

Houdini

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Harry Houdini



箱

Rendering

HTML
CSS
JS

DOM
CSSOM

Layout

Paint

Composit
e

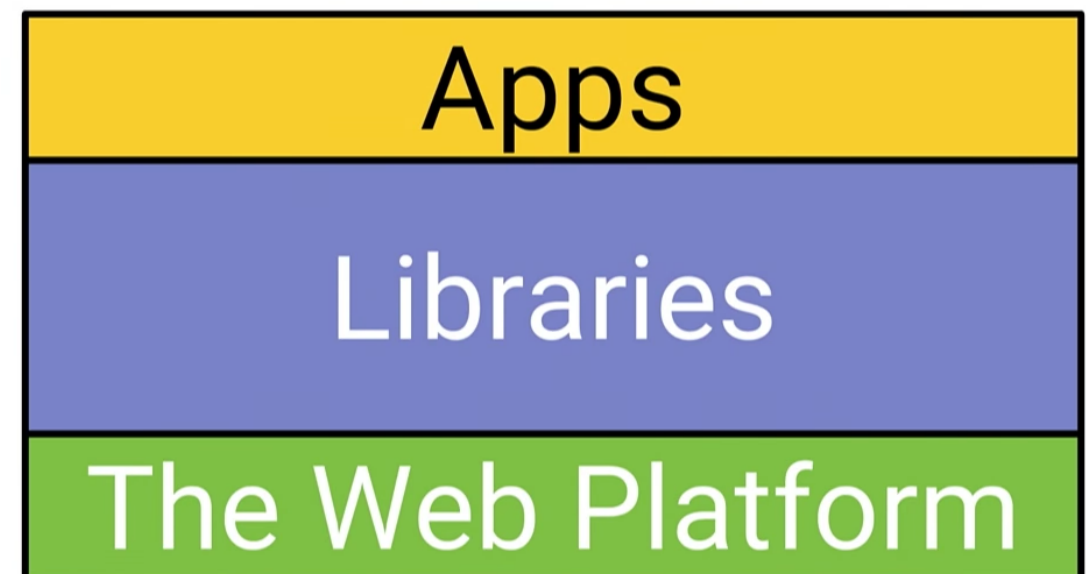
ブラック
ボックス

Extensible Web

The old web



The extensible web



Great libraries and tools for great Progressive Web Apps
<https://youtu.be/Use459WBeWc>

Extensible CSS?

CSSは
拡張
できない



Draft Specs

<https://github.com/w3c/css-houdini-drafts>

CSS Typed OM

```
div.style.width = '200px'
```

```
elem.style.transform = `  
  scale(${someScale})  
  rotate(${someAngle}deg)  
  translate(${someTranslation}px)  
`
```

```
let divStyleMap =  
window.getComputedStyle(  
  document.querySelector('div')  
)  
console.dir(divStyleMap.get('width'))
```

```
// CSSSimpleLength {  
//   value: 456.713  
//   type: 'px'  
// }
```



```
div.styleMap.set(  
  'width',  
  new CSSSimpleLength(200, 'px')  
)
```

Custom Properties & Values

```
CSS.registerProperty({  
  name: '--my-color',  
  syntax: '<color>',  
  initialValue: '#901029'  
})
```

Painting API

```
<style>
.ticket {
  background-image: paint(ticket);
}
</style>
```

```
<div class="ticket">
  片道
</div>
```

```
<script>  
window.paintWorklet.import('ticket.js')  
</script>
```

```
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```

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```

```
</script>
```



!?

Worklets


```
class TicketCtor {  
  static get inputProperties () {  
    return ['--ticket-color']  
  }  
  paint (ctx, geom, props) {  
    let path = new Path2D(...)  
    ...  
    ctx.fill(path)  
  }  
}  
  
registerPaint('ticket', TicketCtor)
```

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```

Layout API

Font Metrics
Scroll Customization
Parser API

and more...

CSSは
拡張...
...できそ
う!



Thank you.