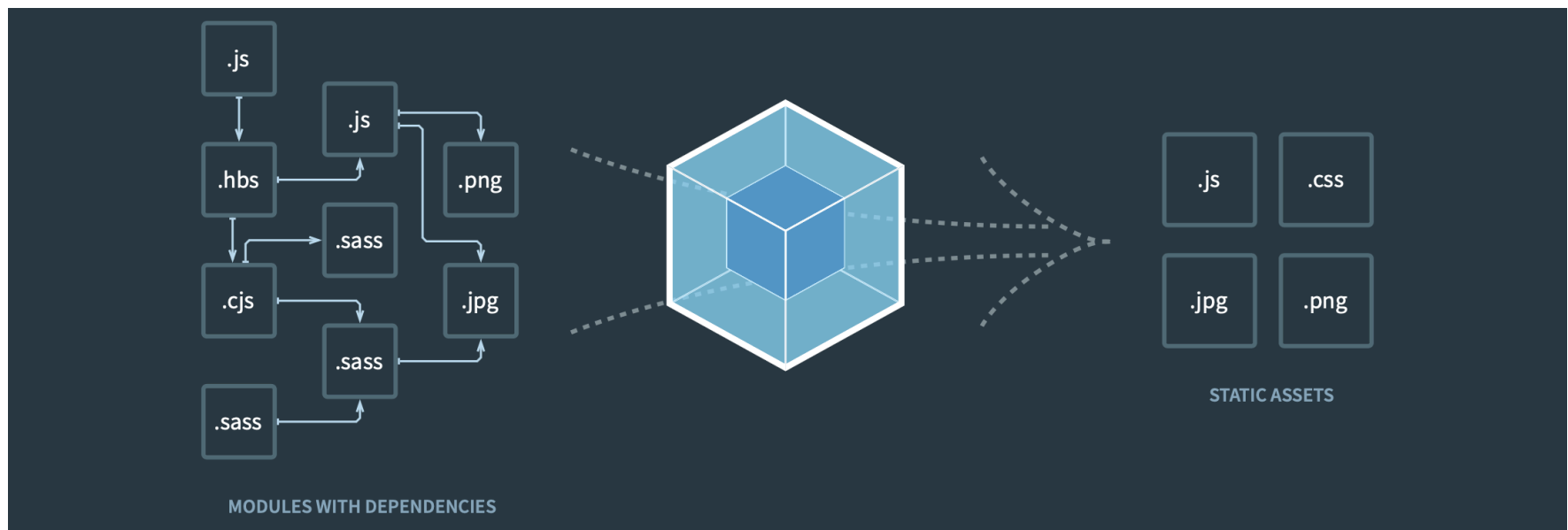


Revision

Node.js

JavaScript Classes



Basic Class Structure

```
class Ball {
  // The constructor will run when a object is created.
  constructor(diameter) {
    this.diameter = diameter;
  }

  // These methods will be added to the prototype.
  Roll() {
  }

  // This will be available on the Ball class Ball.setColour();
  static setColour(colour) {
  }
}
```

Creating Private Properties Using WeakMap

```
// WeakMaps can be used to implement private properties and methods
// There is no way to access private members implemented using WeakMaps from the
// outside of an object.
```

```
//A _ is used to indicate that this is a private property
const _width = new WeakMap();
const _height = new WeakMap();
const _depth = new WeakMap();
```

```
class Box {
  constructor(width, height, depth) {
    _width.set(this, width); //Set() is used to assign a value to the private property
    _height.set(this, height);
    _depth.set(this, depth);
  }

  createBox() {
    //Get() is used to access a value in the private property
    console.log('Box width = ' + _width.get(this));
  }
}
```

Inheritance

```
// Extend allows us to Inherit from another class
class box extends Shape {
  constructor(color) {
    // Super is used to call the parent constructor
    super(color);
  }

  draw() {
    // super is used to call the base method
    super.draw();
  }
}
```