

# KONGU ARTS AND SCIENCE COLLEGE

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ERODE



DBT  
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DEPARTMENT OF  
COMPUTER SCIENCE(UG)

## CYBER CREWS STUDENTS ASSOCIATION

### IT UNLIMITED MAGAZINE

# 96<sup>th</sup> ISSUE

AUGUST - SEPTEMBER  
2023

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[www.kasc.ac.in](http://www.kasc.ac.in)



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## Computer Science

by E. A

IF YOU  
 DON'T KNOW WHERE  
 YOU'RE GOING  
 ANY ROAD  
 WILL GET YOU  
 THERE

```
if (brain!=empty)
{
    keepCoding( );
}
else{
    orderCoffee( );
}
```



# THOUGHTS OF ISSUE

"YOUR FUTURE IS CREATED BY WHAT  
 YOU DO { TODAY }  
 NOT TOMORROW"

# ENCRYPTION TECHNOLOGY

In today's digital age, data security has become a major concern for individuals and businesses alike. With the increase in online transactions, email communication, and cloud storage, the amount of sensitive information being shared over the internet has also increased. As a result, encryption technology has become essential for protecting data from unauthorized access.

One of the most popular encryption technologies used today is PGP encryption. PGP stands for Pretty Good Privacy, and it was developed in 1991 by Phil Zimmermann. The program uses a combination of symmetric and asymmetric encryption algorithms to protect data from unauthorized access.

Symmetric encryption is a method where a single key is used to both encrypt and decrypt data. Asymmetric encryption, on the other hand, uses two keys, a public key and a private key. The public key is used to encrypt the data, and the private key is used to decrypt it.

PGP encryption technology uses both symmetric and asymmetric encryption algorithms to provide strong encryption that is difficult to crack. When a user sends an email or file using PGP encryption technology, the data is first encrypted using a symmetric encryption algorithm. The sender then uses the recipient's public key to encrypt the symmetric key, which is then sent along with the encrypted data.

When the recipient receives the data, they use their private key to decrypt the symmetric key. They can then use the symmetric key to decrypt the data. This ensures that only the intended recipient can read the data, even if it is intercepted by hackers.

PGP encryption technology also provides digital signatures, which are used to verify the authenticity of the sender. Digital signatures work by creating a hash of the data and encrypting it with the sender's private key. The recipient can then use the sender's public key to decrypt the hash and verify the authenticity of the sender.

PGP encryption technology is widely used for email encryption, file encryption, and even full-disk encryption. It is also used by businesses to secure their sensitive data and by individuals who want to protect their personal information from unauthorized access.



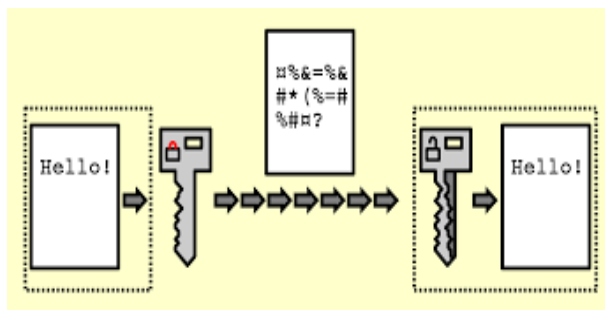
One of the advantages of PGP encryption technology is its compatibility with most email clients, making it easy to use. It is also cost-effective since it is free to use,

However, PGP encryption technology can be complex for non-technical users to set up and use. It requires users to manage their own public and private keys, which can be a hassle. Additionally, it does not integrate with all software applications, which can limit its use.

Despite its disadvantages, PGP encryption technology remains one of the most popular methods for securing data online. It provides strong encryption that is difficult to crack, ensuring that only the intended recipient can read the data. PGP encryption technology also provides digital signatures, which are used to verify the authenticity of the sender. As such, it remains an important tool for protecting sensitive information online.

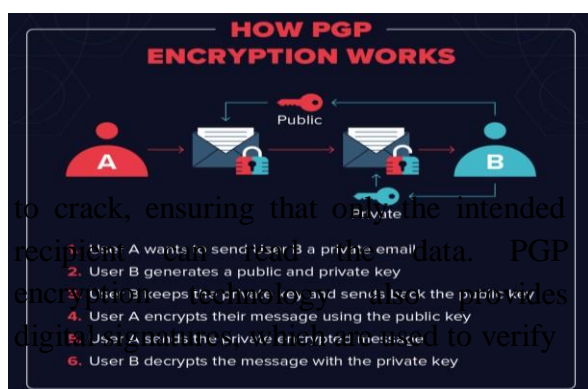
PGP encryption technology is an effective method for securing data online. It provides strong encryption that is difficult

the authenticity of the sender. While PGP encryption technology can be complex to set up and use, it is a cost-effective solution for anyone who wants to secure their data. Data encryption is a common and effective security method—a sound choice for protecting an organization’s information. However, there are a handful of different encryption methods available, so how do you choose?



In a world where cybercrimes are on the rise, it’s comforting to know that there are as many methods available to protect network security as there are ways of trying to penetrate it. The real challenge is deciding which techniques an internet security expert should employ that best suits their organization’s specific situation.

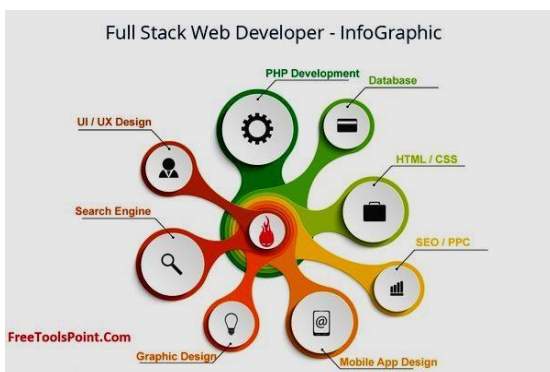
Have a look at the video below that explains what is encryption, how encryption and decryption works with simple step by step explanation, types of encryption and more.



# SCOPE OF FULL STACK DEVELOPER

The role of a full stack developer has become increasingly important in today's digital age. As businesses move towards digital transformation, there is a growing need for developers who can work across the entire tech stack, from front-end to back-end development.

A full stack developer is responsible for designing, developing, and maintaining both the front-end and back-end of web applications. They are proficient in multiple programming languages and have knowledge of database systems, server-side languages, and cloud platforms.

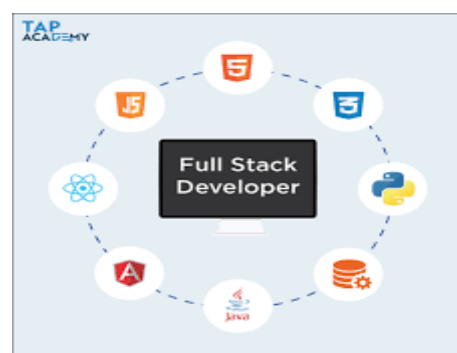


The scope of a full stack developer is vast, and they are involved in every stage of the software development process. Here are some of the areas where full stack developers are essential:

**Design and User Experience** Full stack developers have knowledge of front-end design and user experience. They are skilled in creating responsive and user-friendly web applications that are easy to

navigate. They are also proficient in HTML, CSS, and JavaScript, which are the core building blocks of front-end development.

**Back-end Development** Full stack developers are proficient in server-side languages such as PHP, Python, Ruby, and Node.js. They are responsible for designing and building the server-side architecture of web applications, including the creation of APIs, handling user authentication, and integrating with databases. **Database Management** Full stack developers are also responsible for database management. They are proficient in database systems such as MySQL, PostgreSQL, and MongoDB, and are responsible for designing and maintaining the database architecture of web applications.



**Cloud Platforms** Full stack developers have knowledge of cloud platforms such as Amazon Web Services (AWS), Google Cloud Platform (GCP), and Microsoft Azure. They are responsible for deploying



DevOps Full stack developers also have knowledge of DevOps, which is the process of automating software development, testing, and deployment. They are responsible for managing the deployment pipeline of web applications, ensuring that they are delivered to production in a timely and efficient manner.



Project Management Full stack developers are also involved in project management. They are responsible for collaborating with other developers, designers, and stakeholders to ensure that web applications are delivered on time and within budget.

The scope of a full stack developer is not limited to these areas, and they are often required to wear multiple hats. They are

versatile and can work on a variety of projects, from small startups to large-scale enterprise applications.

In addition to technical skills, full stack developers also require soft skills such as communication, teamwork, and problem-solving. They must be able to collaborate with other team members and stakeholders and communicate technical concepts in a non-technical manner.

The demand for full stack developers has been on the rise in recent years, and it is projected to continue growing in the future. According to the U.S. Bureau of Labour Statistics, employment of web developers is projected to grow 13 percent from 2018 to 2028, much faster than the average for all occupations.

Full stack developers are highly sought after by companies of all sizes, and they often command high salaries. According to Glassdoor, the average salary for a full stack developer in the United States is \$113,000 per year.

In conclusion, the scope of a full stack developer is vast, and they are involved in every stage of the software development process. They are responsible for designing, developing, and maintaining web applications, and they must have knowledge of front-end design, back-end development, database management, cloud platforms, Dev Ops, and project management. The demand for full stack developers is on the rise, and it is an exciting and rewarding career path for those with a passion for technology and problem-solving.



# GENETICS AND EVOLUTIONARY *computing*

Genetic and evolutionary computing are two areas of computer science that are focused on using algorithms inspired by biological evolution to solve complex computational problems. These algorithms mimic the process of natural selection and genetic variation to search for optimal solutions to problems.

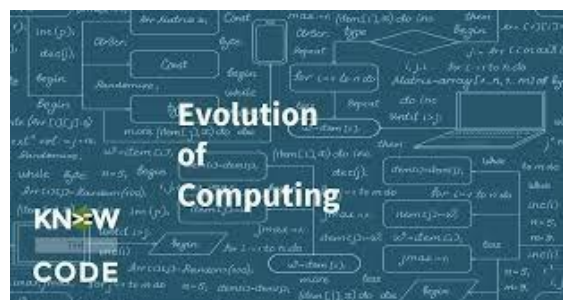
Genetic computing involves the use of genetic algorithms, which are based on the principles of natural selection and genetics. The basic idea is to start with a population of potential solutions to a problem, and then apply a selection process to identify the best solutions. The selected solutions then undergo genetic operations, such as mutation and crossover, to generate new solutions. The process is repeated until a satisfactory solution is found.

Evolutionary computing is a broader term that encompasses several different algorithms, including genetic algorithms. Evolutionary algorithms use a range of different selection and reproduction mechanisms, such as tournament selection, elitism, and genetic programming, to generate new solutions. These algorithms are often used in optimization problems, such as finding the optimal values for a set of parameters, or in machine learning tasks, such as training neural networks.

The development of genetic and evolutionary computing can be traced back to the 1950s and 1960s, when researchers first began exploring the idea of using

computer algorithms to simulate biological evolution. However, it was not until the 1980s that the field began to gain wider recognition, with the publication of John Holland's book "Adaptation in Natural and Artificial Systems". Since then, the field has grown rapidly, with researchers from a range of different disciplines, including computer science, engineering, biology, and mathematics, contributing to the development of new algorithms and applications.

One of the key benefits of genetic and evolutionary computing is their ability to solve complex problems that are difficult to solve using traditional methods. These algorithms are particularly well-suited to optimization problems, where the goal is to find the best solution among a large number of possible solutions. For example, genetic algorithms have been used to optimize the design of complex engineering systems, such as aircraft wings and turbine blades.

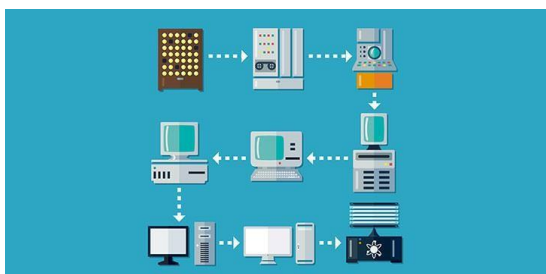


Another benefit of genetic and evolutionary computing is their ability to learn and adapt to changing environments.

These algorithms are able to evolve over time, using feedback from their environment to improve their performance. For example, evolutionary algorithms have been used in robotics to develop robots

Despite their many benefits, genetic and evolutionary computing also face several challenges. One of the biggest challenges is the difficulty of finding the optimal solution to a problem. These algorithms can sometimes get stuck in local optima, where they are unable to find a better solution, even if one exists. Researchers have developed several techniques to overcome this challenge, such as introducing randomization into the search process.

Another challenge of genetic and evolutionary computing is the difficulty of interpreting the solutions generated by these algorithms. Because these algorithms are based on biological principles, the solutions they generate can sometimes be difficult to understand or explain. Researchers have developed several techniques to address this challenge, such as visualizing the solutions in a way that is easy to understand.



In recent years, genetic and evolutionary computing have been applied to a wide range of different applications, from optimization problems in engineering and finance to machine learning and data analysis. These algorithms have also been used to develop new software and hardware systems, such as self-organizing networks and evolutionary robots.

In conclusion, genetic and evolutionary computing are two areas of computer science that are focused on using algorithms inspired by biological evolution to solve complex computational problems. These algorithms mimic the process of natural selection and genetic variation to search for optimal solutions to problems.



While these algorithms face several challenges, such as the difficulty of finding the optimal solution and interpreting the solutions generated, they offer significant benefits, such as the ability to solve complex problems and learn from their environment.

# ROLE OF UI/UX DESIGNER

The role of a UI/UX designer and developer is to create user interfaces that are both functional and visually appealing. UI (user interface) refers to the design of the interface, while UX (user experience) refers to the overall user experience of the product or service.

UI/UX designers and developers work together to create digital products such as websites, mobile apps, and software applications. They are responsible for designing and developing user interfaces that are intuitive, easy to use, and visually appealing. Their goal is to create an experience that meets the needs of the user, while also achieving the goals of the product or service.



UI/UX designers are responsible for the visual design of the interface. They work closely with developers to ensure that the design is implemented correctly. They are also responsible for creating wireframes, prototypes, and mock-ups that are used to test the design before it is implemented.

UI designers must have a strong understanding of graphic design principles, typography, and color theory.

UX designers, on the other hand, are responsible for the overall user experience. They work to ensure that the interface is easy to use, and that it meets the needs of the user. UX designers conduct user research and testing to gain insights into user behaviour and preferences. They also create user personas and user scenarios to guide the design process.

UI/UX developers are responsible for implementing the design into code. They work closely with designers to ensure that the design is implemented correctly. They are also responsible for ensuring that the interface is responsive and works well on different devices and screen sizes. UI/UX developers must have a strong understanding of front-end web development, including HTML, CSS, and JavaScript.

In addition to designing and developing the user interface, UI/UX designers and developers must also work to ensure that the product or service is accessible to all users, including those with disabilities. They must adhere to accessibility guidelines and standards, such as WCAG (Web Content Accessibility Guidelines).

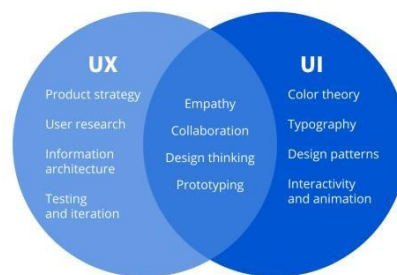
UI/UX designers and developers also play a crucial role in the product development process. They work closely with product managers, stakeholders, and developers to ensure that the product or service meets the needs of the user. They also conduct usability testing to gain insights into user behavior and preferences, and to identify areas for improvement.

In conclusion, the role of a UI/UX designer and developer is to create user interfaces that are both functional and visually appealing. They work together to design and develop digital products such as websites, mobile apps, and software applications. UI/UX designers are responsible for the visual design of the interface, while UX designers are responsible for the overall user experience.



UI/UX developers are responsible for implementing the design into code. Together, they work to ensure that the

product or service meets the needs of the user, while also achieving the goals of the product or service.



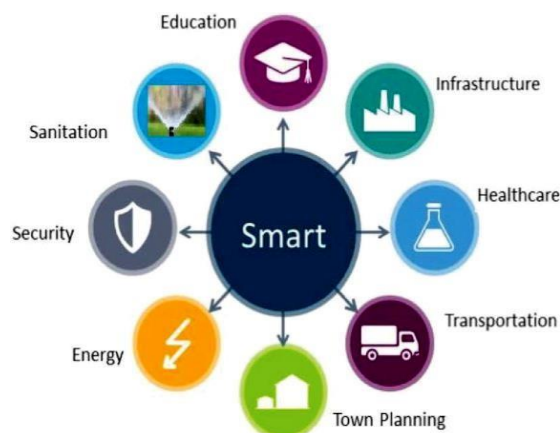
-UI Designers are generally responsible for collecting, researching, investigating and evaluating user requirements. Their responsibility is to deliver an outstanding user experience providing an exceptional and intuitive application design.

The UI UX Designer contributes to creating products that provide a positive user experience. They are in charge of determining what users want from their device and then designing it so they can easily find all its features. They also ensure that everything functions properly when combined in a single package.

Although it is not uncommon for one person to be both a UI designer and a UX designer, the job is better done separately but collaboratively because both of these fields specialize in different things. If you are interested in enhancing your UI/UX design skills, we would highly recommend you check Simplilearn's UI/UX Design Expert Masters Program. This course can help you gain the right skills and make you job-ready in just four months.

# UBIQUITOUS network

Ubiquitous network, also known as ubiquitous computing, is a concept that describes a future where computing is seamlessly integrated into everyday life. In such a world, computing devices are embedded into everyday objects, creating a network of interconnected devices that work together to make life easier and more efficient.



The idea of ubiquitous computing was first introduced by Mark Weiser, a computer scientist at Xerox PARC, in the late 1980s. He envisioned a world where computing devices were so small and ubiquitous that they would be embedded in everyday objects like clothing, furniture, and appliances. This vision has become a reality with the advent of the internet of things (IoT) and the proliferation of smart devices.

The goal of ubiquitous networking is to create a world where computing devices are integrated into everyday life and are able to work seamlessly together to provide users with the information and services they need. This is accomplished through a combination of hardware and software that allows devices to communicate with each other and exchange data.

One of the key benefits of ubiquitous networking is that it can make life easier and more efficient for users. For example, a smart home could automatically adjust the temperature and lighting based on the user's preferences and daily routine. A smart car could navigate the user to their destination while also providing real-time traffic updates and personalized recommendations for nearby restaurants or gas stations.

Another benefit of ubiquitous networking is that it can provide valuable data and insights that can be used to improve businesses and services. For example, a store could use data from customers' mobile devices to track their movements and behavior within the store, allowing them to optimize store layout and product placement.

However, there are also challenges and risks associated with ubiquitous networking. One of the main challenges is

ensuring the security and privacy of user data. With so many devices connected to the internet and exchanging data, it can be difficult to ensure that sensitive information is not accessed by unauthorized users.

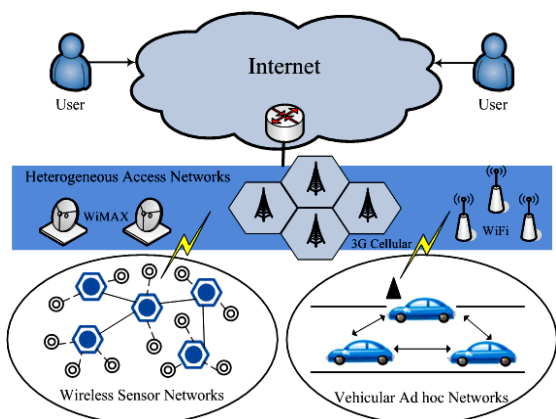
Another challenge is ensuring that ubiquitous networking is accessible to everyone, regardless of socioeconomic status or location. This is particularly important in developing countries where access to technology and the internet may be limited.

In conclusion, ubiquitous networking is a concept that describes a world where computing devices are seamlessly integrated into everyday life. It has the potential to make life easier and more efficient for users, while also providing valuable data and insights for businesses and services. However, it also presents challenges and risks that must be addressed in order to ensure the security and accessibility of ubiquitous networking. As such, it is important to continue to innovate and develop new technologies and strategies that can help us to fully realize the potential of ubiquitous networking.

Digital technology has permeated the everyday life of majority of the population – wake up alarm, weather alert, fitness tracking, diet plan, travel itinerary, shopping, communication, workplace, cars, education, personal finance, entertainment and so on. The profound interlacing of the human and technology has made us oblivious of their distinguished presence.



According to Mark Weiser who coined the term **Ubiquitous Computing** in 1991, Ubiquitous Computing also called **Pervasive Computing** is the consequence of such rapid advancement of computing that technology is omnipresent and prevalent. Such devices are always inter-connected and continuously available by leveraging the internet and wireless computing. Pervasiveness is critical as it provides greater scope to understand and factor in the inter and intra service dependencies required to minimize “service silos”. One of the profound impact of Digital Technology is not just limited to the shift in the way we work, solve and communicate, but how swiftly the underlying technologies have advanced.



# COGNITIVE COMPUTING

Cognitive computing is a field of artificial intelligence (AI) that is designed to mimic human cognition and problem-solving abilities. It uses machine learning, natural language processing, and other AI technologies to process and analyze large amounts of data and make decisions based on that analysis.

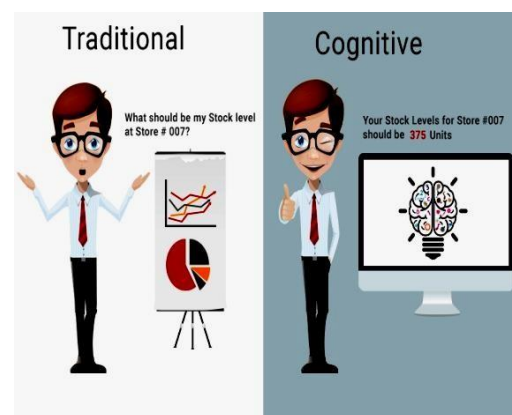
Unlike traditional computing systems that are programmed with specific instructions to follow, cognitive computing systems are designed to learn and adapt on their own. They use algorithms and statistical models to analyze data and make predictions, allowing them to identify patterns and insights that would be difficult or impossible for humans to detect.

Cognitive computing systems are used in a variety of applications, including healthcare, finance, and customer service. In healthcare, cognitive computing systems can analyze patient data and medical research to identify potential treatments and diagnose diseases. In finance, these systems can be used to analyze market trends and make investment decisions. In customer service, cognitive computing systems can analyze customer data to provide personalized recommendations and improve customer satisfaction.

One of the key benefits of cognitive computing is its ability to process and analyze unstructured data. This includes

data such as text, images, and videos, which is difficult for traditional computing systems to analyze. Cognitive computing systems can analyze this type of data and extract insights that would be difficult for humans to identify.

Another benefit of cognitive computing is its ability to learn and adapt over time. This allows these systems to improve their accuracy and efficiency as they process more data and learn from their mistakes. This also makes them more valuable in applications where accuracy is critical, such as healthcare and finance.



However, there are also challenges to implementing cognitive computing systems. One challenge is the need for large amounts of data to train these systems. These systems require massive amounts of data to learn and adapt, which can be expensive and time-consuming to collect.

Another challenge is the need for skilled professionals to develop and maintain these systems. Cognitive computing systems are complex and require expertise in AI, machine learning, and other related fields. This can make it difficult for organizations to find the talent they need to implement these systems.

Despite these challenges, cognitive computing is a rapidly growing field that has the potential to transform a wide range of industries. As the amount of data generated continues to grow, the need for cognitive computing systems that can analyze and interpret this data will only continue to increase.



**Cognitive computing (CC)** is a subcategory of **Artificial Intelligence**. It primarily focuses on the computer's ability to think, learn, and make decisions just as humans. Even though it is new, the concept has been around for several years. cognitive computing refers to computers that are programmed to learn independently and solve problems intelligently.

Cognitive systems aren't designed to solve specific problems. It learns from experience and data they have gathered. Thereon, they analyze the data for developing customized strategies and solutions. Self-learning systems interact with the environment in



With Cognitive Computing, it becomes easier to imitate human thought processes using AI applications. It makes it possible to create your own strategies and solutions on the basis of previous experience. CC goes beyond basic **machine learning** and states that a computer gathers data from a body of information that can later be accessed and recalled. It analyses the situation based on this and compares it to known facts. Thereafter, it makes a recommendation in just a few seconds.

It has become a race to create expert knowledge systems. Cognitive computing is being used in multiple industries and more providers are going to emerge in the future. Emerging players will focus on facilitating unassisted learning algorithms for better and faster deployments. Eventually, the cognitive system is going to emerge as intelligent digital assistants.



# LEARN A TOOL!

CapCut is a free all-in-one video editor and video maker app with everything you need to create stunning, high-quality videos. Beginners can get started with CapCut in a matter of seconds, while advanced users can enjoy all the functions they need to edit videos.

**High - Quality Rendering.** CapCut is an online video editing platform that has remarkable quality due to its high-quality rendering capabilities. This online video editing platform is designed to provide users with a seamless editing experience, allowing them to create professional-looking videos easily.



## **What is CapCut & How to Install It?**

Before we introduce CapCut, CapCut is an excellent video editor, but I would recommend iMyFone Filme. It is a much more comprehensive video editing tool. And it supports a wide range of file types and offers all common editing tools, along with filters, transitions, animation, text, fast video mode, and much more.

CapCut is a mobile app for iOS and Android devices, specifically developed to complement the basic video editing features of the famous social platform, TikTok. The app is free to use and promoted as a free TikTok editing app. CapCut Android and CapCut iOS both have similar features that allow you to modify your TikTok videos with filters, stickers, speed changes, background music, effects, and more. In addition, it comes with split, reverse, and other editing tools to make your TikTok videos look more polished and professional.

## **Capcut interface**

It also does not allow key and advanced editing features. Another drawback is you can add only a single music track with a video. On lengthy videos, the reverse function operates slowly and takes time to process. It is inadequate for editing lengthy videos, such as those for YouTube or vlogs.

## **Advantage of CapCut:**

One of the best things about Capcut Online is its easy-to-use interface. It has a simple drag-and-drop system that makes it easy to add and edit clips, transitions, and effects. The interface also includes helpful tutorials and tips to help you get started quickly.

## Video editor for social media posts

CapCut is a free [video editing](#) program that enjoys unprecedented success among users of social networks such as [Instagram](#), [YouTube](#) and [TikTok](#), where they can upload their perfectly edited short videos. While there are professional video editing programs like Final Cut Pro X or Adobe PremierePro, to carry out any type of editing, you will have to invest a lot of time in figuring out how to do so.

Thus, simpler apps like CapCut offer a middle ground between the wide range of features of a premier editing program and the basic editing tools of apps like TikTok.

## Comprehensive features for free

With CapCut, you can upload the video you want to edit and change basic settings such as brightness, tone, and saturation of the clips you want to edit — all without paying a cent. This video editor also allows you to add endless [stickers](#), [filters](#), masks, sounds, and even copyrighted music without any problem thanks to its integrated gallery. The final output results in high-resolution videos of up to 4K HDR. What's more, CapCut also allows you to add completely customized backgrounds, animations to the titles you create, and transitions for texts and images. In addition, you can automatically change the speed of the image in certain sections thanks to the Auto Velocity function for editing horizontal clips for online posting.

## Add voice to your videos automatically

One of CapCut's most popular options is its text-to-speech function, compatible with nearly 93 different languages. Adding this useful and popular function to all the free video editing utilities, it results in a highly versatile program that can be used for all kinds of purposes — from introduction videos, instructional videos, e-commerce videos, advertising and marketing videos, to TikTok ads.

Another important aspect is that CapCut guarantees a secure editing environment for its users, as it protects data uploads through SSL and HTTPS encryption. It also grants you a highly protected cloud space, allowing you to upload and store files that will be closely safeguarded in AES128 encryption. However, the maximum duration of videos you can make with this editor is only 15 minutes, so if you are thinking of creating longer videos, you will have to resort to an alternative video editing option.



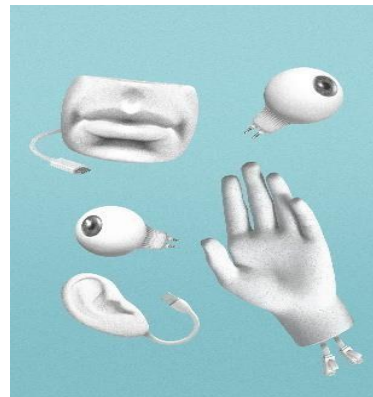
# REVIEW BOX

Towards the end of 2012, artificial intelligence (AI) scientists first figured out how to impart “vision” to neural networks. Later, they also mastered how to enable neural networks to mimic human reasoning, hearing, speaking, and writing. Although AI has become similar to or even superior to humans in accomplishing specific tasks, it still does not possess the “flexibility” of the human brain, i.e., the human brain can apply skills learned in one situation to another.

Global attention has gradually been directed towards multi-skilled AI technology, currently referred to as artificial general intelligence (AGI). The U.S. National Research Council (NRC) released the “National Artificial Intelligence Research and Development Strategic Plan” as early as October 2016, suggesting that the medium and long-term development of AI in the US should be focused on AGI. In 2017, Microsoft established the AGI Laboratory with the participation of numerous scientists in the field of perception, learning, reasoning, and natural language understanding

Alpha Star in October 2019 that ranked above 99.8% of its peers in complex battle scenes with players in the real world. In 2020, OpenAI developed GPT-3 [2] with 175 billion neurons. Based on this, it has developed an all-around “generalist” model with more than 30 types of

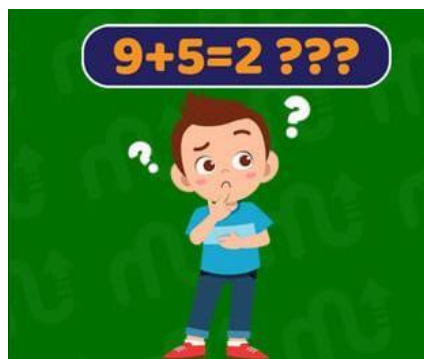
functions, including database engineers, accounting, operation and maintenance, intelligent customer service, etc. This is close to being a capable replacement for humans. At present, China has also started to focus on this field. It now possesses a large number of talented resources and capital advantage and has a strong accumulation in specialized fields, which bodes well for future development.



It is inevitable that multi-skilled AI will become the mainstream trend in the future, However, at this juncture, there is a long path to be traversed ahead. Firstly, the major problem is the current high cost of research and development, as a result of which, the research teams are mainly concentrated in a few leading organizations. Therefore, hardware technology and model compact compression technology still need to be improved. Secondly, this technology must address the problem of high reliance on labeled data and should utilize less specific domain data up to the maximum possible extent.

# Mind Punch!

1. I'm tall when I'm young, and I'm short when I'm old, what am I?
2. What loses its head in the morning and gets it back at night?
3. A farmer has 17 sheep and all but 9 die. How many are left?
4. If you build a fort, drive a Ford, and fill out a form, then what do you eat soup with?
5. What is the answer to this question?
6. Where is Captain America from?
7. What has cities, but no houses; forests, but no trees; and water, but no fish?
8. What is harder to catch the faster you run?
9. Find how it is possible?



10. Identify?





1. What is the process at the most detailed level of the data flow diagrams known as?
2. URL stands for \_\_\_\_\_
3. \_\_\_\_\_ teams develop software solutions based on the design decisions made during earlier stages of the project.
4. \_\_\_\_\_ was the first research scientist to bring the idea of the Personal Area Network.
5. Python provides one of a most popular plotting library called \_\_\_\_\_.
6. A multimedia projects said to be \_\_\_\_\_ and user interactive when users are given navigational control.
7. What is the name of the method used to start a thread execution?  
\_\_\_\_\_
8. Which of the following will directly stop the execution of a Thread? \_\_\_\_\_
9. Which will contain the body of the thread? \_\_\_\_\_
10. Which class or interface defines the *wait()*, *notify()*, and *notifyAll()* methods? \_\_\_\_\_

# FAMOUS AND FAVOURITES



**Azim Hashim Premji** (born 24 July 1945) is an Indian businessman and philanthropist, who was the chairman of Wipro Limited. Premji remains a non-executive member of the board and founder chairman. He is informally known as the Czar of the Indian IT Industry. He was responsible for guiding Wipro through four decades of diversification and growth, to finally emerge as one of the global leaders in the software industry. In 2010, he was voted among the 20 most powerful men in the world by *Asiaweek*. He has twice been listed among the 100 most influential people by *Time* magazine, once in 2004 and more recently in 2011. For years, he has been regularly listed one among *The 500 Most Influential Muslims*

According to the Forbes and Bloomberg Billionaires Index, Premji's net worth is estimated at \$9.3 billion and \$25 billion, respectively, as of February 2023. In 2013, he agreed to give away at least half of his wealth by signing the Giving Pledge. Premji started with a \$2.2 billion donation to the Azim Premji Foundation, focused on education in India.

## Early life and education

Premji was born in Bombay, India in an Kutchi Indian Muslim Shia Islam family from Gujarat. His father was a noted businessman and was known as *Rice King of Burma*. Muhammad Ali Jinnah, founder of Pakistan, invited his father Muhammed Hashim Premji to come to Pakistan, he turned down the request and chose to remain in India.

Premji has a Bachelor of Science in Electrical Engineering degree from Stanford University. He is married to Yasmeen Premji. The couple have two children, Rishad and Tariq. Rishad Premji is currently the chief strategy officer of IT business, Wipro.

## Career

In 1945, Muhammed Hashim Premji incorporated Western Indian Vegetable Products Ltd, based at Amalner, a small town in the Jalgaon district of Maharashtra. It used to manufacture cooking oil under the brand name Sunflower Vanaspati, and a laundry soap called 787, a byproduct of oil manufacture. In 1966, on the news of his father's death, the then 21-year-old Azim Premji returned home from Stanford University, where he was studying engineering, to take charge of Wipro.

# SOLUTIONS

## Mind punch solutions:

1. A candle
2. A pillow
3. Nine
4. A spoon
5. What
6. Brooklyn.
7. A map
8. Your breath
9. When it is 9 AM, add 5 hours  
to it and you will get 2 PM.
10. Vijay mallaya

## It vita solutions:

1. Functional primitives
2. Uniform Resource Locator
3. Software Development
4. Thomas Zimmerman
5. Matplotlib
6. Non - linear
7. Start()
8. Wait()
9. run()
10. object()

*The Editorial Board expresses its sincere gratitude to all those who are responsible, either by being on the stage or behind the screen for the successful launch of the magazine....!!*

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# IT UNLIMITED MAGAZINE (A BIMONTHLY BONANZA)

