IEEE Brainwaves

IEEE Brainwaves Newsletter is published by the IEEE Brainwaves student chapter of D.J. Sanghvi College of Engineering

IEEE Brainwaves Feature Events :

A talk on how to crack UPSC Examinations

IEEE Brainwaves yet again conducted a successful seminar on how to crack the civil services examinations which was delivered by Mr. Prajit Nair ,IAS officer. He is one of the elite alumni of D.J.Sanghvi college of engineering (Electronics Engineering, batch of 2012)who chose to forefront his career towards civil services after his graduation.

The seminar was attended by a lot of IAS aspirants who wanted to get a clear sight of the overall examination process and learn the mantra of cracking the toughest examination. IAS remains as the

dream job for aspiring youngsters who desires to bring a positive change in the outlook of the Indian society.

Mr. Prajit shared his experience of preparing for the examination and gave tips on how to prepare yourself for the various rounds of the examination process.he said that the exams consists of overall three stages: .the prelims, the mains and the panel review stage. The entire process of filling up the form, preparation, the exam and the results, takes about a year. The exam has three stages and in order to see your name in the merit list, you have to get past them. In an exam that stretches for about a year's time, it is crucial not only to be academically prepared, but also be mentally prepared to go through the process.

He further added that the examination requires dedication and a fair amount of mental toughness. It is upto you to focus your attention to the positive side of the civil services or at the negative side. There are still numerous reasons to join civil services in India despite all the liberalization and globalization.

A number of genuine questions were raised by students regarding the examination process and the current state of the syllabus. Mr. Prajit cleared a number of myths surrounding the civil services and the UPSC examination.

He inspired the young minds to work for their mother nation as a country's future relies on the hands of the youth. They hold a solid promise for a better tomorrow, and what better could be an opportunity than to serve the nation? He inspired the students to opt for a job opportunity in India and help in development of the country.

The students were overwhelmed to know Mr. Prajit's inspiring journey of becoming an IAS Officer.

IEEE Spectrum Article :

Hans Peter Luhn and the Birth of the Hashing Algorithm

The IBM engineer's hashing algorithm gave computers a way to quickly search documents, DNA, and databases

In November 1958, at a six-day international conference devoted to scientific information, the inventor Hans Peter Luhn demonstrated a series of his electromechanical machines. They looked rather ordinary. Much like other computing devices of the day, they were boxy and utilitarian, designed to scoop and sort tall stacks of punch cards into slots and bins.

Unlike other computers, however, Luhn's devices were not designed to work with numbers and calculations but rather with words and sentences. One machine that drew particular attention implemented an algorithm that Luhn called KWIC, for Key Word in Context. Taking in a large number of texts—typically, articles from 500 to 5,000 words in length—the KWIC system could quickly and automatically construct a kind of index.

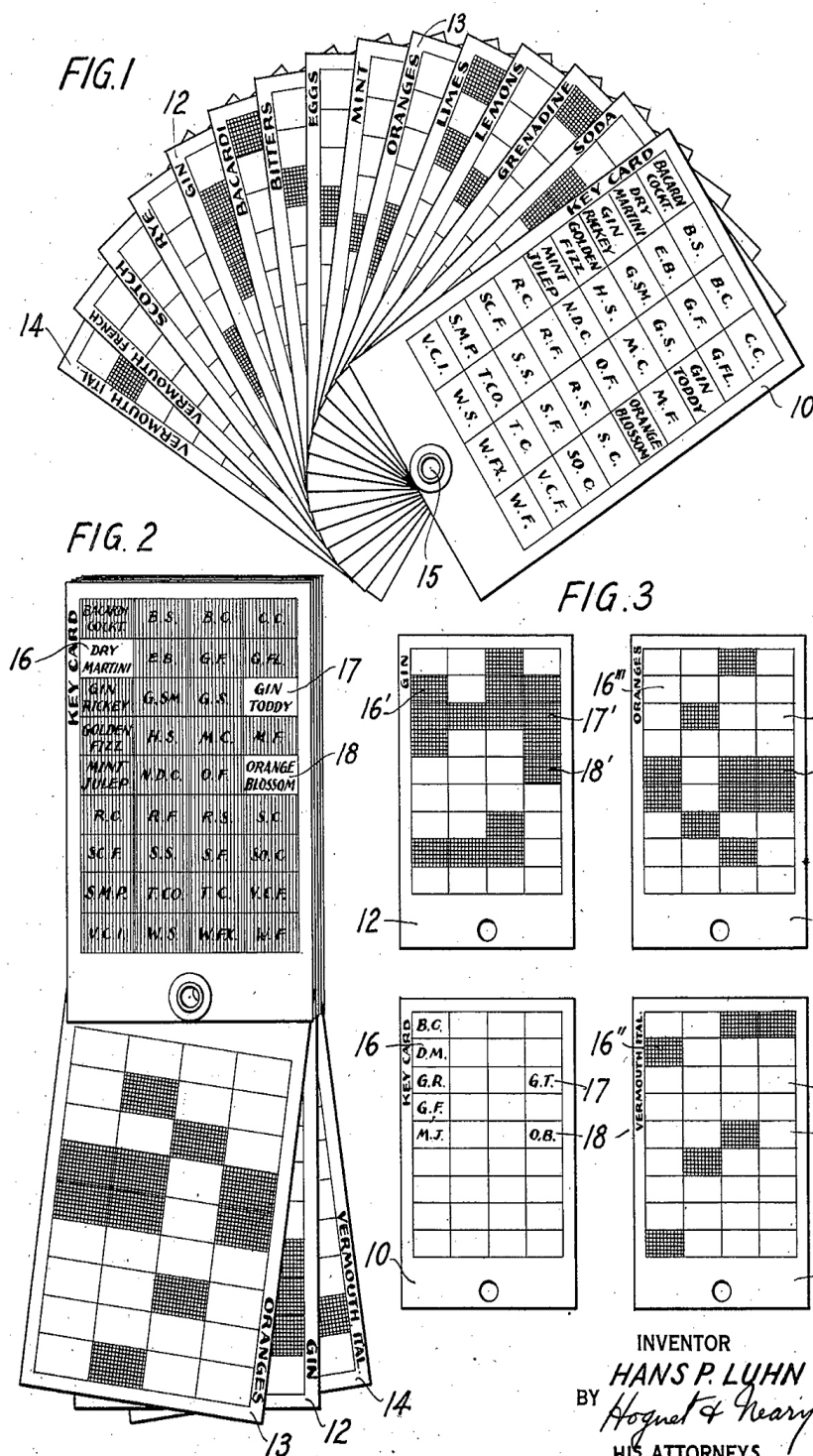At the time, indexing, classifying, and organizing written information was a painstaking process, even for the most experienced specialists. And the volume of information in many fields was growing too rapidly for anyone to keep up. A better means for abstracting and summarizing was desperately needed. For the otherwise staid gathering of librarians and information scientists in Washington, D.C., the demonstration of KWIC was nothing short of earthshaking, with newspapers across the United States reporting on Luhn's astounding invention.

By the early 1960s, KWIC had become central to the design of hundreds of computerized indexing systems, including those used by the Chemical Abstracts Service, Biological Abstracts, and the Institute for Scientific Information. One expert called KWIC "the greatest thing to happen in chemistry since the invention of the test tube." Luhn, a senior engineer at IBM, also built KWIC into an "intelligence system" for businesses, designed to identify and then deliver relevant information to specific individuals within a large organization.

Continue Reading at https://spectrum.ieee.org/tech-history/silicon-revolution/hans-peter-luhn-and-the-birth-of-the-hashing-algorithm