

# ASSIGNMENT 1

Que 1. What is the Prop drilling and how can we Overcome it?

Ans. =>

Prop drilling is the process where we send data from higher component to lower component (Parent to Child) for pass Data from parent to child we have to pass data from all midlist components too.

so, it is a problem with prop drilling. We can overcome with this problem in many ways these are some of them.

Just consider a page component that passes props several levels down so that child component can read it and Intermediate component doesn't know about this.

We can also use Redux in this we create a data store and connect any component to the store no matter where the component positioned React also has the concept of Context which lets us create something like a global Store and any component in context can have access to the data store.

Que2.In React how can we add validation to props?

Ans. =>

The React.propTypes object contain a list of validation that can be used to make sure the data we receive is valid:

- 1: `propTypes.any`      => (prop can be of any data type)
- 2: `propTypes.bool`     => (prop should be Boolean)
- 3: `propTypes.number` => (prop should be number)
- 4: `propTypes.string`   => (prop should be string)
- 5: `propTypes.func`     => (prop should be function)
- 6: `propTypes.array`    => (prop should be array)
- 7: `propTypes.object`   => (prop should be object)
- 8: `propTypes.oneOf()`   => (prop should be one of several types of specified values)
- 9: `propTypes.element` => (prop should be element)

10: `propType.isRequired(prop should be provide)`

11: `propType.instanceOf(prop should be an instance of a particular JavaScript class)`

12: `propType.symbol(prop should be symbol)`

Que3.Can we use classes in NodeJS?

Ans. =>

We can use classes in NodeJS. Classes are template for creating objects they encapsulated data with code to work on That data.

Classes in js are built on prototypes but also have some syntax and semantics that are not shared with ES5 class like Semantics.

There are two ways to create classes:

> using JavaScript OOP using prototype

> using ES6

Que4.What is the purpose of `super(props)`?

Ans. =>

This allows us to access `this.props` in constructor. By Calling `Super(props)` we call the Constructor of `React.Component` Which means that `super` is a reference to the parent class Constructor.

Que5.Why are the express app and server separated?

Ans. =>

Express app encapsulates our API logical which means is our data abstraction, this is where we should keep up our DB logic or data models.

The server should be differently handled as its sale responsibility is to keep the app/website running.

The Separation Of Concerns will lead to optimization.