CSE DOMAINS

TRIED TO COVER MOST OF THE DOMAINS

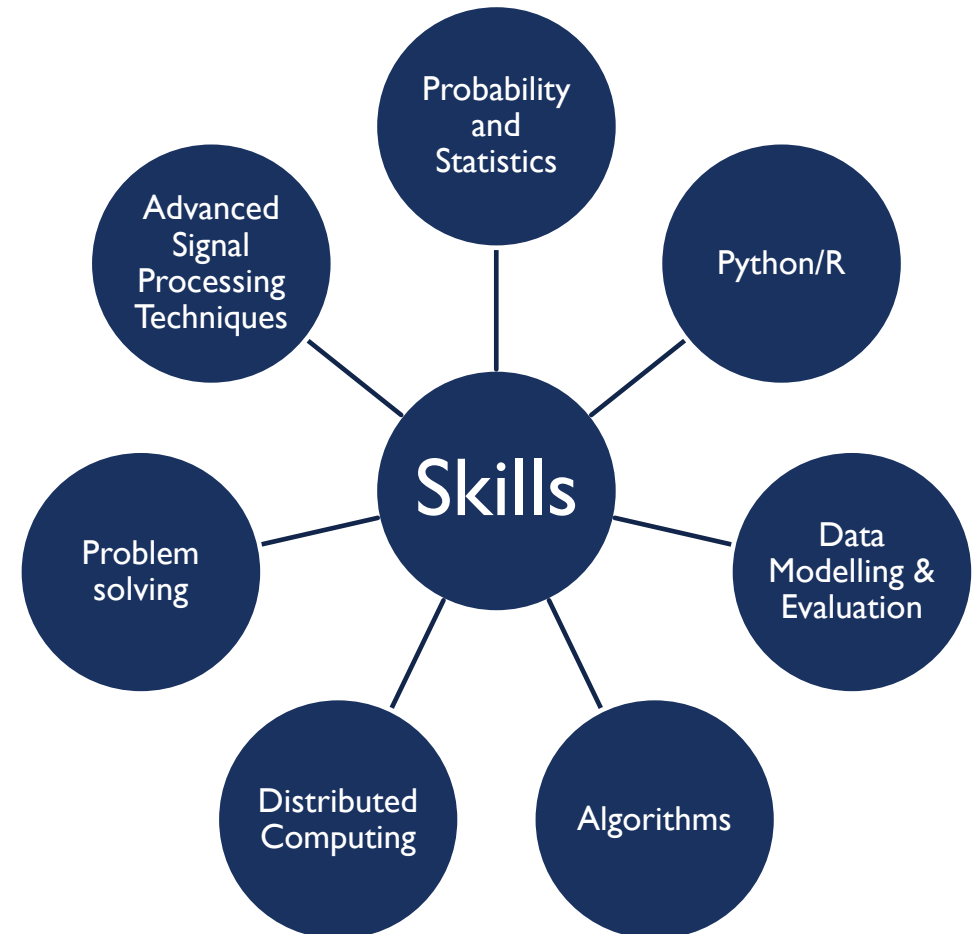# SOFTWARE ENGINEERING

What is Software engineering?

Software engineering is an engineering branch associated with development of software product using well-defined scientific principles, methods and procedures. The outcome of software engineering is an efficient and reliable software product.

Software dev.

Object-oriented design

Teamwork

Testing

Logical thinking

Skills

Problem solving

Debugging

Coding

Problem solving

MACHINE LEARNING & ARTIFICIAL INTELLIGENCE

What is Machine learning & Artificial Intelligence?
Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it learn for themselves. The process of learning begins with observations or data, such as examples, direct experience, or instruction, in order to look for patterns in data and make better decisions in the future based on the examples that we provide. The primary aim is to allow the computers learn automatically without human intervention or assistance and adjust actions accordingly.
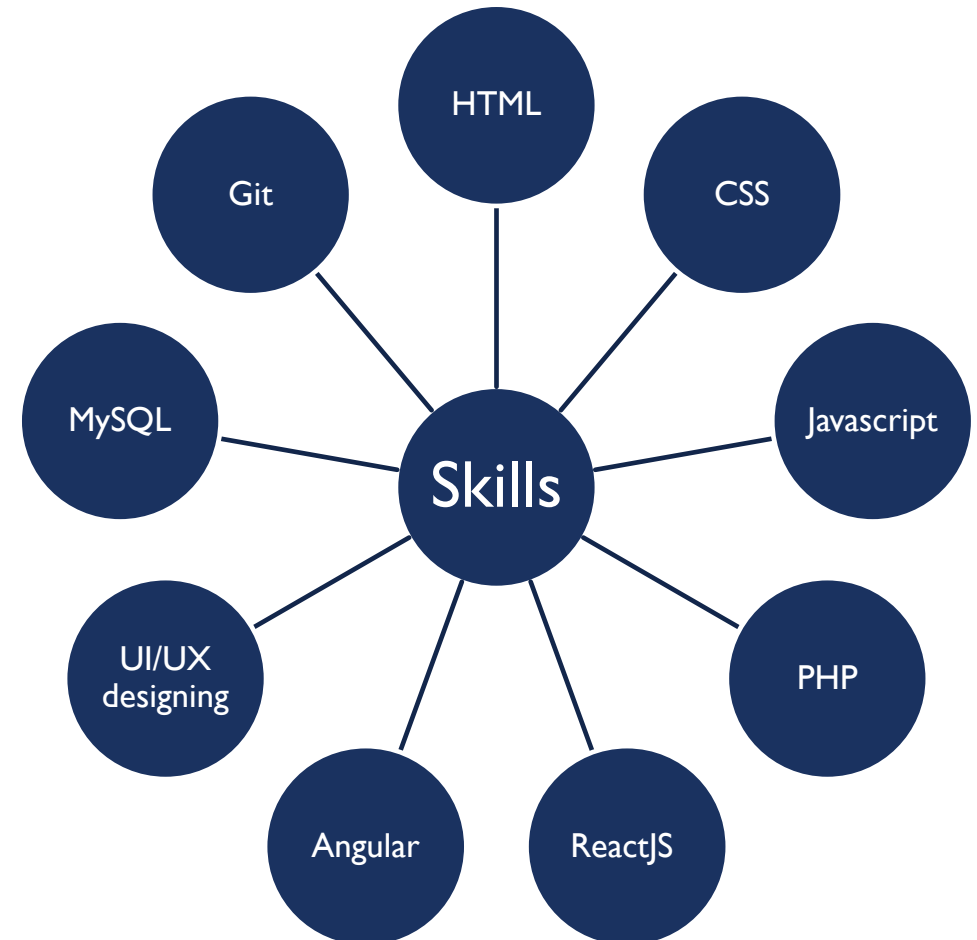
GRAPHIC DESIGN

What is Graphic Design?

Graphic Design requires designers to create graphics, typography as well as images. Thus, graphics created by these designers can be used in print publications as well as for websites. Graphic Designers often have more freedom as they do not face any restriction with respect to programming, resolution or speed.

Skills

Creativity

Visualisation

Photoshop

Typography

Illustrator

Image Layout & Effects

HTML/ Javascript

Art & Visual Perception

Computer Fundamentals

FULL STACK DEVELOPER

What is Full stack developer ?
A full stack developer is a web developer or engineer who works with both the front and back ends of a website or Application-meaning they can tackle projects that involve databases, building user-facing websites, or even work with clients during the planning phase of projects.

INTERNET OF THINGS

What is Internet of things?

The IoT brings the power of the internet, data processing and analytics to the real world of physical objects. For consumers, this means interacting with the global information network without the intermediary of a keyboard and screen; many of their everyday objects and appliances can take instructions from that network with minimal human intervention.

Machine Learning and AI

Teamwork

Automation

Business Intelligence

Skills

IP Networking

UI/UX designing

Hardware Interfacing

IOT Security

Mobile Development

BIG DATA ANALYTICS
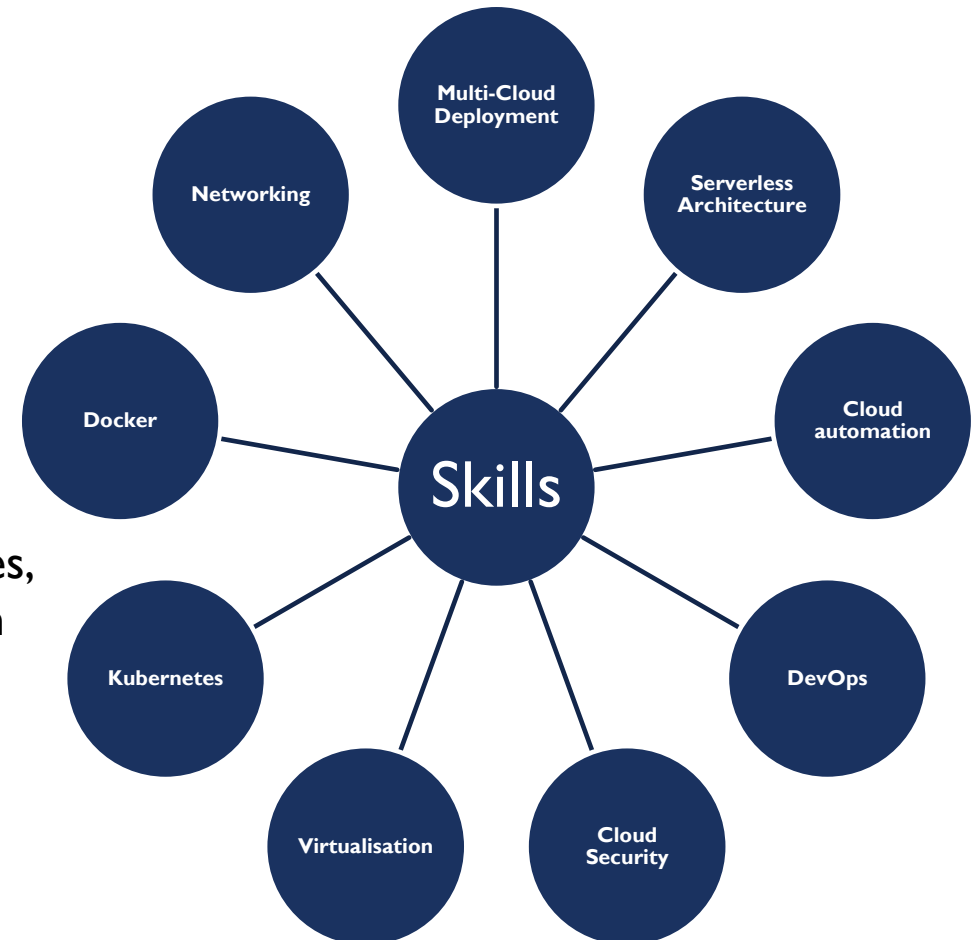
What is Big data analytics ?

Big data analytics is the use of advanced analytic techniques against very large, diverse data sets that include structured, semi-structured and unstructured data, from different sources, and in different sizes from terabytes to zettabytes.

CLOUD COMPUTING

What is Cloud computing ?
Cloud computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centers and servers, you can access technology services, such as computing power, storage, and databases, on an as-needed basis from a cloud provider like aws, azure, gcp, ibm Cloud, etc

Skills

- Multi-Cloud Deployment
- Networking
- Serverless Architecture
- Docker
- Cloud automation
- Kubernetes
- DevOps
- Virtualisation
- Cloud Security

DATA SCIENCE

What is Data science ?

Data science is an umbrella term that encompasses data analytics, data mining, Artificial Intelligence, machine learning, Deep Learning and several other related disciplines. In this post, I have mentioned the necessary Data Scientist skills.

CYBER SECURITY

What is Cyber security ?

Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks. It's also known as information technology security or electronic information security. The term applies in a variety of contexts, from business to mobile computing, and can be divided into a few common categories.

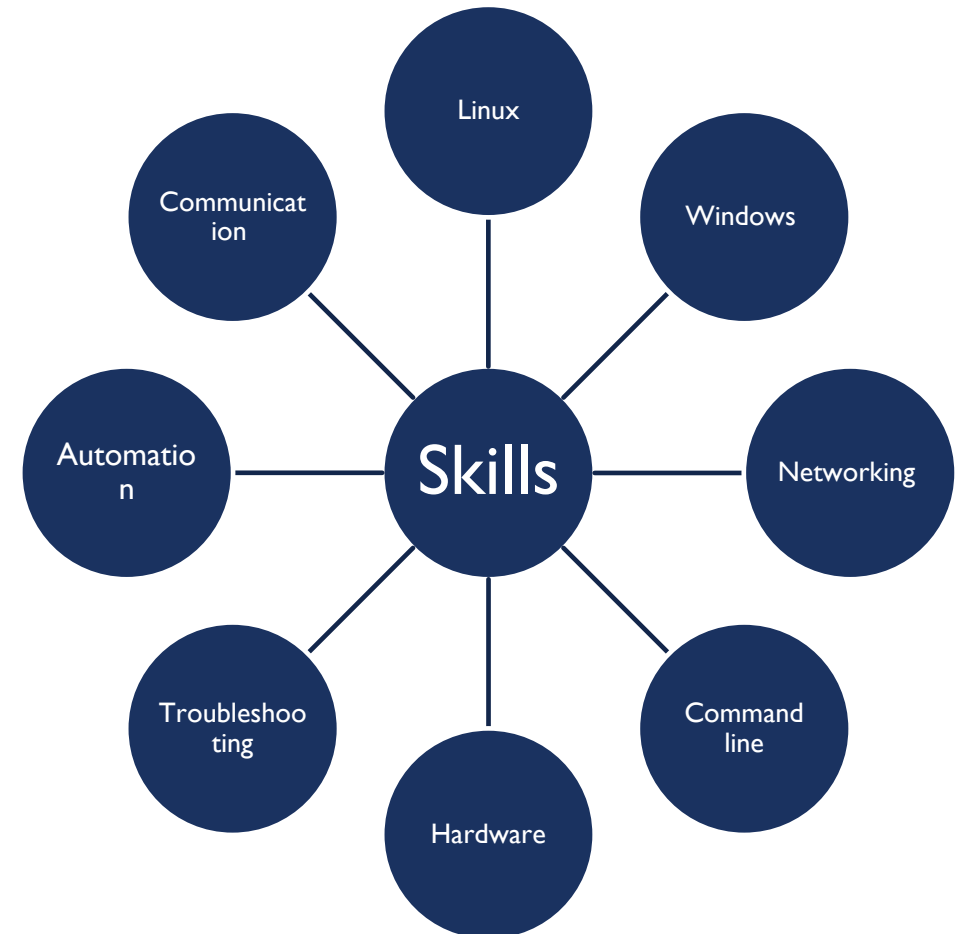# DIGITAL MARKETING

What is Digital marketing ?

Digital marketing encompasses all marketing efforts that use an electronic device or the internet. Businesses leverage digital channels such as search engines, social media, email, and other websites to connect with current and prospective customers.

INFORMATION TECHNOLOGY
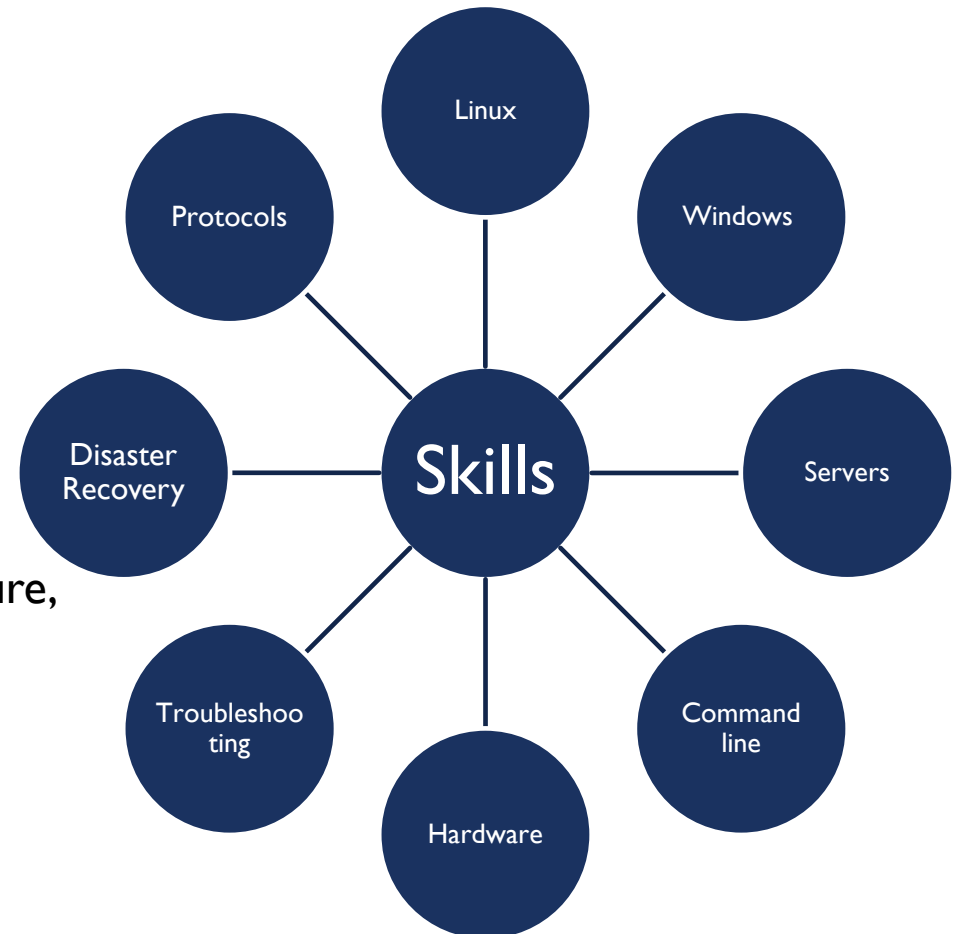
What is Information technology ?

Information technology is the use of computers to store, retrieve, transmit, and manipulate data or information. IT is typically used within the context of business operations as opposed to personal or entertainment technologies. IT is considered to be a subset of information and communications technology.

Linux

Communication

Windows

Automation

Skills

Networking

Troubleshooting

Command line

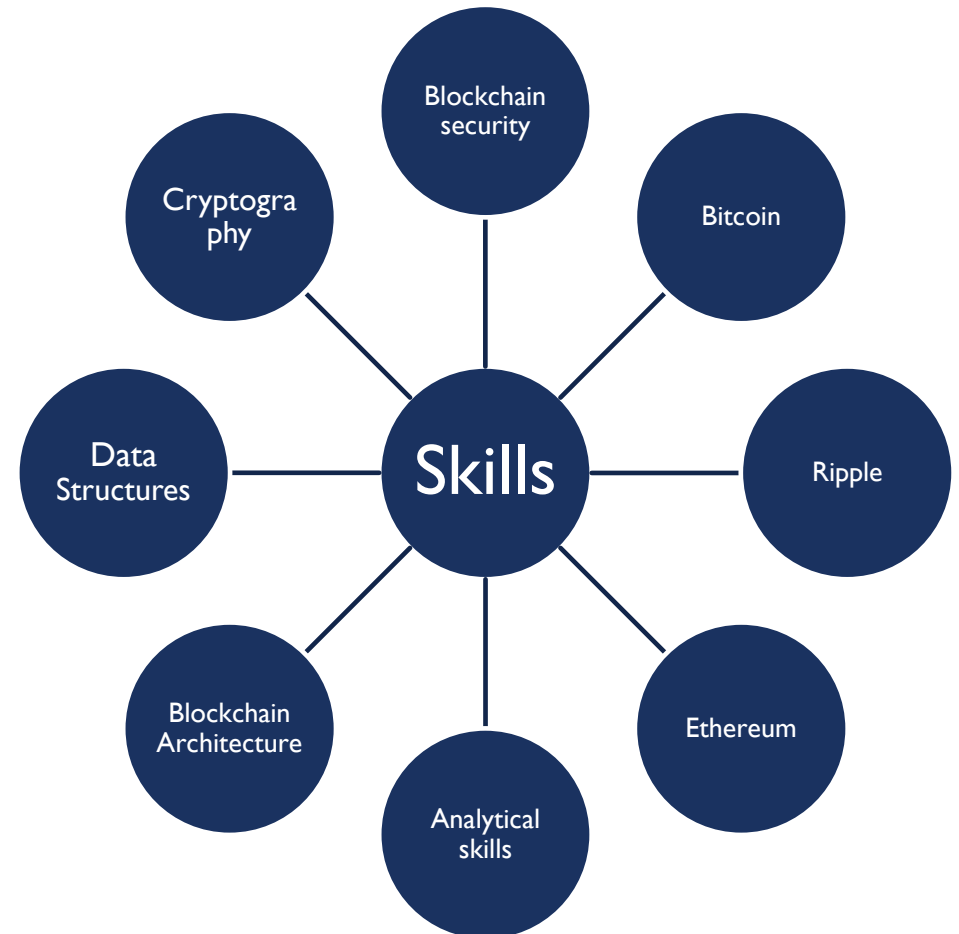Hardware

NETWORKING

What is networking?

Networking, also known as computer networking, is the practice of transporting and exchanging data between nodes over a shared medium in an information system. Networking comprises not only the design, construction and use of a network, but also the management, maintenance and operation of the network infrastructure, software and policies.

Linux

Windows

Protocols

Disaster Recovery

Skills

Servers

Troubleshooting

Command line

Hardware

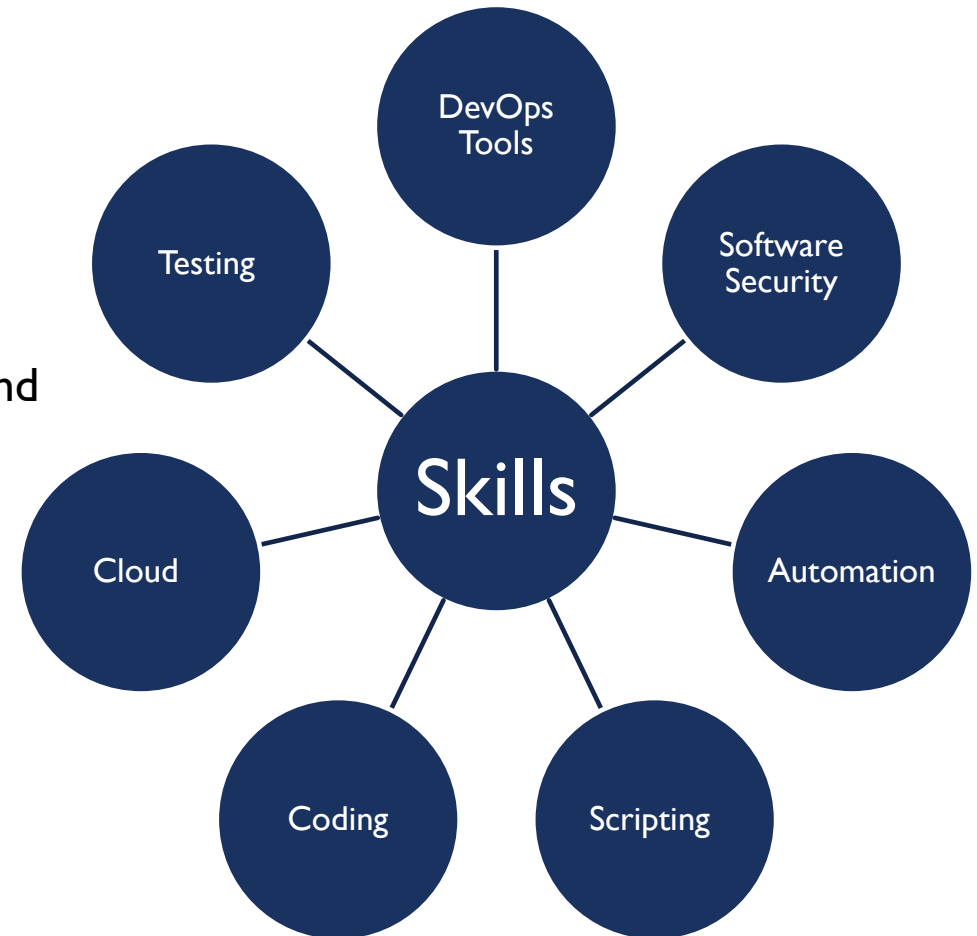# BLOCKCHAIN TECHNOLOGY

What is Blockchain technology ?

Blockchain technology is most simply defined as a decentralized, distributed ledger that records the provenance of a digital asset. A simple analogy for understanding blockchain technology is a Google Doc. When we create a document and share it with a group of people, the document is distributed instead of copied or transferred. This creates a decentralized distribution chain that gives everyone access to the document at the same time.
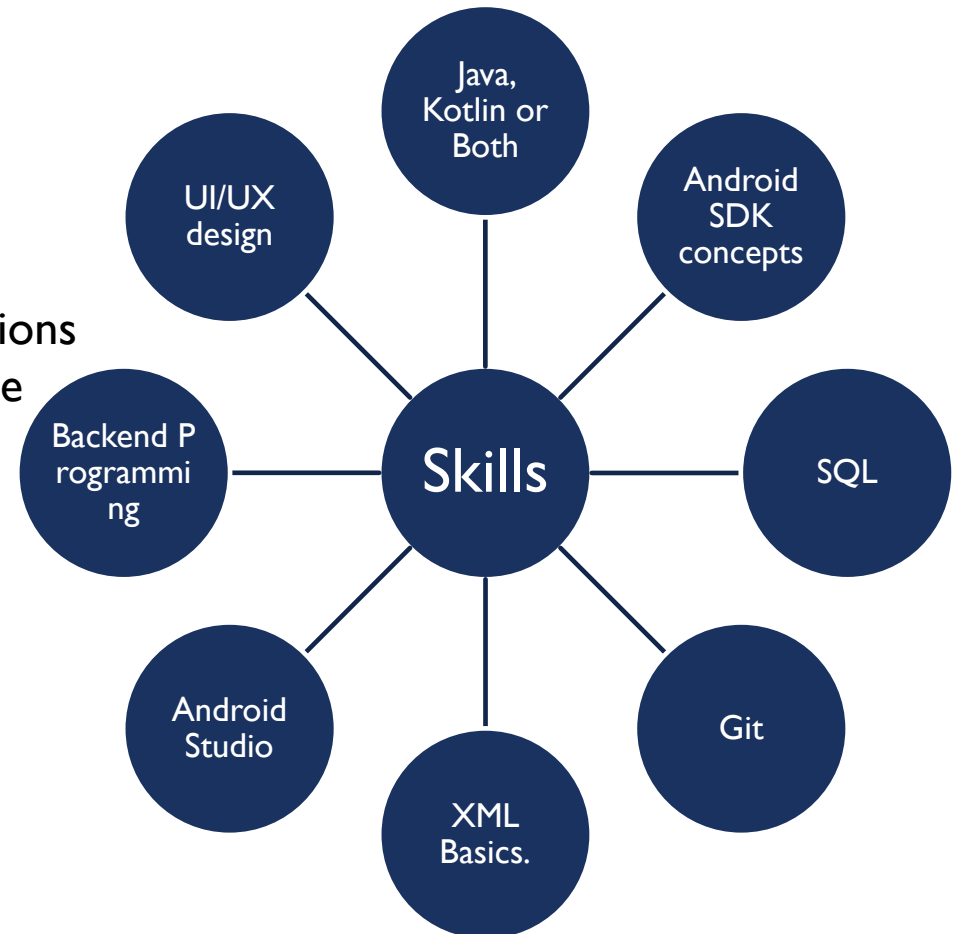
DEVOPS

What is DevOps?

DevOps is the combination of cultural philosophies, practices, and tools that increases an organization's ability to deliver applications and services at high velocity: evolving and improving products at a faster pace than organizations using traditional software development and infrastructure management processes. This speed enables organizations to better serve their customers and compete more effectively in the market.

ANDROID

What is Android?

Android software development is the process by which new applications are created for devices running the Android operating system. Google states that "Android apps can be written using Kotlin, Java, and C++ languages" using the Android software development kit, while using other languages is also possible.
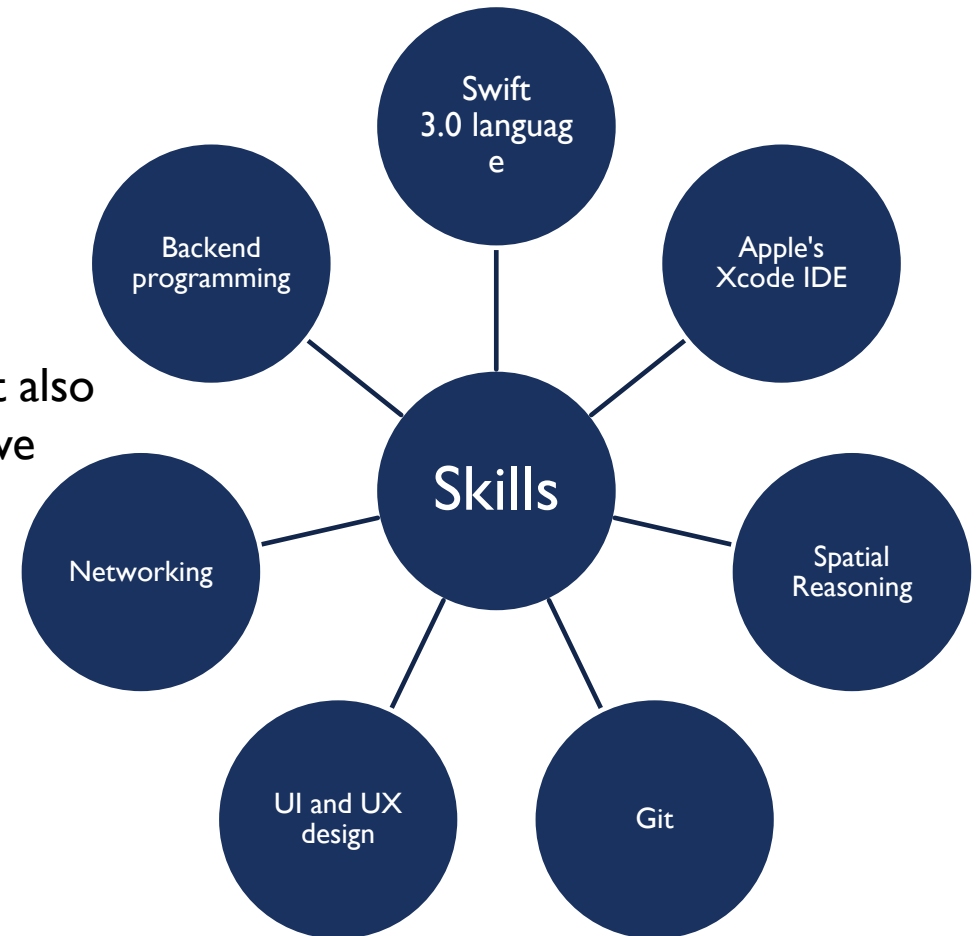
Java, Kotlin or Both

UI/UX design

Android SDK concepts

Backend Programming

Skills

SQL

Android Studio

XML Basics.

Git

IOS

What is iOS?

An iOS developer is responsible for developing applications for mobile devices powered by Apple's iOS operating system. They must also have a strong understanding of the patterns and practices that revolve around the iOS platform.

- Swift 3.0 language
- Apple's Xcode IDE
- Backend programming
- Skills
- Spatial Reasoning
- Networking
- UI and UX design
- Git

GAME DEVELOPMENT

What is Game Development ?

Game Development is the art of creating games and describes the design, development and release of a game. It may involve concept generation, design, build, test and release. A game developer could be a programmer, a sound designer, an artist, a designer or many other roles available in the industry.

AUGMENTED REALITY

What is Augmented reality ?

Augmented reality is an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory.