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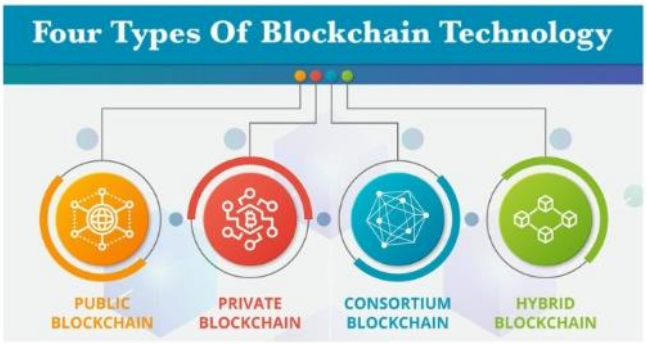
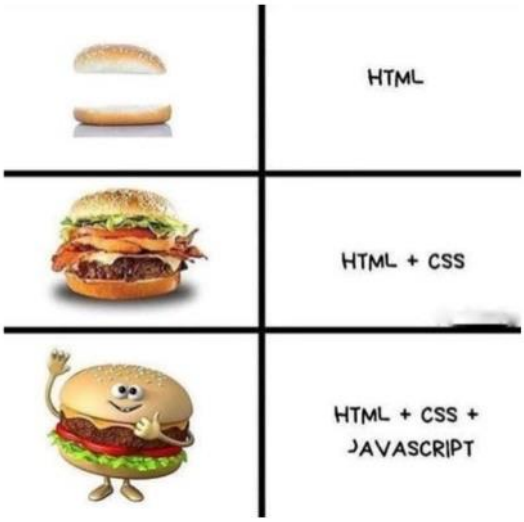


REMEMBER

FREE ADVICE

JUST FOR FUN



MESSAGE

CHAT GPT

ChatGPT was launched as a prototype on November 30, 2022, and quickly garnered attention for its detailed responses and articulate answers across many domains of knowledge. Its uneven factual accuracy, however, has been identified as a significant drawback. Following the release of ChatGPT, OpenAI's valuation was estimated at US$29 billion in 2023.

ChatGPT was originally released in November 2022 using GPT-3, but GPT-4, the newest OpenAI model, was released on March 14, 2023, and is available for ChatGPT Plus users.

Training

ChatGPT is a member of the generative pre-trained transformer (GPT) family of language models. It was fine-tuned (an approach to transfer learning) over an improved version of OpenAI's GPT-3 known as "GPT 3.5". The fine-tuning process leveraged both supervised learning as well as reinforcement learning in a process called reinforcement learning from human feedback (RLHF).

Both approaches used human trainers to improve the model's performance. In the case of supervised learning, the model was provided with conversations in which the trainers played both sides: the user and the AI assistant. In the reinforcement learning step, human trainers first ranked responses that the model had created in a previous conversation. These rankings were used to create 'reward models' that the model was further fine-tuned on using several iterations of Proximal Policy Optimization (PPO).

Proximal Policy Optimization algorithms present a cost-effective benefit to trust region policy optimization algorithms; they negate many of the computationally expensive operations with faster performance. The models were trained in collaboration with Microsoft on Azure super computing infrastructure, using Nvidia GPUs, super computer developed for OpenAI.

In addition, OpenAI continues to gather data from ChatGPT users that could be used to further train and fine-tune ChatGPT. Users can upvote or downvote responses they receive from ChatGPT and fill out a text field with additional feedback.

Features

Although the core function of a chatbot is to mimic a human conversationalist, ChatGPT is versatile. For example, it can write and debug computer programs, compose music, teleplays, fairy tales, and student essays; answer test questions (sometimes, depending on the test, at a level above the average human test-taker); write poetry and song lyrics; emulate a Linux system; simulate an entire chat room; play games like tic-tac-toe; and simulate an ATM. ChatGPT's training data includes man pages and information about internet phenomena and programming languages, such as bulletin board systems and the Python programming language.

In comparison to its predecessor, InstructGPT, ChatGPT attempts to reduce harmful and deceitful responses.

In one example, whereas InstructGPT accepts the premise of the prompt "Tell me about when Christopher Columbus came to the U.S. in 2015" as being truthful, ChatGPT acknowledges the counterfactual nature of the question and frames its answer as a hypothetical consideration of what might happen if Columbus came to the U.S. in 2015, using information about the voyages of Christopher Columbus and facts about the modern world – including modern perceptions of Columbus' actions.

Limitations

ChatGPT suffers from multiple limitations. OpenAI acknowledged that ChatGPT "sometimes writes plausible-sounding but incorrect or nonsensical answers". This behavior is common to large language models and is called artificial intelligence hallucination. The reward model of ChatGPT, designed around human oversight, can be over-optimized and thus hinder performance, otherwise known as Goodhart's law.

POWER OF AI

One of the most exciting developments in modern technology is the subject of artificial intelligence (AI). It has enormous potential to change how people use technology and has far-reaching effects. Artificial intelligence (AI) has already started to impact lives in unimaginable ways only a few years ago, from offering more accurate data insights to helping people make wiser choices more quickly. Now that **AI learns coding**, the transformation is expected to exceed what was ideally thought possible. The newfound code-writing capabilities of AI have not only caused a sensation but also provided fertile ground for the development of programs authored entirely by AI.

Understanding Artificial Intelligence

Artificial Intelligence (AI) is a branch of computer science that focuses on creating intelligent machines that can think and act like humans. In artificial intelligence (AI), the underlying premise is that human intellect can be described so that a computer can duplicate it and carry out tasks ranging from the simplest to the most complicated. Natural language processing (NLP), machine learning (ML), deep learning (DL), robotics (robotics) and computer vision (CV) are just a few of the technologies that AI systems use to do this.

NLP enables machines to understand human language by analyzing text or speech input. Machine learning algorithms enable automated systems to acquire new skills and knowledge via observation and experience rather than manual instruction. For computers to learn to make judgments and predictions with little human input, DL algorithms let them sift through massive volumes of data.

Robotics enables robots to interact physically with their surroundings, whereas computer vision helps them to distinguish things in still photos or moving movies. These technologies allow AI systems to recognize images, comprehend natural language, make decisions, solve problems and much more.

The impact of AI on automation and productivity

As a result of AI's increasing sophistication, automation and output have significantly benefited. Automation powered by AI has the potential to enhance productivity and save costs. Data input, answering customer support questions and other repetitive duties may all be automated with the help of AI. It allows employees to devote their time and effort to the more sophisticated jobs that need human intellect.

The real-time insights into operations made possible by AI-driven automation also aid firms in making better choices more quickly. Artificial intelligence (AI) may swiftly examine massive data sets in search of trends or patterns that inform better decision-making. As a bonus, AI may automate factories' production processes, leading to greater efficiency with less input. Companies that harness AI's potential for automation and productivity in today's fast-paced market have a far better chance of surviving.

The role of AI in business

The advent of AI has altered the structure of businesses and the way they engage with their clientele. Automating tasks, better-serving customers and maximizing productivity are all possible thanks to artificial intelligence (AI)-powered technologies like machine learning, natural language processing and computer vision.

Human Identity Chips

What is human chip implant?

A **human microchip implant** is any electronic device implanted subcutaneously (sub dermally) usually via an injection. Examples include an identifying integrated circuit RFID device encased in silicate glass which is implanted in the body of a human being. This type of subdermal implant usually contains a unique ID number that can be linked to information contained in an external database, such as identity document, criminal record, medical history, medications, address book, and other potential uses.

Types of implants

- Brain implant
- Skin
- Dermal implant (on the skin): Invisible transdermal patch
- Sub-dermal implants (under the skin): Biogas coated NFC chip injected under the skin.

Usage

For Microchip implants that are encapsulated in silicate glass there exists multiple methods to embed the device subcutaneously ranging from placing the microchip implant in a syringe or trocar and piercing under the flesh (subdermal) then releasing the syringe to using a cutting tool such as a surgical scalpel to cut open subdermal and positioning the implant in the open wound.

A list of popular uses for microchip implants are as follows: Address book

- Cryptocurrency wallet
- Key card
- Medical history/medical records
- Medical identification tag
- Payment cards
- Travel cards

Building access and security

In February 2006, City Watcher, Inc. of Cincinnati, OH became the first company in the world to implant microchips into their employees as part of their building access control and security system. The workers needed the implants to access the company's secure video tape room, as

documented in USA Today. The project was initiated and implemented by Six Sigma Security, Inc. The Varricchio Corporation had originally marketed the implant as a way to restrict access to secure facilities such as power plants.

A major drawback for such systems is the relative ease with which the 16-digit ID number contained in a chip implant can be obtained and cloned using a hand-held device, a problem that has been demonstrated publicly by security researcher Jonathan West hues and documented in the May 2006 issue of Wired magazine, among other places.

- The Baja Beach Club, a nightclub in Rotterdam, the Netherlands, once used Varricchio implants for identifying VIP guests.
- The Epicentre in Stockholm, Sweden is using RFID implants for employees to operate security doors, copiers, and pay for lunch.

Criticisms and concerns

Infection

Infection has been cited as a source of failure within RFID and related microchip implanted individuals, either due to improper implantation techniques, implant rejections or corrosion of implant elements.

Cancer risks

In a self-published report: anti-RFID dvocate Katherine Albrecht, who refers to RFID devices as "chips", cites veterinary and toxicological stu dies carried out from 1996 to 2006 which found lab rodents injected with microchips as an incidental part of unrelated experiments and dogs implanted with identification microchips sometimes developed cancerous tumours at the injection site (subcutaneous sarcomas) as evidence of a human implantation risk. However, the link between foreign-body tumorigenesis in lab animals and implantation in humans has been publicly refuted as erroneous and misleading and the report's author has been criticized over the use of "provocative" language "not based in scientific fact". Notably, none of the studies cited specifically set out to investigate the cancer risk of implanted microchips and so none of the studies had a control group of animals that did not get implanted.

G-SUITE

WHAT IS G-SUITE?

G Suite Pricing is the concern for most of the Organizations and it relies on the country and the type of subscription. Business Apps are on a go nowadays and are being used by every Organization as a tool for the maintenance as well as management.

EVOLUTION OF G-SUITE:

Google has introduced G Suite (formerly known as Google Apps for Work / Google Apps for your Domain) for the same. Google started testing Gmail for the domain

- In February 2006, in order to host Gmail accounts with the domain addresses and admin tools for account management.
- In August 2006, It came up with Google Apps for your Domain which included Gmail, Google Calendar, Google Talk, Google Page Creator (now known as Google Sites). These services were available for free as a beta service. (A service that is available for trial under real conditions.)
- In October 2006, Google. announced an edition for the educational institutions which was known as Google Apps for Education.
- In February 2007, Google came up with the Google Apps Premier Edition which was the paid edition including more storage space, and other business integration features

Google introduced several new features that have been a boon to the Business Organizations.

❖ **Infiflex Technologies** is the IT business consultant and provide optimal solutions through the cloud-based products. G Suite is one of the services among them The different editions of G Suite are –

- **G Suite Basic**
- **G Suite Business**
- **G Suite Enterprise**
- **G Suite for Education / G Suite for Non-profits**
- **G Suite for Government**

In order to set up G Suite, two billing plans are available - Flexible plan, Annual Plan.

Flexible Plan/ Monthly Plan - In this plan your billing is done on a monthly basis and at any point, you have the privilege to increase or decrease the no. of licenses and only need to pay for the accounts you use in that particular month. The payment is done monthly.

Annual Plan - The availability of the annual plan depends on the country, subscription and how you pay. The billing is done on monthly basis as well but this plan is recommended as you get a discounted rate when you go for annual commitment. In this plan also you can increase the no. of licenses.

Customize how your teams work: Creating this flexible workspace isn't just about integrations. It's about getting more out of your technology platform. And sometimes an out-of-the-box solution doesn't solve all your needs. If you've ever thought, "I wish this app could do this," that's where our no-code and low-code development tools, AppSheet and Apps Script, come in. With AppSheet, business users can build custom applications that are tied directly to the G Suite productivity tools they're already using.

Later this year, Apps Script, which also recently turned 10, will unveil a new, integrated development environment that improves the development experience by addressing top user pain points, including the release of a new code editor and debugger. With Apps Script, teams can build customized extensions, integrations, and automations for G Suite.

AppSheet and Apps Script enable teams to build solutions to the business problems they encounter every day, without relying on professional software development resources. We've heard some compelling stories from customers like PwC, who has been using Apps Script to build a culture of self-sustained and continuous innovation.

AI-powered Design

Advancements in the fields of artificial intelligence (AI) and machine learning (ML), combined with the increased availability of robust simulation, testing, and field data sets has made engineering data science a critical component of the modern product development lifecycle. Computer-aided engineering (CAE) augmented by AI is offering manufacturers the ability to discover machine learning-guided insights, explore new solutions to complex design problems through physics and AI-driven workflows, and achieve greater product innovation through collaboration and design convergence.

Design Generation

Augment current product development practices and multiply the productivity of engineering teams with AI technology to explore a broader population of customer pleasing, high performing, and manufacturable new product design alternatives.

By applying the same physics-based tools used for verification from concept to design, and through to sign-off and guided by ML using organizational specific constraints, Altair® DesignAI™ enables faster design convergence by confidently rejecting low-potential designs earlier in development cycles.

Design Exploration

Increase collaboration, speed up design convergence, and drive product innovation with AI-powered design tools.For high-fidelity modeling of complex geometries, analysts can use Altair® HyperWorks® Design Explorer an end-to-end workflow for real time performance prediction and evaluation. Automating repetitive tasks using ML, Design Explorer intuitively performs direct modeling for geometry creation and editing, mid-surface extraction, surface and mid-meshing, mesh quality correction, combined with efficient assembly management and process guidance.

Design Optimization

From design fine-tuning through to design synthesis, including complex multiphysics projects or the study of sets of data, Altair® HyperStudy® helps multidisciplinary teams gain insight from complex models, explore and create new concepts with a variety of inputs, determine best compromises, and support decision-making.

High-fidelity Modeling Made Easy with AI

Hyper Worksshape AI makes it possible to automate pattern and shape recognition within a model, enabling the user to select all similar shapes and edit them at the same time. It uses clustering to group the parts, allowing the user to model a small number of groups rather than a large number of individual parts.

ShapeAI contains automatic feature extraction for the specified geometry itself without any additional input or intervention. Combining these features with ML algorithms in HyperWorks' matching tools puts the power of geometric ML at the fingertips of every user. shapeAI can be used to organize components of complex models by geometric similarity so that modifications to one part can be synchronized to all.

Anomaly Detection and Test Rig Analytics with AI

Altair® Compose® is an environment for doing math calculations and manipulating and visualizing data, as well as programming and debugging scripts useful for repeated computations and process automation. Compose allows users to perform a wide variety of math operations including signal processing.

Zigbee is a standards-based wireless technology developed to enable low-cost, low-power wireless machine-to-machine (M2M) and internet of things (IoT) networks.Zigbee is for low-data rate, low-power applications and is an open standard. This, theoretically, enables the mixing of implementations from different manufacturers, but in practice, Zigbee products have been extended and customized by vendors and, thus, plagued by interoperability issues. In contrast to Wi-Fi networks used to connect endpoints to high-speed networks, Zigbee supports much lower data rates and uses a mesh networking protocol to avoid hub devices and create a self-healing architecture.

Zigbee specifications

Zigbee is based on the Institute of Electrical and Electronics Engineers (IEEE) Standards Association's 802.15 specification. Zigbee is built for control and sensor networks on the IEEE 802.15.4 wireless standard for wireless personal area networks (WPANs). The Zigbee WPANs operate on 2.4 Ghz, 900 MHz and 868 MHz frequencies. The Zigbee specifications, which are maintained and updated by the Zigbee Alliance, boost the IEEE 802.15.4 standard by adding network and security layers in addition to an application framework.

The standards created by the alliance can be used to create multivendor interoperable offerings. Manufacturers that are developing custom applications that don't need to operate with the applications of other manufacturers can create their own specific variations and extensions.

As of this writing, there are three Zigbee specifications: Zigbee PRO, Zigbee RF4CE and Zigbee IP.

Zigbee PRO aims to provide the foundation for IoT with features to support low-cost, highly reliable networks for device-to-device communication. Zigbee PRO also

offers Green Power, a new feature that supports energy harvesting or self-powered devices that don't require batteries or AC power supply.

Zigbee RF4CE is designed for simple, two-way device-to-device control applications that don't need the full-featured mesh networking functionalities offered by the Zigbee specification.

Zigbee IP optimizes the standard for IPv6-based full wireless mesh networks, offering internet connections to control low-power, low-cost devices.

Mesh networking

A key piece of the Zigbee protocol is its ability to support mesh networking. Zigbee uses a mesh network architecture for communication.

A mesh network is a local area network (LAN), wireless LAN (WLAN) or virtual LAN (VLAN) that employs one of two decentralized connection arrangements: full mesh topology or partial mesh topology.

The Zigbee protocol defines three types of nodes: coordinators, routers and end devices. Although all nodes can send and receive data, they each play a different role.

Zigbee Alliance

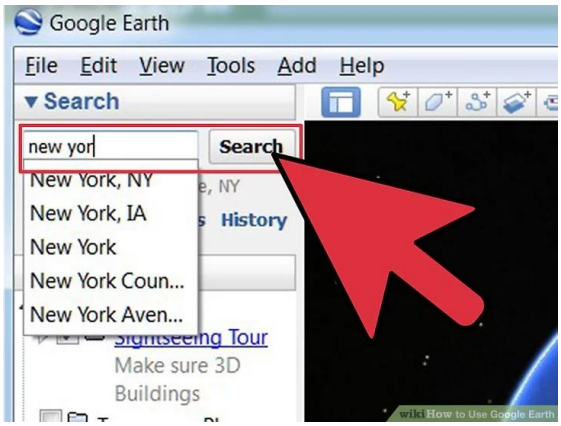
The Zigbee Alliance works to simplify wireless product integration to help product manufacturers introduce energy-efficient wireless control into their products faster and more cost-effectively. There are three types of membership with different rights and benefits:

- An adopter offers access to final, approved specifications, participation in interoperability events and access to standard work/task group documents and development activities.
- A participant offers voting rights in work groups and has early access to all Zigbee Alliance standards and specifications in development.
- A promoter offers automatic voting rights in all work groups, final approval rights on all standards and a seat on the alliance's board of directors.

Learn a Tool !

HOW TO USE GOOGLE EARTH

1. Download and install the Google Earth program from the Google Earth download page. Open Google Earth once it has downloaded.



Perform searches from the search box at the top left side of the program. You can type a place name, zipcode or postcode (for US or Canadian cities), a town/city name, an airport (three letter code or full name) or you can even try to type in a latitude-longitude location (in decimal format). Once you press the ↵ Enter key, you'll be "flown" to that destination. Be creative with your searches, but try to be realistic as to things you'd actually find on a city/county/country map worldwide.

2. Drag the map around to move from one area to another.

3. Utilize the zoom out and zoom in options from the buttons on the right hand side of the screen. Did you even realize that there was once a ladder on top of the Google Corporation building?

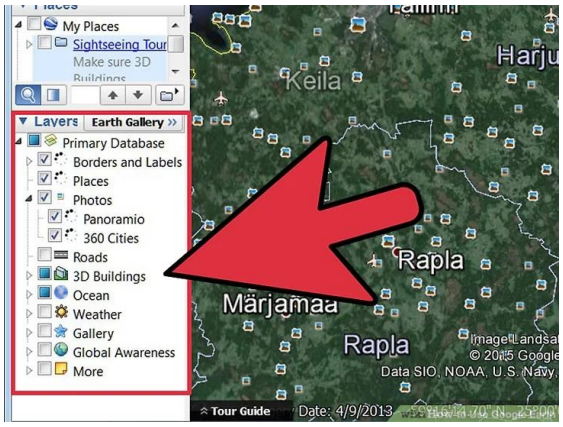
4. Turn the wheel in the top right corner to spin the item to a better understood angle. Whatever angle you choose, the angle will have to work best for you.

- Change this location even more by clicking the button in the center of it. You can change between Land mode and views from above. Sometimes, this can be useful!

5. Change views. To move from an aerial view to a view as if looking from the Earth, use the horizontal bar in the right hand corner.

6. Look for the date the picture was taken from the bottom left hand corner of the screen. And scroll through the dates to see all the satellite images from different days of the year. Zoom to a place on the map where the satellite image has a date, click the "View" menu from the menu bar and click the "Historical Imagery" button to enable the feature. Drag the location of the toggle slider switch in the top left corner to a different date and see what the area was like. (Yes, now you can see what New Orleans was like after Hurricane Katrina, or one of the many famous historical times that date back to 1990!)

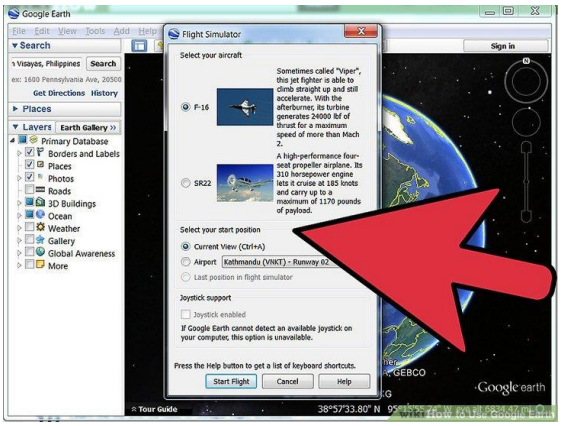
7. Utilize the Layers button from the bottom left hand side of the screen.



8. View Mars, the night Sky(Sky), and the Moon in a picturesque satellite imagery. You'll find this toggle switch in the View-Explore drop down in the Menu bar.

9. Turn on the ability to see what amount of daylight is shown to the location. Click Google Earth's "Sun" or mode to see what areas of the sky are covered by sunlight.

10. Learn the ins and the outs of Google flight simulator.



Whether you start on one of the default airport locations or you "fly" yourself to an airport and level yourself with the zoom button on one of the other airports around the world, the flight simulator will trigger and allow you to fly over areas and view other flight-imagery of cities.

Reviewbox

INKSCAPE

Draw Freely is Inkscape's apt tagline—and what could be better than free, professional-level software that works on both Mac and Windows platforms? Not much, but for seasoned users of popular, industry-leading like Adobe Illustrator, Inkscape comes with a price in the form of a steep learning curve and an unwieldy interface, especially for Mac users.

Inkscape is a vector graphics creation and editing application that's free to download and use on not only Windows and Mac, but also on GNU/Linux operating systems. If you are a PC-based illustrator, a designer who is subscription-averse, or you're unable to invest in expensive software packages, then Inkscape might be for you. However, expect a learning (or unlearning) curve if you are accustomed to working in mainstream products like CorelDRAW and Adobe Illustrator.

INKSCAPE

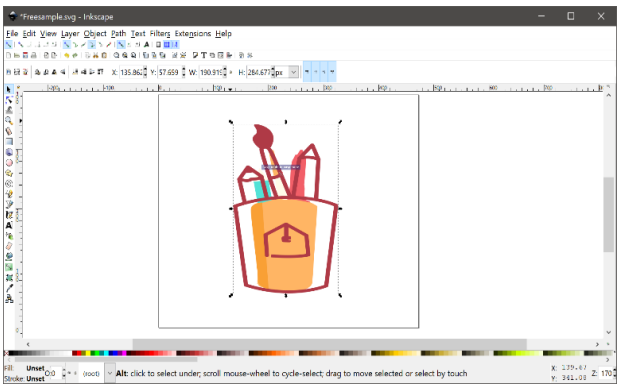
Inkscape is open-source software, which means that while the authors retain copyright, they have released the source code so that the public can further the program's development collaboratively.

PROS

- Free and full-featured.
- Cross-platform.
- Robust community and extension ecosystem.
- Good placement and path tools.
- Helpful website.

CONS

- Problematic Mac version.
- Interface visuals need a boost.
- Steep learning curve.
- Weak text formatting tools.
- Poor interoperability with Illustrator.



MIND PUNCH

1. I am taken from a mine, and shut up in a wooden case, from which I am never released, and yet I am used by almost everybody. What am I?

2. A Red house is made from red bricks. A blue house is made from blue bricks. A yellow house is made from yellow bricks. What is a greenhouse made from?

3. In my hand I have two coins that are newly minted. Together, they total 30 cents. One isn't a nickel. What are the coins?

4. What is harder to catch the faster you run?

5. A word I know, six letters it contains, remove one letter and 12 remains. What is it?

6. Two in a corner, one in a room, zero in a house, but one in a shelter. What is it?

7. The Water level in a reservoir is low, but doubles every day. It takes 60 days to fill the reservoir. How long does it take for the reservoir to become half full?

8. What Word begins and ends in "E," but only has one letter?

9. What has holes all over, but still holds water?

10. I have no life, but I can die. What am I?

1. Who invented worldwide web?

2. Who had invented the computer microprocessor?

3. Which is used in making I.C. chip of a computer?

4. Which was used in programming the first computers?

5. DDL is used to define the structure of a database, including the tables, columns, and data types that it contains. Its full form is?

6. In what form is the data expressed in a digital computer?

7. Structured programming languages such as C, COBOL and FORTRAN were used in which of the following computers?

8. The slogan “Write once, run anywhere” is related to which of the following programming languages?

9. “Internet escrow” is a term most commonly related to which of the following?

10. Which of the following is seen as the earliest mechanical analog computer?

FAMOUS AND FAVOURITE

Elon Musk, (born June 28, 1971, Pretoria, South Africa), South African American entrepreneur who cofounded the electronic-payment firm PayPal and formed SpaceX, maker of launch vehicles and spacecraft. He was also one of the first significant investors in, as well as chief executive officer of, the electric car manufacturer Tesla. Musk acquired Twitter in 2022.

Early life

Musk was born to a South African father and a Canadian mother. He displayed an early talent for computers and entrepreneurship. At age 12 he created a video game and sold it to a computer magazine. In 1988, after obtaining a Canadian passport, Musk left South Africa because he was unwilling to support apartheid through compulsor y military service and because he sought the greater economic opportunities available in the United States.

PayPal and SpaceX

In 2002 he founded Space Exploration Technologies (SpaceX) to make more affordable rockets. Its first two rockets were the Falcon 1 (first launched in 2006) and the larger Falcon 9 (first launched in 2010), which were designed to cost much less than competing rockets.

Tesla

Musk had long been interested in the possibilities of electric cars, and in 2004 he became one of the major funders of Tesla Motors (later renamed Tesla), an electric car company and it was founded by entrepreneurs Martin Eberhard and Marc Tarpenning.

ANSWERS

MIND PUNCH

1. Pencil Lead
2. Glass
3. A Quarter and s Nickel
4. Your breath
5. Dozens
6. The Letter “R”
7. 59 Days
8. Envelope
9. Sponge
10. A Battery

IT VITA+

1. Tim Berners Lee
2. Marcian “Ted” Hoff
3. Silicon
4. FORTRAN
5. Data Definition Language
6. Third Generation Computers
7. JAVA
8. Database Management
9. Antikythera mechanism
10. Binary

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