Subject: Programming Videos
Posted by Dagen on Tue, 19 Aug 2014 02:56:36 GMT
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A while ago I was going to do a set of "Crash Course" (fast and intense introduction) videos about programming on the Apple IIgs, particularly about games. I did kind of do one video about my dev stack and how to make a skeleton System 16 application, but I think it was too crazy for newcomers. Now I think I am going to start over and begin a very introductory video series about programming the Apple IIgs, starting with some really simple stuff like changing the border color and switching banks in the monitor. Eventually, I do want it to get into more advanced topics, but I think it needs to start from a friendlier, immediate hands-on, approach that is in the spirit of Apple II hackers.

I am ready to start with this new idea in a week or two, but I'd love to get some feedback on what kind of lessons you think would help attract people to our beloved platform. Any ideas? Would anyone else want to make similar videos as part of a collaborative series? I could manage editing them all for a consistent presentation style, but that's probably not very important. I'd like this to be something that is super easy for Apple II users to understand, but potentially also as a way for people to quickly get up to speed if coming from programming on other 65xx based systems.

Subject: Re: Programming Videos
Posted by mcpderez on Tue, 19 Aug 2014 15:26:03 GMT
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I think this is a great idea, and I will watch them!

I like the style of scoopex's Amiga programming videos, such as [see next post for link -- you have to post once before being allowed to post a link]

By watching those I learned even basic tools like a good editor to find. If you're using a modern IDE, you'll probably have more editing to do to switch views from the development tool to the program running on the IIGS.

It is good to include some "what not to do" topics too. For example, if there is something that is an easy way to do something when learning, but will be regretted later, that might be good to point out.

Hope this helps, and I'm sorry I can't currently commit any time to helping create the content.

Subject: Re: Programming Videos
Posted by mcpderez on Tue, 19 Aug 2014 21:48:18 GMT
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OK, here is Photon of Scoopex's first video in the series (short and simple):
http://www.youtube.com/watch?v=p83QUZ1-P10

And to get an idea of how it has progressed later in the series (which get longer and more complex), here's #22 about a bounce effect: http://www.youtube.com/watch?v=WiVDxt3oks4

Along the way there was a detour away from the code editor into using a paint application for creating the graphics used as assets in the program. Growing up, I personally skipped from Apple IIe and Applesoft to Macintosh with Lightspeed Pascal, so not assuming familiarity with common IIgs content (or resource) creation applications would be good. Those who are familiar can skip over.

I would imagine a IIgs programming series would probably start similarly along with what basic Tools to load. IIRC, something similar was in Dagen's KansasFest 2013 presentation.

One thing I like is watching Photon's iterative approach, including not always having everything exactly right. So, if you have some spectacular crashes or funky dialogs and how to fix them, that's good too. It takes a little longer to get to the end result, but teaches the debugging process as well.

Subject: Re: Programming Videos
Posted by Dagen on Sat, 23 Aug 2014 13:01:33 GMT
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I'm a fan of the Scoopex vids.

Anyway, here's my first video in a (hopefully) series.
https://www.youtube.com/watch?v=3z4bMwHUEnk

It's not perfect, but overall I'm happy with the result. Please give feedback. If you'd like to contribute, that would be great. You don't have to affiliate yourself with the site or anything (although that would be cool too!)

Subject: Re: Programming Videos
Posted by mcpderez on Sat, 23 Aug 2014 23:49:48 GMT
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Great! My brain quickly tuned out the reflection, so I wouldn't worry about it. I liked how you started on the IIe and then moved to the IIgs. And this also served as a Mini-Assembler refresher.

The annotations where you cite book and page numbers are helpful and worth the extra time it takes you to include them. I see them as sort of a beginning "What's Where in the Apple IIGS Documentation" -- something that I have not yet figured out.

Some questions came to mind, that maybe you can answer here, in comments on YouTube, or maybe in later videos if we're getting there:
- At ~14:00 did you mean to say that the colors correspond to the lores colors?
- Why did you use BRA instead of JMP?
- Is BRA only available on 65c02 and not 6502?
- When you list memory on the IIGS what are the suffixes? For example at ~14:36, the "-v" in "F6-v" at 00/C022. (I think I know what the 00/ prefix means, but others new to 65c816 may not.)

Where would you prefer to see and answer comments to the videos? Here? On Youtube? On the Apple II Enthusiasts FB page? Any of the above?

Thanks for the video! Looking forward to the next one.

Subject: Re: Programming Videos
Posted by Dagen on Sat, 06 Sep 2014 13:51:30 GMT
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Hey mcpderez et al...

I have a follow-up to the initial video here:

   https://www.youtube.com/watch?v=w2P6UJy17ro

I tried to incorporate all of the feedback. I took feedback from the forums here, the YouTube comments, and from Facebook groups. Feel free to discuss in any place, of course I'd love to see more activity here. :)

I think next we will introduce the Super High Resolution (SHR) display!

Subject: Re: Programming Videos
Posted by mcpderez on Sun, 07 Sep 2014 09:30:05 GMT
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I watched the video first thing when I woke up on Saturday.

Thank you for answering my questions very thoroughly. I even learned something by watching the little BASIC program that printed the colors and numbers on a mixed lo-res screen, as well as how to poke characters on the screen.

I also didn't know the monitor will convert hex to decimal with the = sign. I think that will come in handy.

Standing by for Lesson 1.

Subject: Re: Programming Videos
Posted by mmphosis on Wed, 10 Sep 2014 23:51:57 GMT
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Thanks for creating these videos. I think we learn by making mistakes. I learned a lot of little things from the errata and follow up. The = that mcpderez just mentioned, / to switch banks, and " to enter text.

Both the Branch Always (BRA) instruction and the Jump (JMP) instruction take three cycles.

Advantages of Branch Always:
- the code is relocatable because branching uses relative addressing
- two byte instruction vs. three bytes for the Jump instruction

Question:
I don't think that Sweet 16 version 3.0.3 does the retrace / video timing correctly. Are you using KEGS version 0.91 ?

Subject: Re: Programming Videos
Posted by Dagen on Fri, 19 Sep 2014 20:07:58 GMT
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I use GSPort now, most of the time. We'll see. I may resume my work on a modern KEGS port someday.

Don't JMP/JSR instructions get remapped when used in a S16/OMF relocatable file?   But yes, for traditional binary files loaded in unknown locations, only branches would be relocatable.

Latest video about Super High Resolution is here.
https://www.youtube.com/watch?v=bCSDkjhVM2A

Subject: Re: Programming Videos
Posted by Dagen on Mon, 22 Sep 2014 14:16:49 GMT
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Someone asked if I'd be hosting/linking the videos here. I think that's a good idea, but I'd feel a

little odd having it as some kind of authoritative video on programming the Apple IIgs. I'm just a beginner trying to explain things to myself. Also, there only 3 videos so far, so I'd hate to start a page for it and if I lose momentum. It may only ever be 3 videos which would be kind of silly (I hope that won't be the case, of course!)

Any comments? Perhaps add it to the "Library" page? Or make a new "Videos" page? Or something else?

Subject: Re: Programming Videos
Posted by Oz on Sun, 05 Oct 2014 08:23:25 GMT
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   Dagen,

   You should create one Topic per video so people could interact with you on the topic. The Youtube comments are not always the right place to add extra information due to the lack of rich text (at least here you can publish as picture the scheme available in the video or also post the source code using Courrier font).

      Olivier

Subject: Re: Programming Videos
Posted by Dagen on Sun, 05 Oct 2014 14:17:22 GMT
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Thanks for the suggestions.

You are exactly correct. I didn't really know what format the videos would take when I started. I just did it one day because I wanted to get more people programming the IIgs, and I didn't really plan very well. I honestly thought that no one would watch them.

I am taking a break until I get back from my honeymoon (I'm getting married in 13 days!!!) When I get back I have a list of improvements to make. But the main three changes will be 1) I'll start posting all code used in each video online (probably via GitHub) and 2) I will repeatedly state something like, "You can ask questions or join the conversation on twitter or by emailing us.. [give twitter/email addresses] ... and of course join us on apple2.gs forums"... and 3) I'll be trying to put the videos in their own place on here so we can have the full conversation with the ability to post media/code more easily.

I need to make it easier for people to give feedback. I do check the video comments, facebook messages, forum posts, etc... but I never explicitly told people how they could ask questions. Doh!

I am trying to demonstrate small chunks, but it is difficult because some pieces are inter-related and I'm impatient. I just want to get right into making games/demos. :)

-D

Subject: Re: Programming Videos
Posted by Oz on Mon, 06 Oct 2014 19:29:34 GMT
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Quote:I am taking a break until I get back from my honeymoon
I'm getting married in 13 days!!!
When I get back ...

Are you sure to come back one day ? We have lost so many Apple II soldiers after they got
married ! :o