The Future of the Web:
From Cloud to Edge using Server-Side Components, React 18 and Next.js 13

Presented By: Fatima Shahzad

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- Introduction to the main topics of the presentation

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INTRODUCTION

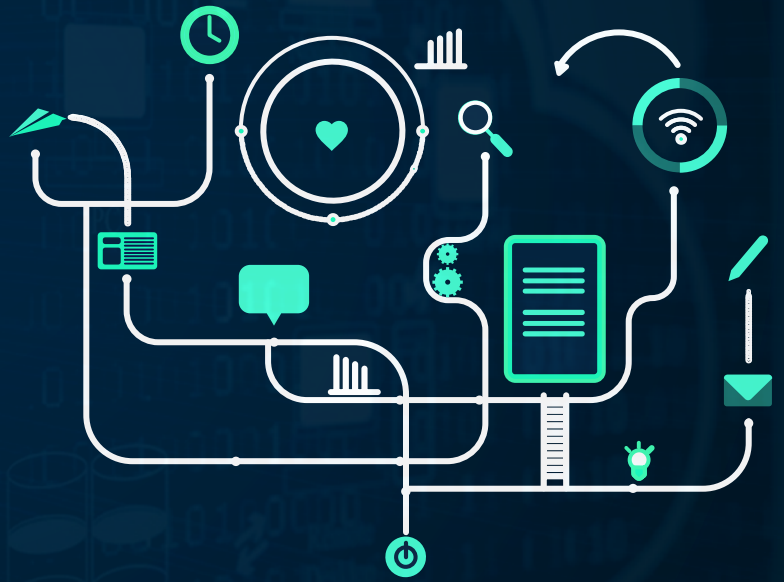
- Brief overview of the current state of the web
- Introduction to the main topics of the presentation: cloud computing, server-side components, React 18, and Next.js 13

The Future of the Web: From Cloud to Edge

Definition of cloud computing and its role in the web

Introduction to edge computing and how it differs from cloud computing

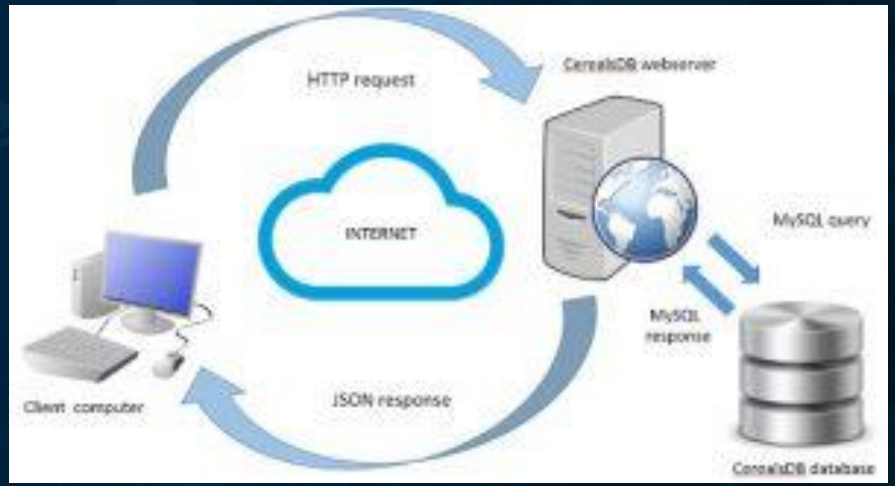
The benefits of a hybrid approach that combines both cloud and edge computing



Definition of cloud computing

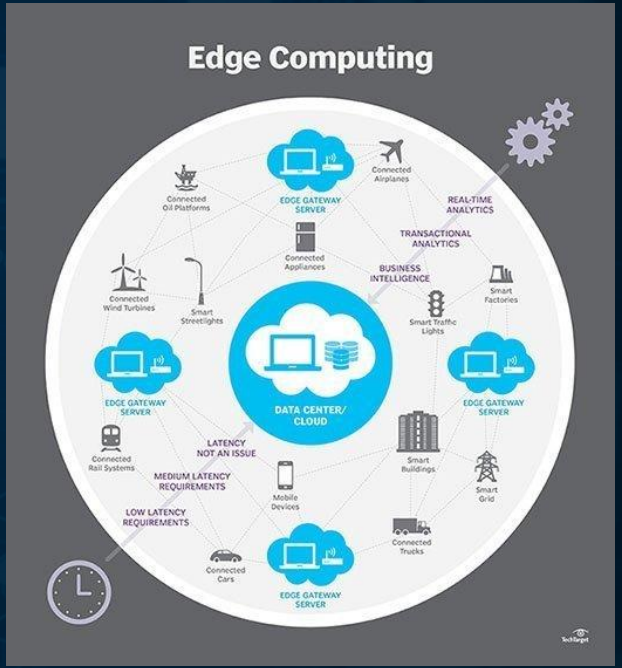
Cloud computing is the delivery of computing services—including servers, storage, databases, networking, software, analytics, and intelligence—over the Internet (“the cloud”) to offer faster innovation, flexible resources, and economies of scale.

Cloud Computing role in the web

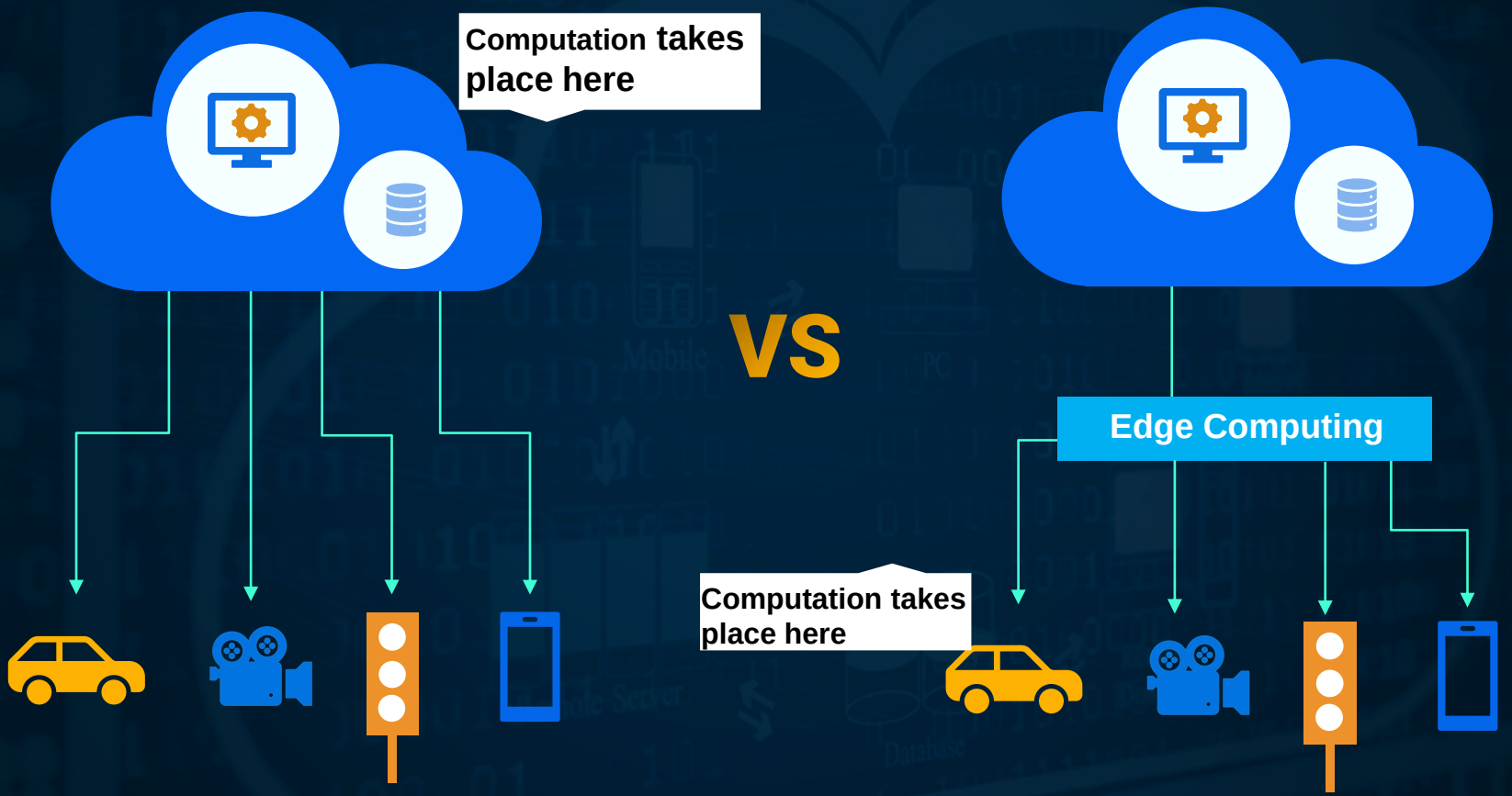


Introduction to edge computing

Edge computing is **a distributed computing paradigm that brings computation and data storage closer to the sources of data.** This is expected to improve response times and save bandwidth. The term refers to an architecture rather than a specific technology.

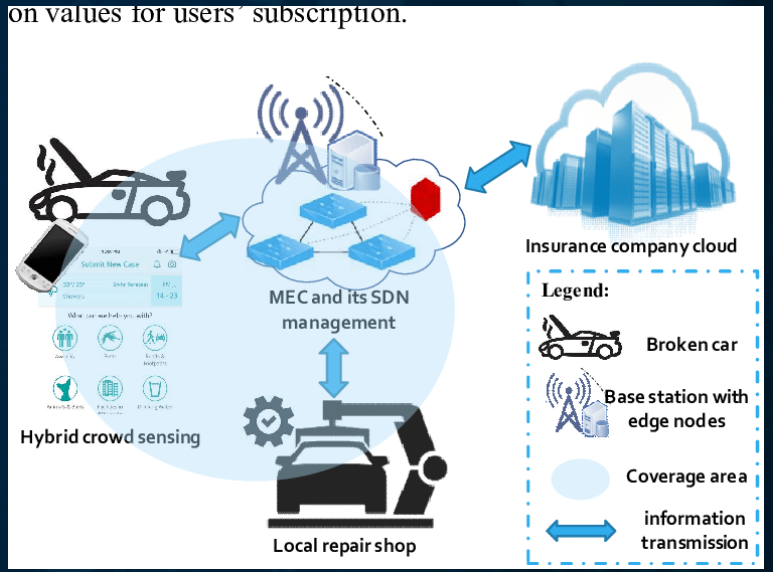


Cloud Computing vs Edge Computing



The benefits of a hybrid approach that combines both cloud and edge computing

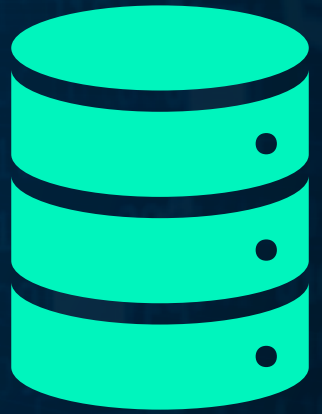
The primary benefit of a hybrid cloud is **agility**. The need to adapt and change direction quickly is a core principle of a digital business. Your enterprise might want (or need) to combine public clouds, private clouds, and on-premises resources to gain the agility it needs for a competitive advantage.



Server-Side Components

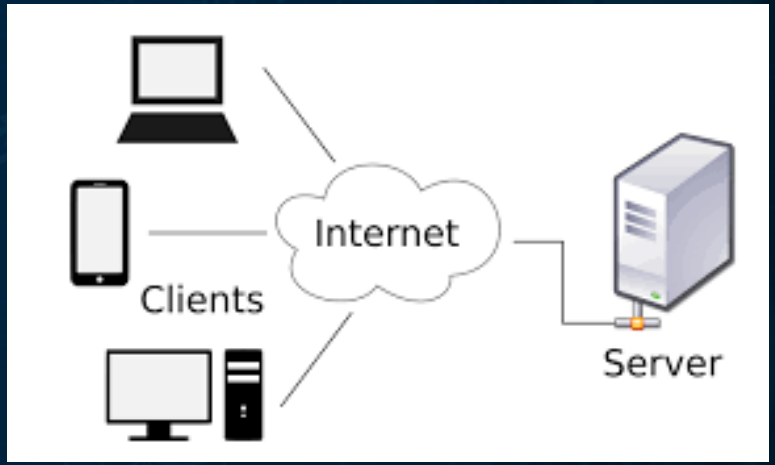
Definition of server-side components

Examples of server-side components in action

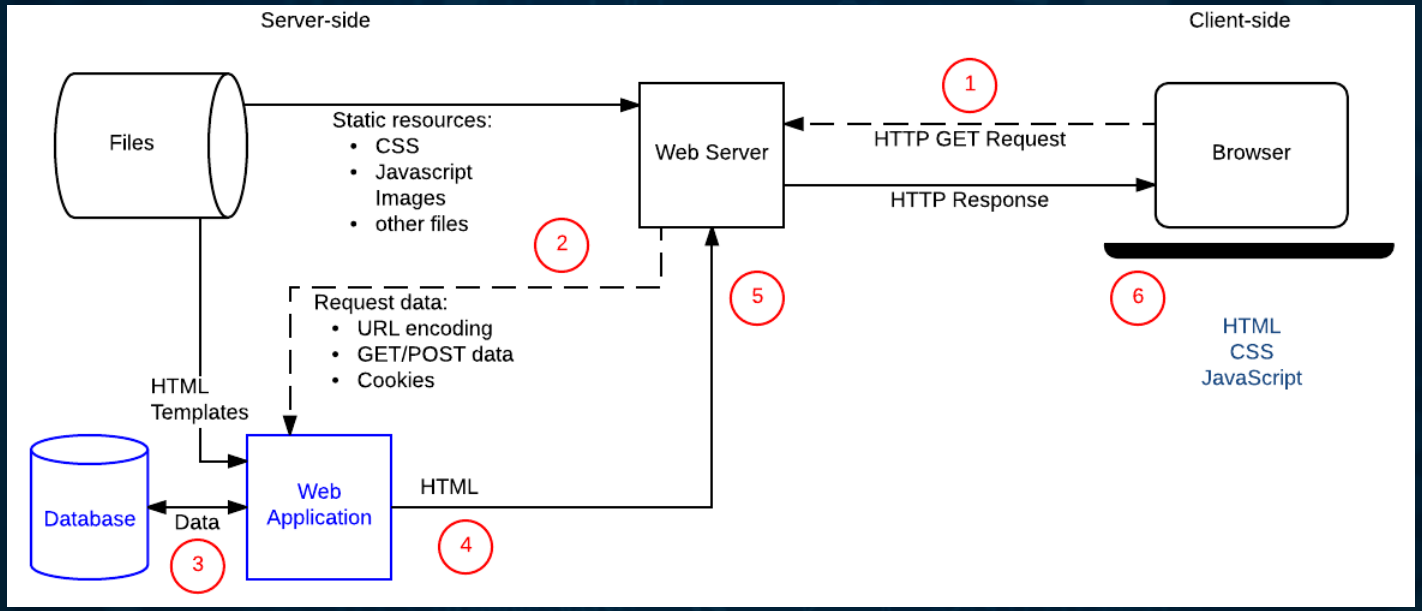


Definition of server-side components

A Server-Side Component **consist of a state object, a set of actions and a render function**. The typical lifecycle is like this: The component is rendered based as part of a view. Once loaded, elements inside the component, e.g. a button, can call server-side actions using a simple JavaScript library.



Examples of server-side components in action



React 18

Overview of the React library for building user interfaces

Introduction to the new features and improvements in React 18

React library for building user interfaces

Introduction to the new features and improvements in React 18

With the new React 18 release, React introduces '**Automatic Batching**,' an improved version of batching. Automatic Batching enables batching for all state updates from create Root , regardless of where they originate. This has batch state changes, intervals, native event handlers, asynchronous operations, and timeouts.

Next.js 13

Introduction to Next.js, a framework for building server-rendered React applications

Overview of the new features and improvements in Next.js 13

Tips for using Next.js 13 in your web projects

Introduction to Next.js, a framework for building server-rendered React applications

Next.js is a front-end framework that makes it easy to build fast websites with React—which is a free and open-source front-end JavaScript library for building user interfaces based on UI components.

New features and improvements in Next.js 13

App/Directory for File-Based Routing

React Server Components

Async Components & Data Fetching: Async components, a new method of data collecting for server-rendered components

Streaming

Turbopack

Accessibility and Inclusivity

The importance of accessibility and inclusivity in the web

Best practices for building accessible and inclusive web applications

The role of server-side components in improving accessibility and inclusivity

The importance of accessibility and inclusivity in the web

Accessibility: **addresses discriminatory aspects related to equivalent user experience for people with disabilities**. Web accessibility means that people with disabilities can equally perceive, understand, navigate, and interact with websites and tools. It also means that they can contribute equally without barriers.

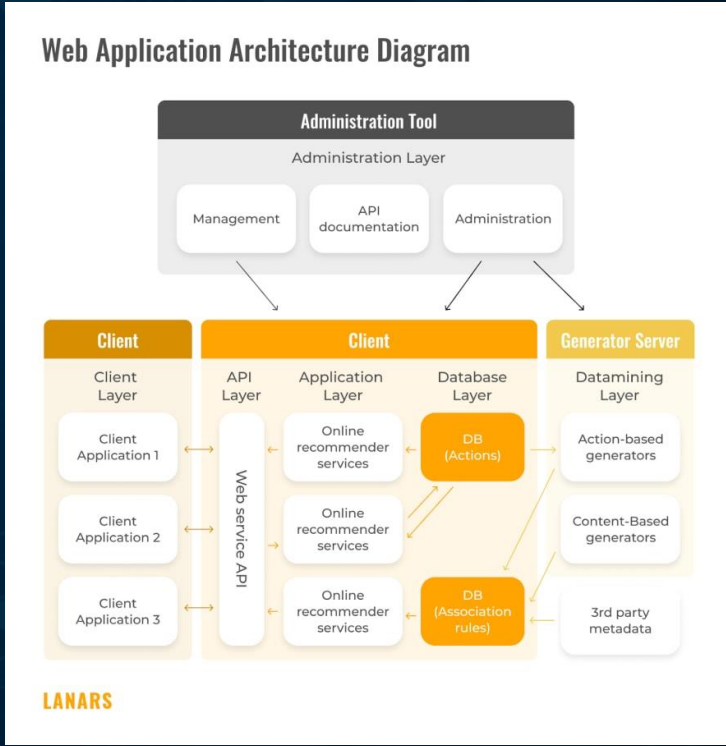
It is important to keep in mind when designing a website that not every user interacts with it the same way. By using inclusive design, you can remove bias and assumptions from your website and ensure that users do not feel excluded. Read on to learn how to master this modern approach.

Best practices for building accessible and inclusive web applications

10 best practices for building an accessible web

- Use ALT texts for images
- Avoid using div for button
- Use headings properly
- Support Keyboard navigation

Etc.



THANK YOU