MERN Stack Assignment 2

1.What is MongoDB replication?

Replication is nothing but the method of duplication of the data across multiple servers. The process of creating a copy of the same data set in more than one MongoDB server is called as MongoDB replication. MongoDB achieves replication using replica set. A replica set is a group of MongoDB instances that host the same data set.

2.What are some of NodeJS features?

NodeJS is a server-side platform built on google chrome's JavaScript Engine (V8 Engine).
The following are some of the features of NodeJS:
1.Cross-platform compatibility
2.Object oriented
3.Convenience of using one coding language (JavaScript).
4.Scalable
5.Very fast in code execution
6.Asynchronous and event driven
7.Vast set of open-source NodeJS packages
8.Active open-source community

3. What is MongoDB's database type?

MongoDB is classified as a NoSQL database program. MongoDB is a source available cross platform document-oriented database program for high volume data storage. MongoDB uses JSON like documents with optional schemas.

4.How does Node prevent code from being blocked?

Code blocking refers to operations that blocks further execution until that operation finishes. Node uses a single thread. It means one task can be executed at a time. This is done by using stack.

This can be prevented by using the callback function. Each time when we encounter such a situation, the process causing the delay is offloaded from the stack and the execution of that process continues parallel to further execution of main code. Thus, callback for that function is pushed into a task queue and the code continues to execute asynchronously. When the process completes its execution, the callback function returns the desired output from that process and resumes normal execution.

5.What exactly do you mean when you say "pure components"?

Pure components are the components which do not re-renders when the value of state and props has been updated with the same values. The component not re-renders when the value of previous state or props is same to the value of new state or props. Pure components restrict the re-rendering which ensures the high performance of the components. A react component is considered as a pure component if it renders the same output for the same state and props value.