



## Takeaways

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- We use the `fetch()` function to send HTTP requests in JavaScript.
- The `fetch()` function accepts 2 arguments, the first argument is the API endpoint, and the second argument is the request option.
- The `fetch()` function returns a Promise.



# Takeaways

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- Var sucks.
- Var is not scope safe.
- Var variables are hoisted.
- We can't access a let/const variable before declaration.
- Var variables are added to the window object by default.



## Takeaways

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- ES6 Modules help us to organise our code and improve reusability.
- There are 2 types of export: Default Export and Named Export.
- When we import a 'Named Export' we must specify what item to import, but not with 'Default Export'



## Takeaways

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- Callback is a function passed to another function
- Callback function allows customisation for the end user.
- Callback hell is not pretty, and we should try to avoid it as much as possible.



## Takeaways

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- Postman is a wonderful HTTP client.
- It sends HTTP requests so we can test API endpoints.



## Takeaways

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- We don't need 'return' and the curly braces in an arrow function if the function is a one-liner.
- If there is only 1 argument, the round brackets are optional.
- Arrow function automatically binds the parent's context to itself.



GET UP AND EAT



# Takeaways

- Inheritance is the concept of a class extending another base / parent class so it can access all the properties and methods of the base class.
- The 'super' function is a special function that represent the constructor of the base class.



# Takeaways

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- JavaScript stores data in the 'Heaps'.
- Objects are references in JavaScript. To make a copy we should clone the object.
- Triple dots (...) are referred to both 'Spread' and 'Rest' operator.
- Spread is used to unpack arrays and objects. Rest is used to pack function arguments.





# Takeaways

- Polymorphism is the concept where classes have the same method signature but different implementation.
- Polymorphism helps us to write cleaner and more generic code, so our code will be easier to maintain in the long run.



# Takeaways

- Inheritance is not very flexible and hard to maintain.
- Object composition is a better way to create an Object template.
- Object composition is the idea of building an object via smaller building blocks and join them together.





# Takeaways

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- Synchronous operations run on the spot. Asynchronous operations run later in the Event Loop.
- Event loop is the name of the queue system that Javascript uses for async tasks.
- Promises are async operations that aimed to solve the problems of callback.
- Async function returns Promise. It is a nice helper keyword to save us from writing the Promise boilerplate code.





## Takeaways

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- The 'this' keyword represents the context in Javascript.
- By default, 'this' resolves to the global object, ie 'window' object in the browser.
- 'this' is useful to access information in the current context, eg updating value of the object instance.



## Takeaways

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- Class is the template for creating object.
- We use the 'new' keyword to create object instances from class.
- A class constructor is a special function that runs whenever an object is instantiated.
- The 'Constructor function' has the same purpose as Class, just different syntax.



## Takeaways

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- Procedural Programming - writing logic as step-by-step instructions.
- Object Orientated Programming (OOP) - Splitting logic into objects to easily reuse our code.
- Functional Programming (FP) - describing the logic using function.
- JavaScript is a prototype-based language. However, it supports OOP and FP.



# Takeaways

- Object destructuring is useful to extract properties out.
- Array destructuring is useful to extract the first few elements out from an array.



## Takeaways

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- The built-in clipboard object allows us to manipulate the clipboard with JavaScript.
- Blobs (Binary Large Object) represent file as an object.
- Mime Type is a string convention to describe a particular data type.





## Takeaways

- Higher order functions - A function that accepts another function as its argument or returns a function as its result.
- Closure - a function that is defined in another function
- Functional Programming (FP) techniques can help us to write more declarative and cleaner code.



# Takeaways

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- APIs are functions exposed by a software. We use APIs to interact with the software.
- Programming APIs are consumed within the programming language itself, whereas Web APIs are consumed via HTTP.
- HTTP comes with 2 parts: the request and response. Request is sent by the browser; Response is sent by the server.
- HTTP headers contain meta data about the request/response, while the HTTP body contains the payload.



# Takeaways

- Prototype is a special object attached to every constructor function.
- A constructor function can only have 1 prototype, and it is shared across all its instances.
- Object is the root ancestor of every data type in JavaScript.
- JavaScript's inheritance system is based on the prototype chain.

