

***THE
GIGABYTE
GAZETTE***

The Monthly Newsletter
of the
***SUN CITY SUMMERLIN
COMPUTER CLUB***

<https://www.scscclub.com>

December, 2022

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President's Message

Holidays Upon us

by Jeff Wilkinson

I hope everyone enjoyed Thanksgiving. The election of the club's 2023 Board of Directors will take place at **2 PM on Thursday, December 1**, at our Monthly General Meeting. The meeting will be held in **Desert Vista Room 5**. We have **space for 80** club members. For planning purposes, we have asked people to let us know they will be there by clicking the following link to make a reservation on [Eventbrite](#).

We will have music by *The Band of Gold* and sandwich trays, cookies and other surprises. This get-together presents an opportunity to chat with your board and fellow club members and offer ideas to help guide the future direction of the club. Let us know what you would like to see in terms of classes and seminars or just question and answer sessions focused on specific topics.

We've had a good year, despite the setbacks from Covid-19 and our membership is holding steady. So, from the Board of Directors and myself we hope to see you at our meeting and wish you a Happy and Healthy Holiday Season!

Jeff Wilkinson, President
(702) 527-4056 pres.scsc@gmail.com

General Membership Meeting

The December General and Business Meeting will be held at **2 PM on Thursday, December 1** at Desert Vista Room 5 and also via Zoom webcast. The business will be the election of club directors for 2023. Following the election will be a social with special holiday refreshments and music by The Band of Gold

For Club information: go to www.scscclub.com, contact Jeff Wilkinson, President at (702) 527-4056 or email him at pres.scscclub@gmail.com.

SCSCC Board of Directors Actions

The Computer Club Board of Directors took the following actions on November 9, 2022

George Lobue made a motion that the **minutes of the October 12, 2022 Board Meeting be approved as submitted**. The motion was seconded by Tom Burt and unanimously approved by the Board.

Howard Verne made a **motion** that the **meeting adjourn**. Jeff Wilkinson **seconded** the motion, and it was unanimously **approved** by the Board. The meeting was adjourned at 10:05 AM.

December 2022 Printable Calendars

To view this month's printable classroom and lab calendars, click the following hyperlink:

https://www.scscclub.com/Calendars/scscclub_calendar_2022-12Dec.pdf

Submissions Welcome

We are always looking for new information to share with our club members. If you have computer or technical information or tips you would like to share with members of the club, send your articles to editor **Tom Burt** at tomburt89134@cox.net. Thank you to everyone for your contributions.

Welcome New Members

The following new 2022 members have joined the Computer Club
from October 28th to November 27th.

Sunnie Bell
Michael Fefferman
Georgette Fernandez
David Jentsch
Bill Kornfeld

Robin Lavin
James McGregor
David Morrow
Kathleen Nagle
Linda Sedler

As of November 27th, the club has 549 paid memberships for 2022 and 138 for 2023.

The Computer Club is now accepting new and renewed memberships for 2023.
Annual dues are \$10 per person.

As of December 31, 2021, the club had 618 paid memberships for 2021.
Of those, 17 were new memberships for 2022.

Special Interest Groups and Kaffee Klatches

Special Interest Groups (SIGs) provide a forum for general discussion on a specific computer related subject. Admission to all SIGs is on a first-come, first-seated basis and is subject to the maximum allowed by fire code regulations. <W>, <L>, <M> or <H> indicate whether a SIG would be of interest to a Windows, Linux, MacOS or Hand-held Device user.

Apple iPhone / iPad Lab <M/H> *Live in the Classroom*

Zane Clark 702-332-5747

First Wednesday, 9 a.m. monthly

Next meeting: Wednesday, December 7

The lab sessions will be in the usual format, one-on-one help with your questions. Come anytime, leave anytime.

Repair SIG <W/L/M> *Live in the Classroom*

Chuck Hagen (702-418-2614)

Every Tuesday, 12:30 p.m. to 3:30 p.m.

The Repair Lab provides **CLUB MEMBERS ONLY** with no-cost assistance for those having upgrades and / or hardware and software problems with their computers. Bring in only your PC tower, your Mac or your laptop and your problems. Our TECH team will give you our best effort. ***Be sure to mark your cables so you can re-connect when you get home.***

Internet Investing <W/M/H> *via Zoom*

Tom Burt (702-341-7095)

3rd Thursday, 9:00 a.m. monthly

Next meeting: Thursday, December 15th

The Internet Investing SIG provides a forum for members interested in using Internet resources for researching and managing investments to meet, discuss, and learn more about the topic. The SIG's target audience is members with intermediate computer skills and investment experience, but all members are welcome.

Kaffee Klatch <W/M/H> *Live in the Classroom and via Zoom*

Jeff Wilkinson (702-527-4056)

Every Tuesday, 8:30 a.m.

This Kaffee Klatch is an open, free-form discussion group for all users, from beginning to advanced. KK discussions are not restricted to any one subject, computer platform or computer-knowledge level but should be computer or technology related. We will try to answer your questions, help you keep your systems updated and provide some useful “tips and tricks.”

Windows 10 SIG *Live in the Classroom*

Bill Wilkinson (702-233-4977)

First and Third Saturdays at 9:30 a.m.

If you are a novice or near-beginner computer user, or if you just want some refresher information together with a refreshing cup of coffee, then jump-start or recharge your computing knowledge by attending these Win 10 SIG / Q&A sessions. At each session, attendees will explore several topics of interest to beginners and near-beginners. The topics are always announced a couple of days in advance via e-mail to SCSCC members who have subscribed to the club’s SCSCCNews mailing list. Each topic is presented in a step-by-step manner and is supported by “how to” notes that can be easily and conveniently downloaded from the SCSCCBKK.org web page. Following each “up front” presentation of one or more topics (approximately 60 minutes in duration), an informal open-ended Question and Answer period takes place for those who wish to participate, listen, reflect, or inquire.

Seminar and Q&A Offerings

The club's educational sessions are being conducted either as Zoom webcasts, live in-person or a hybrid of the two. Check the weekly calendar on the website to see which mode the session is using. Unless explicitly stated, advance registration is not required for these sessions.



Managing Passwords Now and Forever

Monday, December 19th at 9 AM

Presenter: Gail Weiss

Location: Classroom Live and Zoom

If you are like a lot of people, you probably have more usernames and passwords than you can remember. You should start to think about organizing them and keeping them in a place that you and someone you trust can access.

There are many password manager applications available to you that claim they will store your passwords securely and even help generate passwords for you. In this class we will explore some of these password manager applications, and if they are a good option to use. We will also discuss the importance of why you should use a different password for every website you visit.

But then we also need to discuss the sensitive topic that what would happen if you should die or become incapacitated. Would your executor or loved ones be able to access all your on-line data (your bank and brokerage accounts, your photo storage accounts or even your social networking accounts) that you so carefully secured and then didn't bother to share the passwords with anyone. This class will explain all your options for managing your passwords and we will also discuss how to preserve your digital legacy.

This class will be held in the club classroom. Feel free to bring your own laptops or mobile devices if you want to follow along.

For more information about this class or if you have any questions or ideas for future classes, please email me at gmweiss5@gmail.com.



Exploring the Windows File Explorer

Thursday, December 29th at 10:00 AM *via Zoom*
Presenter: Tom Burt

This month we'll do a comprehensive 1½-hour look into the **Windows File Explorer**. Managing your PC's files and folders is one of the most key activities to allow you to use your computer effectively. We'll look at all the common actions, including how to effectively search your file system. We'll also look at various ways to organize your PC's files based on how you expect to use them.

We'll look at both the Windows 10 and Windows 11 versions of File Explorer. They each have the same functionality but present it to the user in a different way.

Presentation notes will be available on the club website in the Seminars area on about December 24th.



Tom's Tech-Notes

A New Box for a New Year - 2023

Tom Burt, SCSCC Vice-President

The Windows desktop PC I currently use for all my daily computing was built (by me) in July of 2018. It's been a reliable and faithful servant for 4 years and still works well. However, just like me, it's getting on in years and it's not officially compatible with Windows 11. For a few months, I've been sidling up to the idea of getting a new one. I use my PC for most of my Computer Club activities, all my personal computing and also for occasional consulting jobs, so it has to be a dependable performer.

I first looked around at what desktop systems were commercially available, checking HP, Dell and Lenovo. I came away disappointed. Affordable systems were under-powered or lacked key components. More powerful systems were quite pricey and still were seldom configured with all the features I needed. So I did some research on components at Amazon.com and Newegg.com to see what I might be able to cobble together. Both are always having sales on PC components, so it pays to keep checking. Being of scottish descent, I've always been a frugal fellow, so my goal was to get a lot of bang for a modest outlay of bucks.

I've worked up a parts list based on an AMD CPU and compatible Gigabyte motherboard. As I write, it's just after Thanksgiving (2022), so I expect to see some good sales on at least some of the parts. If you're an adamant Intel fan, the AMD Ryzen 5 CPUs are comparable to Intel Core i5 CPUs. Gigabyte also makes Intel-compatible motherboards. I'm not sure yet when I will actually do this build, but here's the parts list ...

CPU:

After reading lots of reviews I settled on the **AMD Ryzen 5 5600G**. It uses an AM4 socket, has 6 cores (12 threads) and runs at a base cycle rate of 3.9 Ghz with a turbo mode that peaks at 4.4 GHz. So it's plenty fast. The package includes a CPU and GPU on one die. Peak power consumption is 65 watts. The GPU is a Radeon series chip with 7 cores that will handle all my graphics needs. The retail box includes an AMD "Wraith" cooling fan. The CPU is unlocked, so it can be overclocked. Personally, I don't bother with this; I like my systems to be stable.

Recent price at Amazon: **\$127**.

Motherboard:

The AMD Ryzen 5 5600G requires an AMD socket AM4 motherboard with a compatible chip set. I selected the Gigabyte B550M-DS3H (Rev 1.x): (<https://www.gigabyte.com/Motherboard/B550M-DS3H-rev-1x#kf>). This has the latest AMD B550 support chip. The board includes four USB 3.1 (10 gigabit) ports, 4 USB 2.0 ports, plus a host of other ports, including DVI-D and HDMI out for video. The board's form factor is micro ATX. It has four DDR 4 dual channel memory slots and 4

SATA III (6 G-bits/sec) ports. The board also supports gigabit ethernet and 2.4 GHz WiFi. There are also two NVME slots for solid state drives.

It's important that the motherboard's RAM support be compatible with the CPU's RAM support. The Ryzen 5 5600G requires DDR-4 3200 RAM; the B550M-DS3H supports that configuration.

Recent price at Amazon: **\$120**.

RAM:

For the RAM memory, I selected two 8 GB sticks of **Corsair Vengeance DDR4 3200 LPX** DRAM. This is about 40% faster than the RAM in my current box. On my current PC, I have found that with 16 GB of RAM, I'm never using more than about 50% of that RAM when running my normal mix of apps. Even when occasionally rendering HD videos, I never max out to 16 GB. So there was no point in going to 32 GB. If that changes in the future, I can just order two more 8 GB sticks.

Recent price at Amazon: **\$50**.

Storage:

I decided to pair a new **Samsung 970 EVO Plus** 500 GB M.2 NVME solid state drive with a **Seagate Barracuda** 2 TB 7200 RPM SATA III (6G-bits / second, 256 M-byte cache) hard drive.

The 500 GB SSD is plenty to install and run Windows 11, with generous space for temp files, applications and frequently-used data files. The specs say this SSD can achieve sequential read speeds up to 3500 M-bytes / second (28 G-bits / second) and can perform 480,000 random 4K-byte reads / second. (<https://semiconductor.samsung.com/consumer-storage/internal-ssd/970evoplus/>). If I see a good sale, I might upgrade this SSD to 1 TB; the 1 TB unit is a bit faster.

Recent price at Amazon: **\$60**.

The Seagate 2 TB hard drive will be used for storage of data: documents, pictures, music, videos. I also keep a 2 GB external drive for archival data storage and image backups.

Recent price at Amazon: **\$50**.

DVD Reader / Burner

While DVDs are becoming archaic in the technical universe, they're still around and have some virtues. Notably – they're flat, so they go nicely into file folders or storage boxes. And you can write on them or print nifty labels to stick on them. Flash drives have much higher capacities, but it can be a challenge to find the right flash drive among many that has the latest copy of a file you need.

Happily, I have a few lightly used DVD burners around the house that I can cannibalize. If you need to buy one, they can be had as internal units for about \$25 on Amazon. External USB DVD burners can be had for \$20 to \$25 (or more) on Amazon.

Case and Power Supply:

For this build's case, I plan to use a **Fractal Design Core 1100** mini-tower case. It has front USB ports (1 USB 3.0, 1 USB 2.0) and has a 5.25 inch bay for a DVD burner. It supports micro-ATX motherboards.

Recent price at Amazon: **\$59**. (free shipping)

For the power supply, I plan to use a **Corsair VS500** which is rated for 500 watts and has flat cables.

Recent price at Amazon: **\$50**.

Operating System:

I plan to install Windows 11 Pro 64-bit OEM. I expect to use a leftover Windows 8.1 Pro product key to activate the installation, so my cost for Windows 11 Pro should be \$0,00. However, see the following article, which has been updated to include Windows 11 for other low-cost options: <https://www.tomshardware.com/reviews/get-windows-10-free-or-cheap,5717.html>.

Cost Summary: (All components from Amazon w Prime free shipping)

CPU: AMD Ryzen 5 5600G 3.6 GHz CPU & Cooler	\$136
Motherboard: Gigabyte B550M-DS3H	\$122
RAM: Corsair Vengeance LPX DDR4-3200 2 x 8 GB	<u>\$ 50</u>
Subtotal:	\$308
SSD: Samsung EVO 970 Plus M.2 NVME 500 GB	\$ 60
HDD: Seagate Barracuda 2 TB 7200 RPM 256 MB cache	\$ 50
DVD: Reuse existing DVD Burner	\$ 0
PSU: Corsair VS500 500 watts	\$ 50
Case: Fractal Design Core 1100 mini-tower ATX	\$ 59
Windows 11 Pro: Activate with spare Win 8.1 key	<u>\$ 0</u>
Subtotal:	\$219
Overall Total:	\$527
Tax:	\$ 44
Grand Total:	\$571

The next step is the interesting task of procuring all the pieces. Happily, ordering on Amazon is easy and, with Prime, shipping is free. However, the offered prices change often.

Once all the parts are in hand comes the challenge of planning the build and then assembling the parts into a working Windows 11 Pro desktop PC workstation. When I actually get to doing the ordering and the build, I'll do a photo essay on the assembly steps for building this new system.

Happy Holidays!



Kretchmar's Korner

What is USB C?

David Kretchmar, Computer Hardware Specialist

If you purchased an electronic device in the last few months, it probably has a USB-C port, which is alternately known as USB Type-C. Until relatively recently, all smartphones and tablets came with some kind of Micro-USB connection, but that little slot at the bottom of your USB connected device has now been upgraded to work with something much more powerful and convenient.



USB-C, introduced in 2014, is the latest and greatest connector type developed by the USB Implementer's Forum (USB-IF), a group of industry-leading companies like Apple, Intel, AMD, HP, Dell, and Microsoft with the goal of creating industry-wide specifications for connecting devices. The goal is to unite many different capabilities previously reserved for many different cables, into one standard.

This has left many users wondering just what is USB-C and how fast is it? To understand what makes USB-C special, it helps to understand its evolution. I will also focus on USB-C data and power delivery.

What Is USB-C?

USB-C is the latest universal standard for wired connection of smart devices. It's the successor to the many precedent standards, i.e., Micro-USB and USB-A. Those older standards are still widely seen today, but will eventually go the way of floppy disks – away. A major feature of USB-C is its reversible connector design that lets you insert either end of the connector into your device.

The USB-C Connector has No Up or Down

Like Apple Lightning, USB-C can be oriented in either direction so there is no need to figure out which direction is up on the plug. One of the most annoying characteristics of the old USB-A form-factor was that you had to get the plug in with the correct orientation. This was almost impossible on the first try because ports and cables did not have an obvious up or down, and connecting was an exercise in trial and error.

How Fast Is USB-C with Data?

The "C" in USB-C only refers to the shape of the connector and plug and has nothing to do with speed. USB-C is a physical standard and not a data speed standard. To understand the speed at which a USB-C cable will transfer data, you have to look at its data standard.

USB data standards such as USB 2.0, 3.0, 3.1, 3.2, or 4 help us know the speed of a cable. Basically, letters represent the shape, and numbers represent speed. USB-C now offers data transfer speeds of up to 10 Gbps with the right cable and port combination. In the near future speeds of up to 40 Gbps will be common

What about USB-C charging?

USB Power Delivery is a charging protocol that uses high speed USB-C connectors and cables.



Smartphones, tablets, and laptops that are Power Delivery enabled allow safe, fast charging and more power for devices, without the need for a separate power cable.

Most of us are familiar with using USB connections to charge smaller devices such as smartphones, either from a computer or from an AC wall outlet using an adapter. This works well because older USB connections could carry enough wattage to charge up small

batteries and power less power-hungry devices. This is why laptops, requiring more power, have kept those larger bulkier power cables.

A USB-C type of connection now provides enough power to juice up most laptops. Laptop charging is a new direction for USB connections and we will see that more laptops are coming out with USB-C charging compatibility.

One other benefit of charging over USB-C is that you don't necessarily need your laptop's own charger on hand for power. With the coming near-universality of USB-C, you can plug pretty much any USB-C charger into your laptop's USB-C charging port and it will (in theory) provide power.

Unfortunately, manufacturers today have taken what could be simple standardized connector and turned it into craziness, each device requiring a proprietary US-C cable. I am not sure why this is being done unless the manufacturers want to make a few extra dollars by forcing consumers to buy the manufacturers' own replacement part.

Where is Apple?

Apple is having a unique issue with USB-C in spite of being an early adapter of the technology. The European Union has ruled that if Apple wants to sell new iPhones in the region, those devices will need to have a USB-C port before the end of 2024. That means Apple's proprietary Lightning connector, which Apple has used for 10 years and which generates significant profits, will have to be changed. The company has already switched to USB-C charging for MacBooks, and today's iPad Pros also use USB-C charging. Apple has just announced they will provide USB-C charging for the iPhones, at least for the EU. Apple is unlikely to create a special phone just for the EU, so I expect this change will come for all iPhones.

All photos are from Google Images

APCUG Guest Article

QR Code Scams – Be careful where you point that smartphone

By Phil Sorrentino, Secretary and APCUG Rep
Sun City Center Computer Club

<https://sccccomputerclub.org/> philsorr (at) yahoo.com

QR Codes seem to be everywhere today. You'll find them anywhere someone wants to give you more information than is possible by other means, like a sheet of paper or a machine-readable standard bar code. Initially, QR codes were created to track manufacturing processes where barcodes couldn't store enough information. However, a bar code has one dimension. A QR code is 2-dimensional and can store significantly more data than a bar code. Roughly speaking, a QR code may contain as many as 7,000 characters as opposed to a bar code that may contain up to around 40 characters. That's over 170 times the amount of data. This increased amount of information makes the QR code so worthwhile.

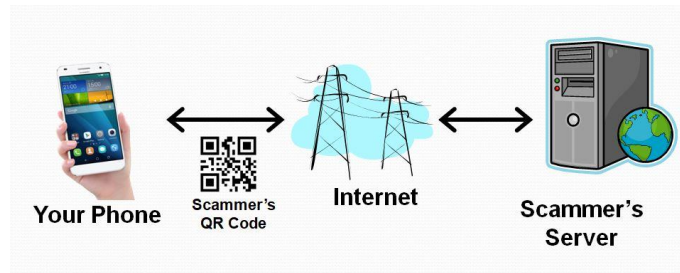
QR codes were invented in Japan in the 1990s. They were first used by the automotive industry to manage production but have spread everywhere. There are even websites and apps that let you make your own. A QR code is a machine-readable, 2-dimensional matrix of black and white squares. A QR code may represent many different data types, such as text, a hyperlink to a website, a telephone number, an email address, or a text or email message. QR codes, like billboards, clothing labels, walls, TVs, and even tattoos, can be placed on almost anything. QR stands for Quick Response. Quick Response comes from the manufacturing industry and deals with how fast a product can be replaced on the seller's shelves.

Quick Response is **"the rapid replenishment of a customer's stock by a supplier with direct access to data from the customer's point of sale."** A QR code is merely a data storage representation of some information using the binary code. (For example, the letter A is represented by "01000001".) The little squares and patterns of the QR code represent the binary information. The actual QR code is read-only, so it cannot record or steal any personal information on its own. Nowadays, the smartphone's camera app can scan the QR code when the camera is directed at it. (Most smartphones no longer have to download a separate app from the App store for reading QR codes.)

A QR code with an embedded hyperlink to a website can connect you to a specific website quickly and easily using your smartphone. There is very little one needs to know to take advantage of a QR code. But a lot of the latest technology is being used to accomplish the task. The three major technology components are your smartphone, the internet, and a server (on the internet, or "in the cloud"). This collection of technologies goes by the name "Client-Server Technology," and all three components have been developed to work together. For example, your smartphone has a camera App that connects the smartphone, as the client, to the server website whose URL was embedded in the QR code. (URL is the Universal Resource Locator, the term for a web address on the internet.) This allows the provider of the QR code the ability to

connect your phone with the QR code provider's server when you scan the QR code. Once connected to the server, the smartphone can access all the information that the server can provide.

QR codes take people from the physical world to the online (cyber) world. They let smartphones connect to an enormous world of information quickly and easily, but unfortunately, they also allow smartphones to connect quickly and easily to a scammer's website. This is why scammers have started using QR codes in attempting to get in touch with potential victims. It gets people online with the scammer's server. It is similar to "phishing" emails and telephone calls. QR codes are another way for scammers to get in touch with potential victims.



Many scammers (aka cybercriminals) have started to exploit the technology's convenience. Scammers create malicious QR codes to connect unwitting consumers to the scammer's server and dupe them into divulging their personal information. Anytime new technology comes out, cybercriminals attempt to find a way to exploit it. This is especially true with technology like QR codes. It seems like most people can figure out how to use them, but they probably don't really know how they work, and it's always easier to manipulate people when they don't understand their technology. Scanning the scammer's QR codes won't do anything malicious to your smartphone, such as installing malware. Still, it probably will take you to a website designed to try to get personal or financial information from you.

Like any other phishing scheme, it's impossible to know precisely how often QR codes are used for malicious purposes. Experts say they still represent a small percentage of overall phishing, but numerous QR code scams have been reported to the Better Business Bureau. As a result, many people know they need to be on the lookout for phishing links and questionable attachments in emails that purport to be from your bank. But thinking twice about scanning a QR code with your smartphone camera isn't second nature for most people yet.

Recently a QR code scam was uncovered in a Texas city. Drivers were led to a scammer's website after scanning a QR code sticker on a parking meter. Eventually, around 30 such stickers were found. The QR code was supposed to help the motorist pay for online parking. However, instead of being taken to the city's authorized website, the motorist who scanned the fake stickers was led to a fake website that collected their credit card information. With a warning of the parking meter scam, officials in another city issued a warning to motorists after spotting similar stickers on parking meters.

Fake QR codes have even shown up in emails. Scammers may like using QR codes in phishing emails because they often aren't picked up by security software, giving them a better chance than attachments or bad links to reach their intended targets. It boils down to QR codes being

just one more way for cybercriminals to get what they want and yet another threat for people to be on the lookout for.

So be careful when scanning QR codes. Here are some tips from security experts:

- Think before you scan. Be especially wary of codes posted in public places. Take a good look and determine if the sticker is part of the sign or display. If the code doesn't look like it fits in with the background, it may have been put there by a scammer.
- Be suspicious of any QR code that comes in an email.
- If you scan a QR code, look at the website it led you to and determine if it looks like what you expected. If it doesn't look appropriate, then leave the website.
- If it asks for personal information you don't think is appropriate, don't provide it.
- And, in the words of one of the Computer Club's past presidents, Matt Batt, "Be careful out there!"

Lab Monitor Schedule

The Open Lab session is held once per week: 9 am to noon on Saturdays.

December	Monitor Schedule
Jeff Southwell Jim Mahoney	Saturday 12/3/2022
Fred Cohen Linda Muench	Saturday 12/10/2022
John Zuzich Raymond Pun	Saturday 12/17/2022
<i>Lab Closed</i>	Saturday 12/24/2022
<i>Lab Closed</i>	Saturday 12/31/2022