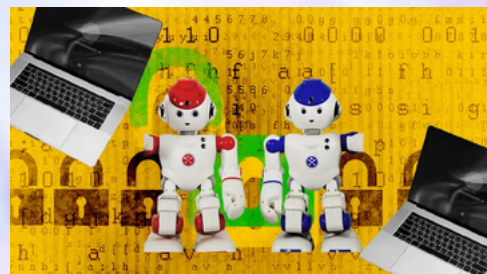# Byte Quest

Department of
## CSE

S. KOMAL KA
(ASST. PROFES
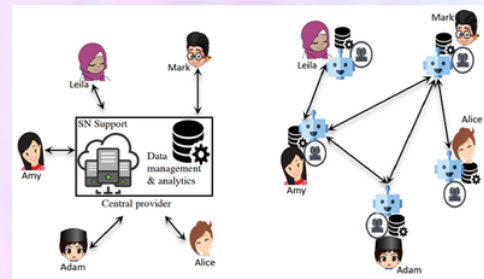T. NISHITHA
(ASST. PROFES

**ADOPTING KUBERNETES**

**COBOTS**

**DECNTRALIZED BLOCKCHAIN**

**FUTURE OF SOCIAL MEDIA**

## Department Vision

*To be a center for academic excellence in the field of Computer Science and Engineering education to enable graduates to be ethical and competent professionals.*

## Department Mission

*To enable students to develop logic and problem solving approach that will help build their careers in the innovative field of computing and provide creative solutions for the benefit of society.*

**FACULTY COORDINATORS**

**STUDENT COORDINATORS**
CHANDRASHEKAR (2/4) CSE B
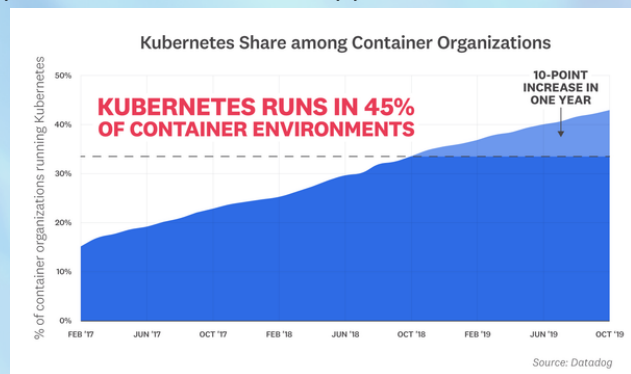SRIRAM (2/4) CSE A
ANISHA (4/4) CSE B
AKASH (3/4) CSE C

## ADOPTING KUBERNETES

Kubernetes is an open-source system, developed by Google, an orchestration engine for managing containerized applications over a cluster of machines. It works on container technology such as Docker and rkt. It's a platform to control and manage the containerized applications and services and also all other things related to that containerized application that make application consistent and available to take requests.

Steps to adopt Kubernetes are:

- Set Up a Cluster.
- Deploy an Application to Kubernetes.
- Create a Dockerfile.
- Connect to Cluster.
- Add Cluster and Login Docker Registry.
- Deploy a Docker image.
- Build and Deploy an image.
- Deploy the private image to Kubernetes.
- Automate the process Deployment to Kubernetes.



Kubernetes Share among Container Organizations

**KUBERNETES RUNS IN 45% OF CONTAINER ENVIRONMENTS**

10-POINT INCREASE IN ONE YEAR

Source: Datadog

## COBOT

A cobot, or collaborative robot, is a robot designed for direct human-robot contact in a shared area or for close proximity to people. Traditional industrial robot applications, in which robots are segregated from human contact, contrast with cobot applications. Cobot safety can be ensured through the use of lightweight construction materials, rounded edges, natural speed, and force limitations, as well as sensors and software that ensure safe behavior. Because they are designed to work alongside people, service robots could be termed cobots. Industrial robots have historically worked in isolation from humans, separated by fences or other barriers, but cobots eliminate this barrier.

Cobots can be used for a variety of tasks, including information robots in public spaces (an example of a service robot), logistics robots that transport materials within a building, and industrial robots that help automate non-ergonomic tasks like assisting people with heavy parts, machine feeding, and assembly operations.

# Byte Quest



## HOW TO BUILD A DECENTRALIZED BLOCKCHAIN

In short, this is an ecosystem which architecture does not imply a single center for managing and distributing information. That is, all personal data and content that you uploaded to a social network do not pass through the main Server (or a group of servers that are managed by a single organization).

Step 1: Key idea
When creating a decentralized network based on the blockchain, start by finding an original idea that could be implemented with your capabilities.

Step 2: Name and Domain Name
Having an idea, you can begin to choose the name of your social network and create a domain name. Ideally, a name is one or a combination of two words that, in an obvious form, beats the idea of your project, is easy to pronounce and remember. Simple examples: iPhone, YouTube, Twitter and Google.

Step 3: Requirements and Functions
The next step in creating a decentralized social network is defining the requirements for the site. Most of them are standard (features, security, design, code quality), but some will be specific.

Step 4: Development Approach
Development from scratch. Ideal if you need to create a unique decentralized social network. It requires a lot of time and money, but it allows you to stand out among the competitors and realize something really new.

Step 5: Marketing Policy
For the success of your social network, you need users, a lot of users, and the easiest way to attract them is through other social networks. To do this, you need to develop a marketing policy.

Step 6: Development and Testing
When all the preparatory work has been completed and you have a detailed understanding of what your decentralized social network should be, you can proceed directly to coding.

Step 7: Starting a social network

This should be a grand event, which is waiting for dozens, and preferably hundreds of thousands of users. It is difficult to create such an agiotage, but if you correctly organize a marketing company and start it long before the launch of the site, then it's quite realistic to do.

**FUTURE OF SOCIAL MEDIA IS DECENTRALIZED**

## What is Wrong with current social media platforms?

Social media users' concerns about their privacy have significantly increased in recent years, owing to data breaches and the misuse of this data. Incidents of data breaches have compelled users to re-evaluate their relationships with social media platforms. The platforms don't seem to be doing much about it, and without tighter regulations, including laws to stop the creation of 'monopolies,' they will continue to exploit their users.

## Decentralized Social Media

Recently, there has been a lot of talk on how blockchain technology is the perfect driver in changing the social media landscape. With military-grade encryption and optimum option for secure data storage, the potential for social media platforms built on blockchain technology to offer security against hacks and other forms of data breaches is better than any traditional social platform. At the same time, decentralization means there is no single authority that will have the final say in how the platform performs or the data is handled. This further secures user data against the selling of it by platform operators. The users are the operators, not some suits in a boardroom.

As community-driven endeavors, users decide on the content that can be uploaded, what discussions are allowed, and what is banned. This counters the suppression of free speech and, at the same time, helps people moderate hate speech. For a user, this means there is no monopoly controlling their data, assets, or identity. Each group comes together as one and transparently controls their data and privacy. As responsible and mature users, they will be able to moderate content themselves.

The days of social media as we know it are coming to an end. These Big Data companies have turned us into products, selling our data to the highest bidder. Companies like the social.network will put the control of data and digital asset creation into the hands of us, the creators.

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