SNS COLLEGE OF ENGINEERING

Kurumbapalayam(Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NAAC-UGC with 'A' Grade

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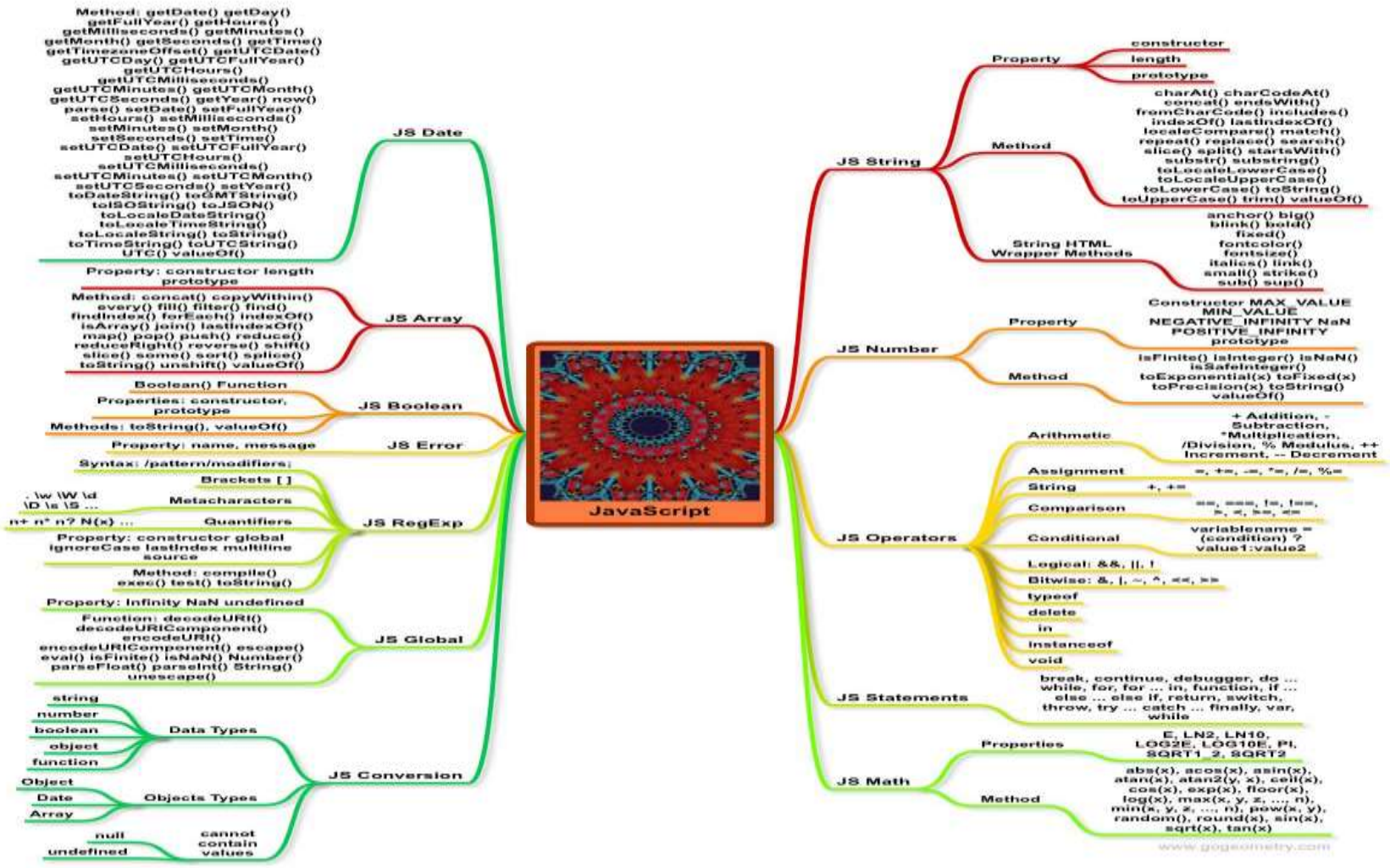
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

Course Code and Name : 19TS601 FULL STACK DEVELOPMENT

Unit 1 : JAVASCRIPT AND BASICS OF MERN STACK

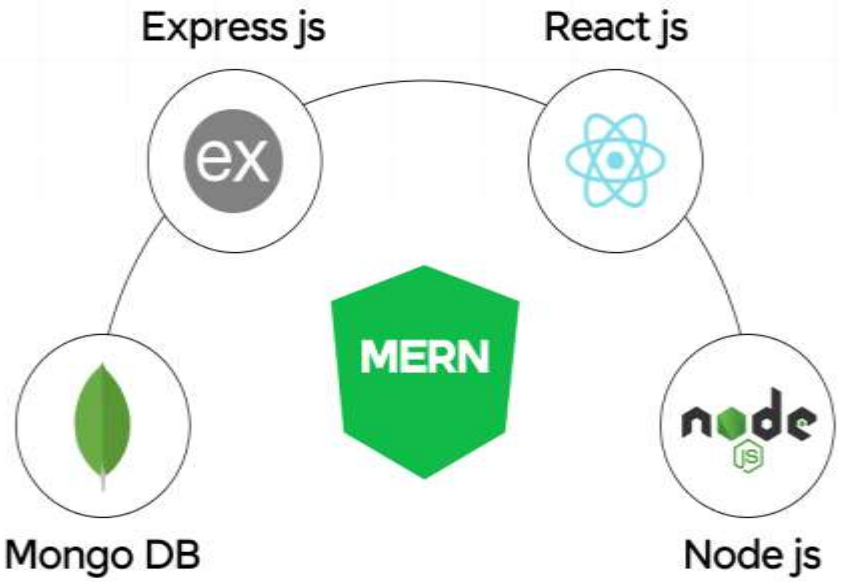
Topic : MERN Components

JavaScript Fundamentals



What is MERN Stack?

- The MERN stack is a popular and powerful stack of technologies used for building modern web applications. It is an acronym that stands for:



MERN Components

- **MongoDB**: MongoDB is a NoSQL database that stores data in a flexible, JSON-like format.
- It provides scalability and flexibility, making it suitable for handling large volumes of data and diverse data types.
- MongoDB is often used as the backend database in MERN stack applications.

Express.js

- **Express.js:** Express.js is a minimal and flexible web application framework for Node.js.
- It provides a robust set of features for building web servers and APIs quickly and easily.
- Express.js simplifies the process of handling HTTP requests, defining routes, and implementing middleware, making it an essential component of the backend in MERN stack applications.

- **React.js**: React.js is a JavaScript library developed by Facebook for building user interfaces.
- It enables developers to create reusable UI components and build single-page applications (SPAs) with a declarative and component-based approach.
- React.js provides efficient rendering and state management capabilities, making it a popular choice for the frontend in MERN stack applications.

Node.js

- **Node.js**: Node.js is a runtime environment for executing JavaScript code outside the browser.
- It allows developers to build scalable and high-performance server-side applications using JavaScript.
- Node.js is used as the backend runtime in MERN stack applications, enabling server-side logic and interaction with databases like MongoDB.

- By combining MongoDB, Express.js, React.js, and Node.js, the MERN stack provides a full-stack JavaScript solution for developing modern web applications.
- It offers advantages such as code reusability, efficient data handling, and a seamless development experience across the frontend and backend.
- Developers and businesses widely adopt the MERN stack for building robust and scalable web applications.

1.What are the MERN Components?

Text Book:

1.Pro MERN Stack, Full Stack Web App Development with Mongo, Express, React, and Node, Vasan Subramanian, A Press Publisher, 2019.

Reference:

David Flanagan, “Java Script: The Definitive Guide”, O’Reilly Media, Inc, 7 th Edition, 2020

2. Matt Frisbie, “Professional JavaScript for Web Developers” Wiley Publishing, Inc, 4th Edition, ISBN: 978-1-119-36656-0, 2019

Thank
You!