

ImpactJS Presentation

David Leonard

City College of New York

September 17, 2014

What is a game engine?

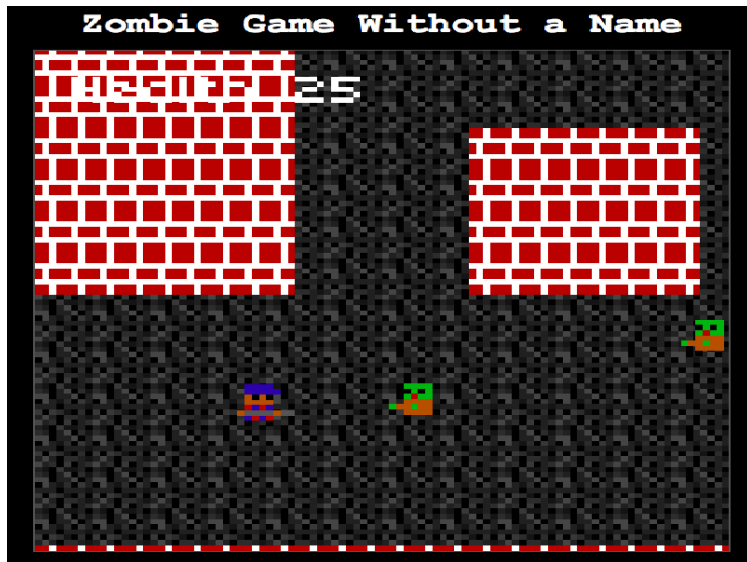
- ▶ Just a collection of algorithms

What is a game engine?

- ▶ Just a collection of algorithms
- ▶ Exposes functionality for use

What is a game engine?

- ▶ Just a collection of algorithms
- ▶ Exposes functionality for use
- ▶ Not a point and click tool







Why ImpactJS?

- ▶ Collision handling

Why ImpactJS?

- ▶ Collision handling
- ▶ Camera plugins

Why ImpactJS?

- ▶ Collision handling
- ▶ Camera plugins
- ▶ Map Editor

Why ImpactJS?

- ▶ Collision handling
- ▶ Camera plugins
- ▶ Map Editor
- ▶ Player Physics

Why ImpactJS?

- ▶ Collision handling
- ▶ Camera plugins
- ▶ Map Editor
- ▶ Player Physics
- ▶ Strong OOP Design

Why ImpactJS?

- ▶ Collision handling
- ▶ Camera plugins
- ▶ Map Editor
- ▶ Player Physics
- ▶ Strong OOP Design
- ▶ Runs in modern browsers

Why ImpactJS?

- ▶ Collision handling
- ▶ Camera plugins
- ▶ Map Editor
- ▶ Player Physics
- ▶ Strong OOP Design
- ▶ Runs in modern browsers
- ▶ Can export games to iOS and Android Market

JavaScript Types

► strings : "Hello World"

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : `var x = 45`

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : var x = 45
- ▶ boolean : var flip = true

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : `var x = 45`
- ▶ boolean : `var flip = true`
- ▶ function

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : var x = 45
- ▶ boolean : var flip = true
- ▶ function
- ▶ array : var arr = [1, 2, 3, 4]

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : var x = 45
- ▶ boolean : var flip = true
- ▶ function
- ▶ array : var arr = [1, 2, 3, 4]
- ▶ object : person = { name: David, Age: 23 }

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : var x = 45
- ▶ boolean : var flip = true
- ▶ function
- ▶ array : var arr = [1, 2, 3, 4]
- ▶ object : person = { name: David, Age: 23 }
- ▶ undefined : typeof person === undefined

JavaScript Types

- ▶ strings : "Hello World"
- ▶ number : var x = 45
- ▶ boolean : var flip = true
- ▶ function
- ▶ array : var arr = [1, 2, 3, 4]
- ▶ object : person = { name: David, Age: 23 }
- ▶ undefined : typeof person === undefined
- ▶ null : var x = null

JavaScript Objects

```
var person = {  
  name: David,  
  age: 23,  
  major: Computer Science  
};
```

```
person.name; // David  
person.age; // 23  
person.major; // Computer Science
```

main.js

- ▶ Require all modules

main.js

- ▶ Require all modules
- ▶ Define game classes

main.js

- ▶ Require all modules
- ▶ Define game classes
- ▶ Bind keys within Init()

main.js

- ▶ Require all modules
- ▶ Define game classes
- ▶ Bind keys within Init()
- ▶ Camera code, game logic within Update()

main.js

- ▶ Require all modules
- ▶ Define game classes
- ▶ Bind keys within Init()
- ▶ Camera code, game logic within Update()
- ▶ Draw images within Draw()

Expand skills

- ▶ Work on something you like

Expand skills

- ▶ Work on something you like
- ▶ You don't need to know the language or framework

Expand skills

- ▶ Work on something you like
- ▶ You don't need to know the language or framework
- ▶ Start building a portfolio

Expand skills

- ▶ Work on something you like
- ▶ You don't need to know the language or framework
- ▶ Start building a portfolio
- ▶ Get involved in research

Github

- ▶ Create a Github account

Github

- ▶ Create a Github account
- ▶ Contribute to open source projects

Github

- ▶ Create a Github account
- ▶ Contribute to open source projects
- ▶ Lead your own projects

Github

- ▶ Create a Github account
- ▶ Contribute to open source projects
- ▶ Lead your own projects
- ▶ Employers want to see motivation

JavaScript

- ▶ Hundreds of libraries

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js
- ▶ Express.js

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js
- ▶ Express.js
- ▶ jQuery.js

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js
- ▶ Express.js
- ▶ jQuery.js
- ▶ Most popular language on Github

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js
- ▶ Express.js
- ▶ jQuery.js
- ▶ Most popular language on Github
- ▶ Many, many, MANY jobs in JavaScript

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js
- ▶ Express.js
- ▶ jQuery.js
- ▶ Most popular language on Github
- ▶ Many, many, MANY jobs in JavaScript
- ▶ ???

JavaScript

- ▶ Hundreds of libraries
- ▶ Node.js
- ▶ Angular.js
- ▶ Express.js
- ▶ jQuery.js
- ▶ Most popular language on Github
- ▶ Many, many, MANY jobs in JavaScript
- ▶ ???
- ▶ PROFIT

Resources

- ▶ My Github Account: <https://github.com/DrkSephy>

Resources

- ▶ My Github Account: <https://github.com/DrkSephy>
- ▶ Written tutorial: <http://drksephy.github.io/impactjs/>

Resources

- ▶ My Github Account: <https://github.com/DrkSeph>
- ▶ Written tutorial: <http://drksephy.github.io//impactjs/>
- ▶ Book: Building HTML5 Games with ImpactJS

Resources

- ▶ My Github Account: <https://github.com/DrkSeph>
- ▶ Written tutorial: <http://drksephy.github.io//impactjs/>
- ▶ Book: Building HTML5 Games with ImpactJS
- ▶ Book: HTML5 Game Development with ImpactJS