March 26th

Stanley Gill

Born: March 26, 1926; Worthing, UK

Died: April 5, 1975

Gill co-invented the "initial orders" subroutine concept and the first subroutine libraries with Maurice Wilkes [June 26] and David Wheeler [Feb 9] while working on the EDSAC [May 6]. He also co-authored the first programming textbook, "The Preparation of Programs for an Electronic Digital Computer" (1951) with Wilkes and Wheeler.

These were outcomes of how the EDSAC was made available to departments, labs, and research units at the University of Cambridge. The availability of well-documented libraries for input, output, and standard math operations (eventually around 100), made the formulation of problems much easier.

Stanley Gill. Photo from http://www.computerhope.com.

Before joining Wilkes' team, Gill worked at the National Physical Laboratory (NPL) from 1946 to 1948 on Alan Turing's ACE [Feb 19]. While at Cambridge, he returned to NPL on several occasions to contribute to the Pilot ACE [May 10].

In 1953, Gill visited the University of Illinois, where he was involved in the development of the ILLIAC I [Sept 1] and ORDVAC.

He was a founding member of the British Computer Society [Oct 14] and its President from 1967 to 1968.

Daniel H. Fylstra

Born: March 26, 1951; Nevada

Fylstra was a founding associate editor of BYTE magazine [Sept 3] in 1975.

In 1976, he and and Peter R Jennings founded "Personal Software" to sell Jennings' Microchess program for the KIM-1 [April 00]. The company later began publishing a variety of games.

In the fall of 1978, Dan Bricklin [July 16] borrowed Fylstra's Apple II for a weekend to prototype a version of VisiCalc [May 11; Oct 19], which persuaded Fylstra to distribute the finished VisiCalc through "Personal Software". He also promoted the application by creating a fun set of self-running demos illustrating how to create a financial statement, an inventory plan, real estate listings, and perform insurance calculations. He may even have come up with the VisiCalc name, but that's a hotly contested point.

In early 1982, "Personal Software" was renamed VisiCorp, and began releasing various "Visi-" named applications (e.g. VisiOn [Dec 16]). This was possible because the company owed the rights to the VisiCalc name, even though the software was developed by Bricklin and Bob Frankston [June 14] through their company, "Software Arts" [Jan 2]. After several legal battles, "Software Arts" won back "VisiCalc" but VisiCorp kept a hold of "Visi".

"Personal Software"/VisiCorp was the top PC software publisher in 1981 and 1982, although Microsoft took the no. 1 spot in 1983. Indeed, the bottom fell out of VisiCalc sales after the release of Lotus 1-2-3 [Jan 26] in 1983, and the company was sold off in 1984.

Fylstra bounced back with "Frontline Systems", which created the solver that shipped as part of Excel 3.0 [May 2].

Steve Gibson

Born: March 26, 1955; Dayton, Ohio

In the early 1980's, Gibson worked on light pen technology for the Apple II [June 5] and Atari systems [Nov 00].

In 1985, he founded "Gibson Research", best known for its SpinRite software which could recover lost data from hard disks. The company also claimed that the application could "refresh" aging drives, but that was met with some skepticism.

In 2001, Gibson correctly predicted that Microsoft's implementation of the SOCK_RAW network protocol in Windows XP [Oct 25] would lead to a leap in distributed denial of service attacks [Sept 6]. Three years later, Microsoft limited raw socket support in XP's Service Pack 2.

Eugene Howard Spafford ("Spaf")

Born: March 26, 1956; Rochester, New York

Spafford is a computer security pioneer who helped USENET [Jan 29] through "The Great Renaming" [June 9] and (probably) set up the "Backbone Cabal". Despite its exciting name, the cabal was simply an informal organization of large-site USENET administrators who wanted to make the propagation of USENET posts more reliable. That they dressed in black monk-style robes while doing this is untrue. However, acolytes when questioned about the cabal would only whisper

"There is no Cabal" (sometimes abbreviated as "TINC").

Security software designed and/or supervised by Spafford include Tripwire and COPS [Jan 31]. He was also responsible for analyzing the Morris Worm [Nov 2].

In 1989, he published the first English-language technical book on malware, "Computer Viruses: Dealing with Electronic Vandalism and Programmed Threats", co-authored with Kathy Heaphy and David Ferbrache.

Also in 1989, Spafford designed what may have been the first "honeypot" for observing and capturing network intruders, in this case losers hoping to download the Morris Worm. In 1991-1992, he helped the Air Force develop an early "honeynet" .

QED

March 26, 1968

QED ("quick editor") was a line-oriented text editor developed by Butler Lampson [Dec 23] and L. Peter Deutsch [Aug 7] for the Berkeley Timesharing System [Nov 30] between 1965 and 1966. This day saw the publication of its first manual.

Ken Thompson [Feb 4] reimplemented QED on CTSS [May 3] and Multics [Nov 30], adding the first version of regular expressions. Dennis Ritchie [Sept 9] liked this editor so much that he ported it over to GECOS, a time-sharing OS for GE machines ("C" stood for "Comprehensive").

The use of regular expressions in QED introduced an irritating problem called "Leaning Toothpick Syndrome" (LTS) – an expression quickly becomes almost unreadable when it uses a large number of escape characters ("\") to switch off the meaning of special characters. A simple example in sed:

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s/ftp:\/\/[^\/]*\/pub\//foo/
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QED had a strong influence on the development of the UNIX text editors ed, sed, and their descendants such as ex and sam [?? 1956], and more distantly on vi [Nov 8], AWK [Aug 9], and Perl [Dec 18].

Lawrence Edward Page

Born: March 26, 1973; East Lansing, Michigan

Page was the co-founder of Google [Sept 27] with Sergey Brin [Aug 21], and the inventor of PageRank, Google's best-known search ranking algorithm. PageRank records the number and quality of links going to a page to obtain a rough estimate of that page's importance. The assumption is that more important websites are likely to have more links going to them from other websites. As a website's importance increases, so does the algorithm's measure of the quality of a link from that site to another one.

Brin joined Page's "BackRub" project [Aug 29] at Stanford during its early stages, and their first publication, "The PageRank Citation Ranking: Bringing Order to the Web", was a technical report released on Jan. 29, 1998, co-authored with Rajeev Motwani and Terry Winograd [Feb 24].

In July 2015, when Google was reorganized as Alphabet, Page was elevated to its CEO, while Sundar Pichai became CEO of what was left of Google.

Other executives have described Page's role as a "futurist", highly detached from day-to-day business dealings and focused on moon-shot projects. So it wasn't that surprising when he and Brin officially relinquishing managerial control of Alphabet to Pichai in Dec 2019.

While an undergraduate at the University of Michigan, Page built an inkjet printer made out of Lego bricks. This required him to reverse-engineer the ink cartridge to understand the electronics and mechanics for driving it.

Royal Email

March 26, 1976

Queen Elizabeth II sent the first Royal email, from the Royal Signals and Radar Establishment in Malvern during a demonstration of networking technology.

Peter Kirstein [June 20] had set up her account with the username "HME2" (Her Majesty, Elizabeth II).

The Royal missive began: "This message to all ARPANET users announces the availability on ARPANET of the Coral 66 compiler provided by the GEC 4080 computer at the Royal Signals and Radar Establishment".

Royal Email. Photo by Peter Kristein.

Coral 66 was designed for writing real-time applications on computers with limited processing power, including those with only fixed point arithmetic and no dynamic storage allocation. Its use in military applications meant that the Coral 66 compiler had to pass a suite of 25 test programs and run six benchmark programs before it was certified by the IECCA (Inter-Establishment Committee for Computer Applications). This benchmarking methodology was later adapted by the US DoD for the certification of Ada compilers [Dec 10].

The picture of the Queen taken on this occasion doesn't show the GEC 4080 mentioned in the email, which was located in another building. The terminal was linked to it via an acoustic modem, and Kirstein was standing nearby, posed to step in if the link failed. I've been unable to find any information about the bath sponge on the tray to the Queen's right.

For more Royal activities, see [March 6], [Dec 23]

Melissa Virus Unleashed

March 26, 1999

This virus was hidden inside a Word document posted to the alt.sex USENET newsgroup, along with a message claiming that the file was a list of passwords for pornographic sites. That was more than enough incentive for numerous people to download and open the file, thereby triggering a macro.

The virus mailed itself to the top fifty people in the user's Outlook address book, and also messed with other documents by inserting a Simpsons [Jan 12] reference from the "Bart the Genius" episode.

A side-effect of the virus' emailing efforts meant that many servers crashed due to the enormous surges in traffic.

Within three days, Melissa had infected between 100,000 and 250,000 computers, and perhaps caused $80 million worth of damages

Incidentally, the virus was called Melissa in honor of an exotic dancer based in Florida.

On Dec. 10, 1999, the virus' creator pleaded guilty to releasing it and was sentenced to ten years in prison (of which he served 20 months), and was fined $5,000.

For more virus nasties, see [Jan 26; April 30; May 5; July 13; July 15; July 17; Sept 5; Oct 26; Nov 21].

A Word about the Space Tourist

March 26, 2009

Charles Simonyi [Sept 10], the chief architect of Microsoft Word [Sept 29], became the first tourist to travel into space twice

On this day, he departed the Earth for a second time from the Baikonur cosmodrome in Kazakhstan aboard a Soyuz TMA-14, and docked with the International Space Station (ISS) two days later. Simonyi had become a space tourist for the first time when he joined the Soyuz TMA-10 mission in 2007.

Simonyi wasn't the first space tourist from the computer industry. Ubuntu's Mark Shuttleworth [Oct 20] beat Simonyi to the ISS as the second paying guest in April 2002. Simonyi was visitor no. 5 and 7.

Simonyi is Hungarian but not the first Hungarian in space; Bertalan Farkas, a former fighter pilot, was a member of the Soyuz 36 mission to the Salyut 6 space station in May 1980. Upon Farkas' return, he was awarded the title "Hero of the Soviet Union".

From 2001 to 2009, the publicized cost for space trips was $20-40 million. Seven tourists made eight space flights, but Russia cancelled the excursions in 2010 due to an increase in the ISS' crew size

For more ISS stories, see [Jan 22], [Feb 24], [March 11], [Aug 14].