

Computer graphics Tutorial 4

WebGL and ThreeJS

Miryala Narayana Reddy
CVIT

- API (Application programming interface)
- rendering 2D and 3D graphics (vectors).
- interacts with GPU for Hardware accelerated rendering
- Managed by [Khronos Group](https://www.khronos.org/).



- Web Graphics Library (WebGL)
- Javascript API
- Use of GPU-accelerated physics and image processing and effects.
- Graphics code and logic is written in JavaScript.
- HTML 5
- DOM (document object model)
- Canvas element.

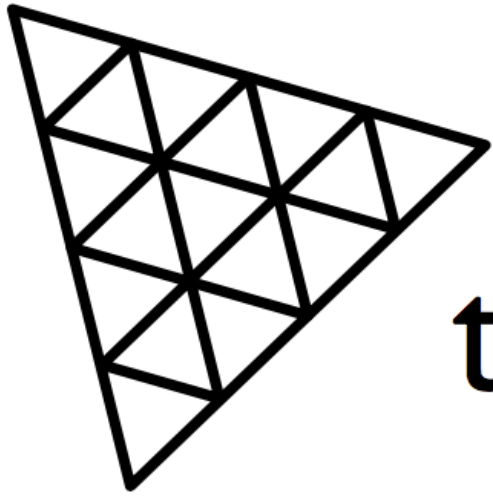
```
<canvas id="example" width="200" height="200">
```

This text is displayed if your browser does not support HTML5 Canvas.

```
</canvas>
```

- WebGL is widely supported by modern browsers.





three.js

- High level Javascript Library which uses WebGL.
- WebGL is a low-level graphics API created specifically for the web.
- <https://threejs.org/>

Setup/ Running three.js

- We will use npm to install Threejs library
 - npm install three
 - npm install webpack
 - sudo npm -g install servez
 - Servez .





webpack

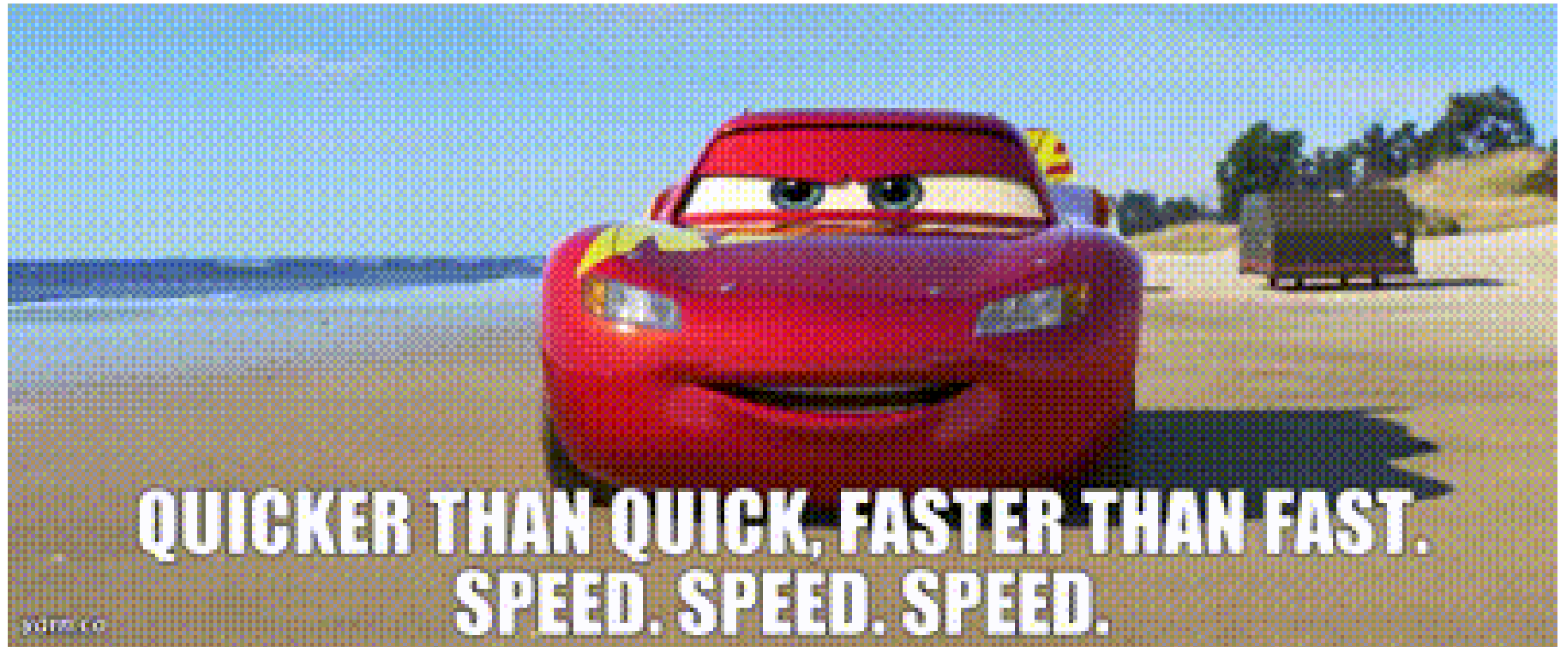
Webpack is a static module bundler used for JavaScript applications.

It is made primarily for JavaScript.

<https://webpack.js.org/>



Assignment 2



The End