



Bexar County IT News

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BCIT Augmented Reality



Bexar County's eServices & Innovation Technology Division has recently made progress in adapting a trending technology into everyday life. With the introduction of augmented reality (AR) into Bexar County's Bibliotech facility, the forward thinking of the BCIT Department has launched the County into being the first government entity to use this technology. The current state of the industry has AR being used for everything from tourism to education. In an industry that is projected to have a billion users by the year 2020, it is easy to see why it was not a difficult decision to adapt the technology with the first ever bookless library.

Background

Augmented Reality dates back to the late 1960's but never really picked up momentum until the recent announcement of Google Glass. The user actually sees graphical user interfaces (GUI) layered on top of a "reality" background. With the use of a device (i.e. mobile phone or tablet), a person can view what the developer is trying to communicate through the form of a video, picture, web address link, gaming, 3-D animation, or even manipulating the current background they are looking at. The most common uses of AR require the download of a free application to be the platform. Currently we are using a newly created Bexar County AR App (found in Apple's iTunes store and Google's Play Store). With the Bexar County AR App a person is able to use their smart device to point and view newly created augmented reality images.

If you would like to see Augmented Reality in action, download the Bexar County app on your smart device (Apple or Android). Point your smart device at the County Seal on this page and enter the world of augmented reality.

Future

Be sure to pay extra attention from this upcoming technology that will inevitably be utilized in future departments to help constituents of the County in useful and innovative ways.

Uses

- ▶ Instructional
- ▶ Contact Info
- ▶ Provide Information to Residents
- ▶ Business Cards
- ▶ Links to pre existing websites



Computer Pioneers - Grace Murray Hopper

Grace Brewster Murray was born in New York City. She was the oldest in a family of three children. She was admitted to Vassar College at the age of 17. She graduated Phi Beta Kappa from Vassar in 1928 with a bachelor's degree in mathematics and physics and earned her master's degree at Yale University in 1930. In 1934, she earned a Ph.D. in mathematics from Yale. Her dissertation, *New Types of Irreducibility Criteria*, was published that same year. Hopper began teaching mathematics at Vassar in 1931, and was promoted to associate professor in 1941.

In 1943, during World War II, Hopper obtained a leave of absence from Vassar and was sworn into the United States Navy Reserve, one of many women to volunteer to serve in the WAVES. Hopper was assigned to the Bureau of Ships Computation Project at Harvard University as a lieutenant, junior grade. She served on the Mark I computer programming staff headed by Howard H. Aiken. Hopper and Aiken co-authored three papers on the Mark I, also known as the Automatic Sequence Controlled Calculator. Hopper remained at the Harvard Computation Lab until 1949, turning down a full professorship at Vassar in favor of working as a research fellow under a Navy contract at Harvard. Using the Harvard Mark I computer, she developed the first compiler for a computer programming language. She conceptualized the idea of machine-independent programming languages, which led to the development of COBOL one of the first modern programming languages. She is credited with popularizing the term "debugging" for fixing computer glitches (inspired by an actual moth removed from the computer).



Grace Hopper is famous for her nanoseconds visual aid. People (such as generals and admirals) used to ask her why satellite communication took so long. She started handing out pieces of wire that were just under one foot long (11.80 inches)—the distance that light travels in one nanosecond. She is known for receiving standing ovations at the conclusion of her lectures which often included remarks and insight in the future of computers... and where she often would hand out her wire "nanoseconds".

A joint resolution in the House of Representatives, led to her promotion to Commodore by a special Presidential appointment. She remained on active duty for several years beyond mandatory retirement by special approval of Congress. In 1985, the rank of Commodore was renamed Rear Admiral, Lower Half. She retired (involuntarily) from the Navy on August 14, 1986. The U.S. Navy destroyer USS Hopper is named for her, as was the Cray XE6 "Hopper" supercomputer at NERSC, the National Energy Research Science Computing center.

"It is often easier to ask for forgiveness than to ask for permission," is one of the quotes attributed to Grace Hopper. Another favorite quote of Grace Hopper: The most dangerous phrase in our language is, "We've always done it this way."

Happy New Year from ERP



Another new year is upon us and the Enterprise Resource Planning (ERP) division of the Bexar County Information Technology Department is hard at work. In cooperation with other County offices and departments, they have completed the behind-the-scenes work that has to be done every year to accomplish benefits and payroll changes and updates. This work entails things that the average employee (if they think about it at all) expects to happen, but doesn't particularly know or care how they happen - just as long as they happen.

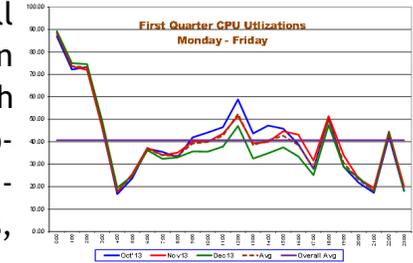
Listed below are some examples of those things that are done by the ERP division each year in order to ensure that employee benefits and payroll functions continue to operate efficiently and in the appropriate manner.

- ◆ Testing and implementation of year-end updates (patches) to the SAP software system which is used to administer employee benefits and payroll must be completed before other year-end processes are initiated.
- ◆ Annual Open Enrollment forms have to be updated, generated and mailed to each employee so that benefit elections for the next year can be recorded and entered into the system.
- ◆ Confirmation Forms are produced and sent to employees for confirmation that their benefits choices have been received and recorded correctly.
- ◆ W-2 Forms (Wage and Tax Statements) which are used to report wages paid to employees and the taxes withheld from them, by law, must be generated and sent to all employees by January 31st each year.
- ◆ Benefits interface files which transfer all pertinent employee information regarding coverage levels and premiums, etc. are sent to the appropriate companies for benefits such as:
 - * AETNA health and dental insurance
 - * MetLife - Short Term Disability and Long Term Disability
 - * Davis vision plans
- ◆ And of course, underlying all of these actions is the required updating of all tables and databases with the latest plan names, rates, and schedules, as well as any newly enacted Internal Revenue Service mandates, etc.

These projects have for all intents and purposes been completed until next year when they will have to be done all over again. Currently, the ERP division is pursuing several other technology projects to help our clients process data faster, better, and more efficiently. Stay tuned to future issues of *Bexar County IT News* for updates!

IBM 2818-M02 CPU Utilization – 1st Quarter FY'14

The IBM 2818-M02 (z114, z-server) has come through its first full quarter with same efficiency that was observed since its installation in August, at better than 10% on average less CPU time to accomplish the same work of its predecessor. Rates of CICS (our transaction processor) average almost 15 transactions per second, Monday thru Friday, eight a.m. until five p.m. with response of one second or less, 99.74% of the time.



Getting Help When Your iPhone Acts Up

Most of the time, your iPhone behaves itself. But every so often it causes you problems. Here's a quick review of things you can try if your iPhone misbehaves.



Start with the first tip – later suggestions are more drastic

1. Restart your iPhone.

Press and hold the sleep/wake button, and then slide the red slider to turn it off. Wait a few seconds. Press the sleep/wake button to turn the iPhone back on.

2. Force any frozen applications to quit.

Press and hold the Home button on the front of the iPhone for 6 to 10 seconds. Then restart it (see Step 1).

3. Reset and restart your iPhone.

Press and hold the sleep/wake button and the Home button. When you see the Apple logo, release both buttons.

4. Reset the iPhone settings.

Tap the Settings icon on your Home screen, and then tap General, Reset, and Reset All Settings. Resetting iPhone settings won't erase your data, but you'll probably have to change some settings afterward.

5. Restore your iPhone.

Connect your iPhone to your computer as though you were about to sync. Then select the iPhone in the iTunes source list, and click the Restore button on the Summary tab.

This last suggestion erases all your data and media and resets all your settings.

Because your data and media (except photos you've taken as well as contacts, calendar events, and playlists you've created or modified since your last sync) still exist on your computer, you shouldn't lose anything. Your next sync will take longer, and you will have to reset any settings you've changed since you purchased your iPhone. But your media and data files shouldn't be affected.