SDE Course Project

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Research Paper

Node.js: Using JavaScript to Build High-Performance Network Programs (IEEE)

Figure: Event Loop

▶ Here are some key points from the paper
  ▶ Node JS is a server-side JavaScript environment, for long running server processes.
  ▶ It uses the asynchronous event model i.e there is only one thread that is processed at one time
  ▶ When one thread is busy the processor jumps to another thread
▶ It uses an event loop ▶ go

Event Loop

▶ An event loop is a continuous process in programming that efficiently handles asynchronous tasks.
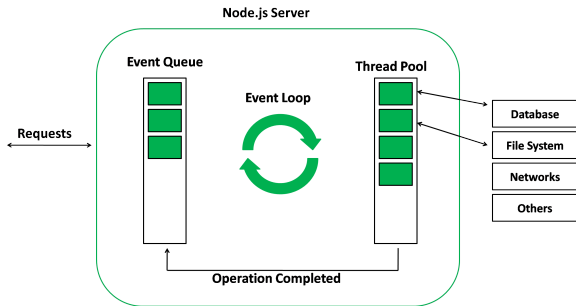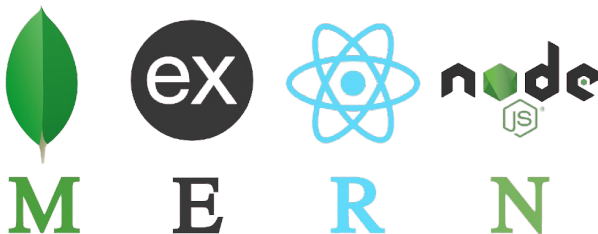

Figure: Event Loop

MERN Stack

Figure: MERN Stack

- ▶ MERN stack is a technology stack comprising of:
  - ▶ • MongoDB Database: for storing data
  - ▶ • Express JS: for backend and Routes
  - ▶ • React: for frontend
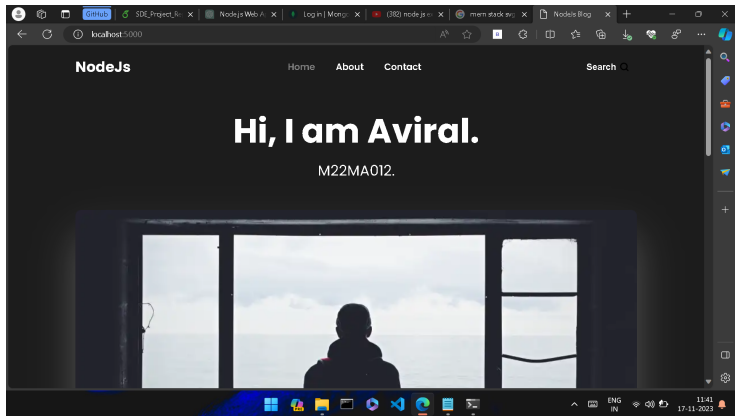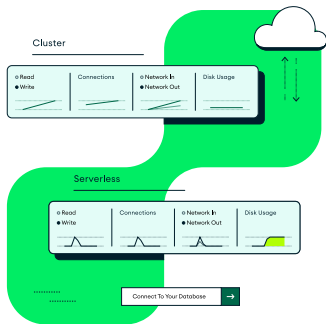 - ▶ • Node JS: JavaScript execution environment (backend)

Final Result

Figure: Homepage of my MERN blog

Blog Functionality

▶ The blog is having the following functionalities:
  ▶ A user can register
  ▶ User can login with registered credentials
  ▶ A registered user can 'create', 'edit', and 'delete' the posts in the blog
  ▶ Anyone can search for the blog posts in the blog

Conclusion

▶ We have created a very basic blog website with various functionalities of 'creation', 'editing', and 'deletion' of posts

▶ The blog is connected to Mongo DB at backend to store the data such as: Username, Passwords, Posts, user's Session Data

Thank you!