🏫

JS.4

▼ What is a programming paradigm?

Programming paradigm is an approach to solve problem using some programming language

▼ Is JavaScript multi-paradigm?

yes

▼ What is OOP (Object Oriented Programming)?

- Objects

- Classes

- Prototypes

having objects as a programmer-provided data structure that can be manipulated with functions

▼ What is prototypal inheritance?

it means that vanilla JavaScript has objects without classes

In JavaScript, it creates a link when we create an object

inheritance is flowing up the prototype chain of inheritance

▼ What is functional programming?

- Closures

- First class functions

- Lambdas

Functional programming basically means writing code that does something (declares what is done) but isn't specific about how to do it (imperative).

▼ Imperative vs. Declarative?

Declarative: You declare what you want to happen, not how it's done.

Imperative: You declare how something is done. Procedural.

▼ Is functional programming declarative?

yes

▼ Is object oriented programming imperative?

yes

▼ What is imperative also called?

procedural

▼ What are examples of the imperative programming paradigm?

Object-oriented programming (OOP), procedural programming, and parallel processing

▼ What are examples of the declarative programming paradigm?

Functional programming, logic programming, and database processing

▼ What are some characteristics of declarative (functional) programming?

You declare what you want to happen, not how it's done.

the data is often considered immutable values (not changeable)

▼ What are some characteristics of imperative programming?

- You specify exactly how to do something, not just the desired outcome.

- Variables, pointers, and stored procedures are commonplace, and data is often considered mutable variables (changeable)

- Inheritance is commonplace

▼ What are first class functions?

Functions are first-class objects in JavaScript, meaning they can be:

- stored in an array, variable, or object

- passed as one of the arguments to another function

- returned from another function

▼ What are lambda expressions (pre-ES6)?

In JavaScript, you can use any function as a lambda expression because functions are first class.

▼ What paradigm is used for React Hooks?

React Hooks are a functional programming approach for abstracting away complexity from managing the state (i.e. mutable variables) of an app.

▼ Rule of thumb for inheritance

use no more than 3 levels of inheritance