**MERN Stack Assignment 2**

1. What is MongoDB replication?

MongoDB replication is the process of storing the same data at multiple locations to avoid loss of data in case hardware failure or any other reason. MongoDB uses “replica set” to achieve replication. In replica one node will act as primary node which receives all read and write operations, all other secondary nodes replicates the actions done in primary server to synchronize the data across all replicas.

1. What are some of NodeJs features?

The following are some Node JS features:

* **Asynchronous** which make it run multiple things at same time.
* **Scalable** due to its capacity of handling large number of requests and load balance across all the CPU cores.
* **Cross platform compatibility** : can be used in Linux, windows etc.
* **Single threaded** but robust in handling requests.
* **Fast Data Streaming**: Due to this application will provide quick responses.
* **Uses Java Script**.

1. What is MongoDB's database type?

Mongo DB is a NoSQL database which uses document-based model. It uses Json like structure to store the data called as BSON.

1. How does Node prevent code from being blocked?

Node uses asynchronous way of executing code uses “Event Loop” in stack to avoid waiting for blocking code by running it parallelly along with the main code.

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

The components that return same output every time given the inputs props and state is same, such components are called as Pure components.

Pure components will improve the performance of the application as they use shallow comparisons in state when state changes