

Today

- Review
- Pointer Events Cont
- HTTP Verbs

Animation

- Transforms
- Transitions
- Keyframes

```
img#one {transform: translateX(200px)  
          rotate(45deg);}
```

```
img#two {transform: rotate(45deg)  
           translateX(200px);}
```

Transitions & Animations

is it numeric? has a midpoint?

transition: transform 200ms ease-in 50ms;

Placing the transition

Example

**More control than
transition in CSS?**

Keyframe animations


```
<div></div>
```

```
div {  
  animation-name: fadeout, shift;  
  animation-duration: 200ms, 100ms;  
}
```

```
@keyframes fadeout {  
  from {  
    opacity: 1;  
  }  
  to {  
    opacity: 0;  
  }  
}
```


Current way:
Touchmove & Mousemove

Future way: Pointer Events

Same on desktop and device

But! Not in ff yet!

And! Safari is not into it

```
image.addEventListener('pointerdown', startSwipe);  
image.addEventListener('pointermove', swiping);  
  
image.addEventListener('pointerup', stopSwipe);  
image.addEventListener('pointercancel', stopSwipe);
```

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PointerEvents

MDN Docs

Pointer capture

Follow events even after they leave the connected element


```
let originX = null;
function startSwipe(event) {
  event.preventDefault();
  event.stopPropagation();

  originX = event.clientX;

  event.target.setPointerCapture(event.pointerId);
}
```

Event bubbling - call

both

Prevent Default

Stop propagation

```
function swiping(event) {  
  if (originX) {  
    let delta = event.clientX - originX;  
    const element = event.currentTarget;  
  
    element.style.transform = 'translateX(' + delta + 'px)';  
  }  
}
```


What does it need to do?

- Assess which direction our pointer has moved
- Show the photo associated with that direction

```
let nextIndex = currentIndex;  
if (delta < 0) {  
    nextIndex++;  
  
} else {  
    nextIndex--;  
}
```



```
const photoSrc = PHOTOS[nextIndex];  
const image = createImage(photoSrc);  
  
modal.innerHTML = '';  
  
image.addEventListener('pointerdown', startSwipe);  
image.addEventListener('pointermove', swiping);  
image.addEventListener('pointerup', stopSwipe);  
  
modal.appendChild(image);  
currentIndex = nextIndex;
```

**We can also
dynamically add
animations once we:**

- Know the swipe direction
- Have the new image created to animate in

```
if (delta < 0) {  
    image.classList.add('animate-next');  
} else {  
    image.classList.add('animate-prev');  
}
```

```
.animate-next {  
    animation: slide-from-right 0.5s;  
}  
  
@keyframes slide-from-right {  
    from {  
        margin-left: 200%;  
    }  
    to {  
        margin-left: 0;  
    }  
}
```


HTTP Verbs

GET

Read information

POST

Create information

Curl GET Example

Fetch API

```
fetch('stuff.txt');
```

Loads information into the browser from remote servers

Send John to the store for milk

1. Me: Hey John, can you go to the store to get milk?
2. John: Yes I'll go
3. Me: Remember when you said you'd get milk? I see you're back. Can I have it?

```
john.getMilk({ fat: 'whole' })  
  .then(onMilkFound, onMilkNotFound);
```



```
const promise = fetch('images.txt');  
promise.then(onSuccess, onFail);
```


Ngrok

Json Placeholder API

```
fetch('https://jsonplaceholder.typicode.com/photos?albumId=1')  
  .then(response => response.json())  
  .then(json => console.log(json));
```