

Writing Asynchronous Code with Promises and `async/await`



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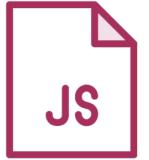
Promise

A Promise is an object representing the eventual completion or failure of an asynchronous operation.”

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Using_promises



Promises



Native support in ES2015



API for attaching callbacks to an object



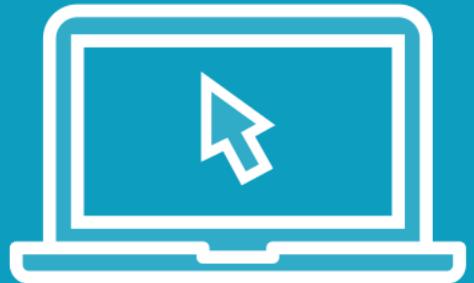
May be chained together



Created by passing a function to the Promise constructor



Demo



Creating and using promises



Generators



Generator Functions

Functions that can be paused and resumed

- State of the function is stored while paused

Return generators

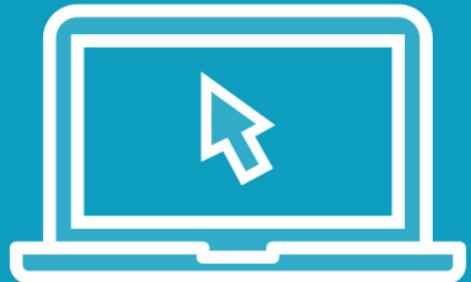
- Implement the iterator protocol

Lazy execution

- Values computed on demand



Demo



Pausing code execution with a generator function

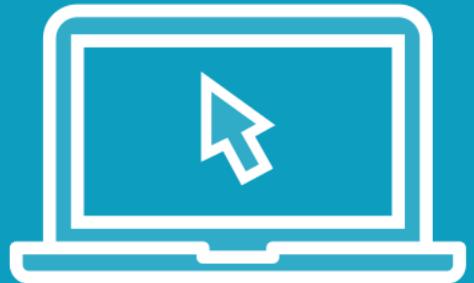


async/await

- Built with promises and generators
- Reads more like synchronous code
- Data returned from async functions is automatically wrapped in a promise
- Using the await keyword will automatically extract data from a promise



Demo



Utilizing `async/await`



Up Next:

Writing Event-driven Code with
EventEmitters

