**MERN Stack Assignment 5**

1. Apart from MERN Stack, what other stacks are you familiar with?

Apart from MERN stack I am little lit familiar with Java Vue Js and MySQL.

1. In ExpressJs, what do you mean by middleware?

Middleware are like functions that have access to the request object (req), response object (res) and next middleware function in the application's request-response cycle. It will sit in between request and response used to modify req and res objects for tasks like parsing request bodies, adding response headers, etc.

1. What exactly do you mean when you say "sharding"?

Sharding is a concept in MongoDB, which is used to split large data sets into small data sets across multiple MongoDB instances.

Sometimes the data within MongoDB will be so huge, the queries against such big data sets can cause a lot of CPU utilization on the server. To tackle this situation, MongoDB has a concept of Sharding, which is basically the splitting of data sets into small datasets across multiple MongoDB instances.

The small splits are called as Shards, which works as one collection of big dataset.

1. Describe a few examples Where can the MERN Stack be used?

MERN Stack is used in:

* Building Web Single Page Applications
* Building mobile application using React-native in place of React.
* Building Applications that deal with API’S.
* We can build servers using Node JS.

1. What do you mean when you say "threads"?

* Threads are light weight process that allow parallel execution which in turn increases the CPU utilization.
* More the threads in Processor more fast the programs can run. Basically the CPU splits the process into threads for maximum utilization of CPU to run programs faster.