to take advantage of the GP32's larger screen.

That said, there are still a few flaws in the emulator. Although both monochrome and colour roms are supported, mono emulation seems to be more buggy (possibly due to hardware differences between the GB and GBC) and larger games, colour or not, suffer from graphical glitches.

While there are still improvements to be made, GPVGB remains one of the best emulators available for GP32, and certainly good enough for most of us to have fun with.

Overall: 9/10



REVIEW

GPGames 0.6

Type: Arcade

Author: Wave (coding), e-gnacky (artist), Fiera_SouL (title screen artist)

By: Rico

Although in Spanish, even English-speaking gamers will enjoy this compendium of much-needed games. GPGames 0.6 incorporates Solitaire, Tetris, Shanghai and GPBall. I'll cover the games individually.

Solitaire: This is a great release. The game plays almost perfectly like the Windows version, and fits into the GP32 screen nicely. The control method is simple: d-pad to move cursor, A to pick up cards, B to drop them. However, Wave has been smart in this respect. Little things like card snapping (drop a card near a pile and it will 'snap' to the pile) really help make the game easier to play. Finally, the game also looks good with a neat deck pattern.

Tetris: Simplistic graphics don't detract from this classic game. The GPGames version is quite slow to start with but has nice animations and efforts and retains all of the Tetris gameplay and fun. Not much else to say on this one. Changing backgrounds, or palette effects on the background, would be nice but obviously not at all required.

Shanghai: About time this game is available for GP32. You are offered several scenarios to play. If the graphics are original, then e-gnacky has done very good work with them, and once again the game scales nicely to the size of the GP's screen. I'm sorry to say I don't know how to play Shanghai, so I did not have a chance to fully test it.

GPBall: Once again, simple graphics - solid circles really - but this game is reminiscent of the Pop-Cap game 'Atomica'. Move balls of one colour next to others of the same to destroy them, while new colours of balls keep appearing. Fun but quite slow to play due to the GP32's d-pad. A mouse is better suited to this type of game. Still, it's great of Wave to include it and provides an interesting diversion.

There were a few problems: the start menus for the games were quite simplistic, the game often said "press select for options" but there weren't any, and being able to change game is terrific. The option is a bit difficult to find, but it's there, 'salir' in the start menu. Wave did allow you to restart the same game without rebooting, a neat feature as well. High-scores are saved to disk, another neat feature.

To summarise, this is a neat collection of simple games, in particular Solitaire stands out as brilliantly done on its own. While there are no bugs and the games seem polished enough, some need graphics work (GPBall) and others are already available (Tetris). The Spanish text does not detract - I recommend this as a good time-waster. Great job!

Overall: 8/10



GP32:zine is

An idea by

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Thanks to everyone who contributed to the magazine, to everyone giving criticism, help and positive feedback. Without you, this would not have been possible. Special thanks to Rico for supporting the idea all along, supplying tons of articles, interview, screenshots and lots more.

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