

Source: Hal Gatewood

Web Design II

...p5js, bootstrap & js.






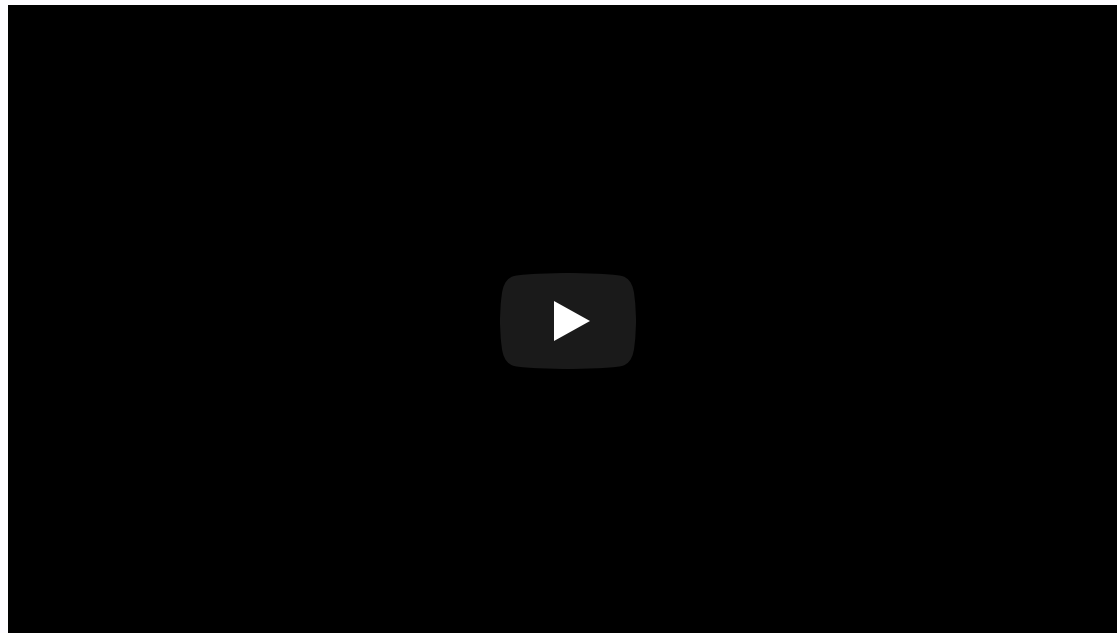
Content

- p5js
- Bootstrap
- Javascript

p5js & HTML

- How to include?
 - HTML & JS
- Multiple ways 
 - `<iframe>`
(Inline Frame)

Youtube



The screenshot shows a YouTube video player interface. At the top, the YouTube logo and navigation icons are visible. The video title is "Can We Teach a Robot Hand To Kee...". The video thumbnail shows a robotic hand. Below the video, an "Embed Video" dialog box is open, displaying the following code:

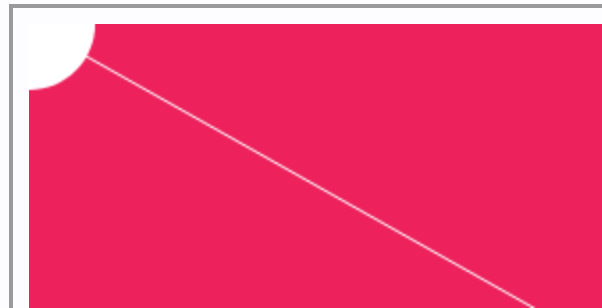
```
<iframe width="560" height="315"
src="https://www.youtube.com/embed/9g
X24m3kcjA" frameborder="0"
allow="accelerometer; autoplay;
encrypted-media; gyroscope; picture-
in-picture" allowfullscreen></iframe>
```

Below the code, there is a checkbox for "Start at 0:09". Under the heading "EMBED OPTIONS", there is a checked checkbox for "Show player controls." and an unchecked checkbox for "Enable privacy-enhanced mode." with an information icon. A "COPY" button is located at the bottom right of the dialog box.

p5js Sketch

Example Sketch

```
<iframe src="demo/simple/sketch.html"></iframe>
```



Prepare Sketch for iframe

- Remove white parts around sketch
- Only draw part of sketch that is visible
- Resize canvas to embedded size

Remove white border

Add style tag in `sketch.html`

```
/* remove border at the top */  
html, body {  
    margin: 0;  
}  
  
canvas {  
    display: block;  
}
```


Remove border around iframe

Add style in embedding site

```
border: none;
```

```
width: 100%;
```

```
height: 100%;
```

Enhanced iframe



```
// from sketch.js:  
  
function setup() {  
  createCanvas(displayWidth, displayHeight);  
}  
  
...
```



Viewport

- Visible area of HTML
- `iframe` only the box

Viewport in p5js

```
// gets the current viewport size
function getViewPortSize() {
  const vw = Math.max(
    document.documentElement.clientWidth,
    window.innerWidth || 0
  );
  const vh = Math.max(
    document.documentElement.clientHeight,
    window.innerHeight || 0
  );
  return createVector(vw, vh);
}
```

```
function setup() {
  const viewPort = getViewPortSize();
  createCanvas(viewPort.x, viewPort.y);
}
```

Enhanced Demo II



Resize canvas on viewport size changed! ✨

Responsive Sketch

```
// this is called when resizing the viewport  
function windowResized() {  
    const viewPort = getViewPortSize();  
    resizeCanvas(viewPort.x, viewPort.y);  
}
```

Real World Demo

bildspur

[Portfolio – About](#)

ÅBEN

At a time when individualism is experiencing its high culture, we should again focus more on togetherness and together pave the way for a better future. The immersive installation «åben» (Danish: open) lets the viewer playfully



Background Sketch **Demo**

bildspur

[Portfolio](#) – [About](#)

ÅBEN

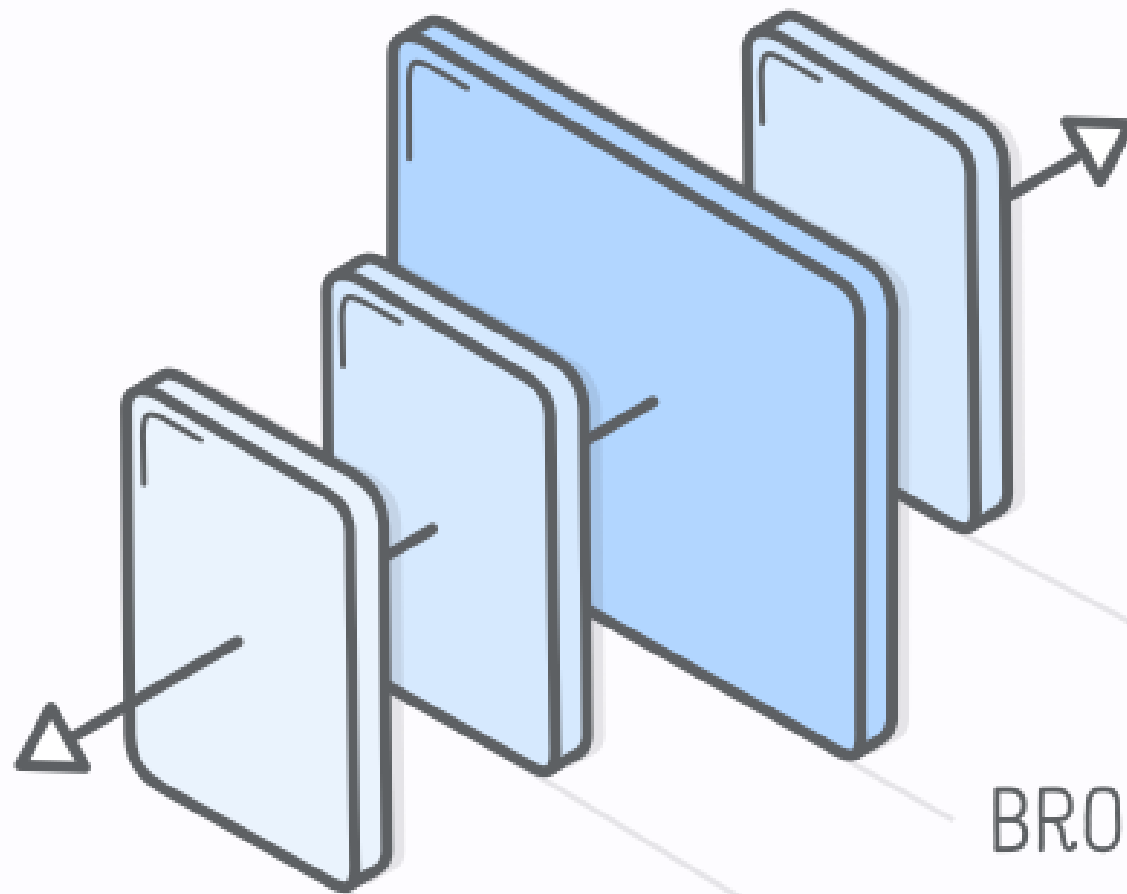
At a time when individualism is experiencing its high culture, we should again focus more on togetherness and together pave the way for a better future. The immersive installation «åben» (Danish: open) lets the viewer playfully experience how important collective coexistence is and how easy it is to accomplish a task with it.



Background Sketch CSS

```
#header-sketch {  
  width: 100%;  
  height: 100%;  
  border: none;  
  
  /* full screen background */  
  position: fixed;  
  top: 0;  
  left: 0;  
  z-index: -100;  
  filter: blur(2px)  
}
```

**POSITIVE
Z-INDEX**



**NEGATIVE
Z-INDEX**

Z-INDEX: -1

BROWSER WINDOW

Z-INDEX: 1

Z-INDEX: 2

Frameworks

- Bootstrap
- Bulma
- Pure.css
- Materialize



Build fast, responsive sites with Bootstrap

Quickly design and customize responsive mobile-first sites with Bootstrap, the world's most popular front-end open source toolkit, featuring Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful JavaScript plugins.

Get started

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Currently v4.5.0



How to include Bootstrap?

```
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
```

- CDN = Content Delivery Network

Grid System

COL-3				COL-3				COL-3				COL-3					
COL-4						COL-4						COL-4					
COL-6						COL-6											
COL-2			COL-2			COL-2			COL-2			COL-2					
COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1				

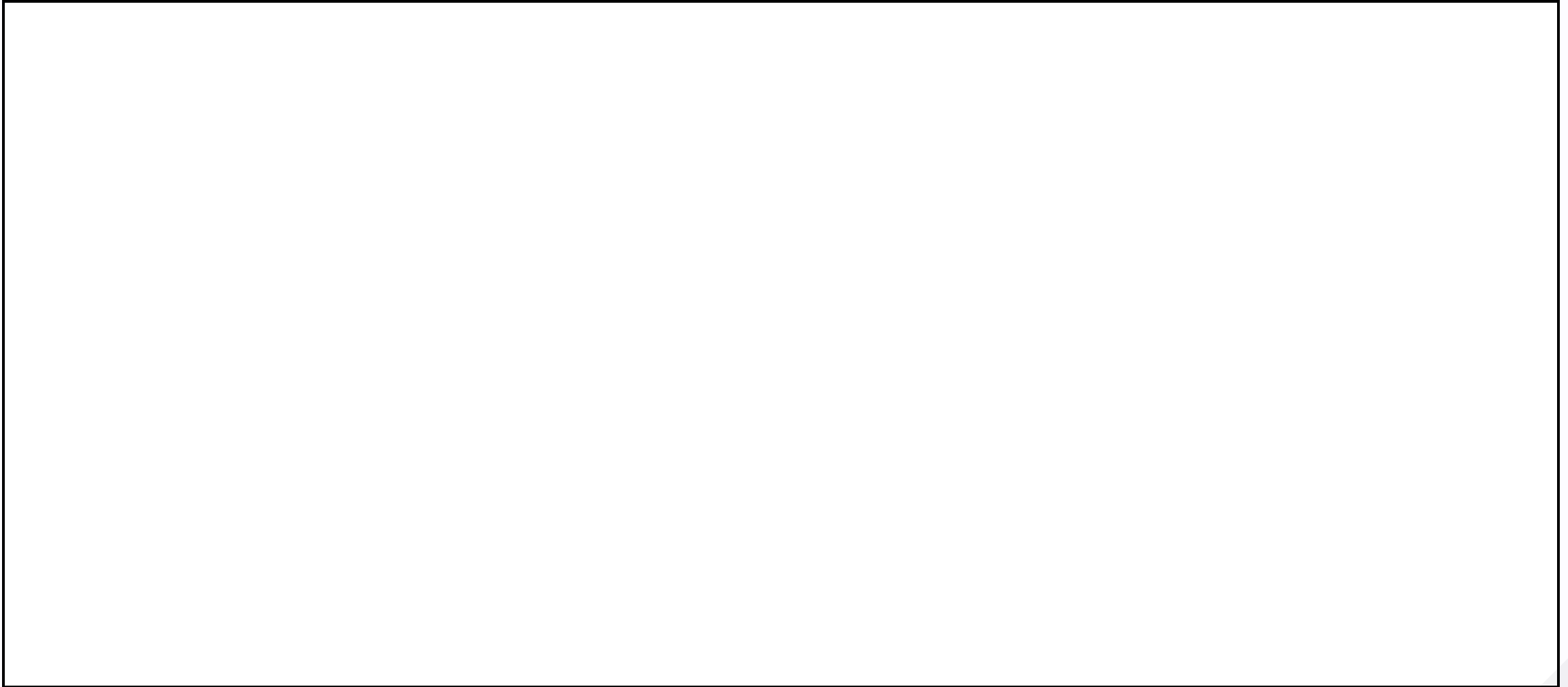
12 Columns

Grid Example

```
<div class="row">
  <div class="col-sm-8">col-sm-8</div>
  <div class="col-sm-4">col-sm-4</div>
</div>
<div class="row">
  <div class="col-sm">col-sm</div>
  <div class="col-sm">col-sm</div>
  <div class="col-sm">col-sm</div>
</div>
```

col-sm-8	col-sm-4	
col-sm	col-sm	col-sm

Grid Demo



Forms

Email address

We'll never share your email with anyone else.

Password

Check me out

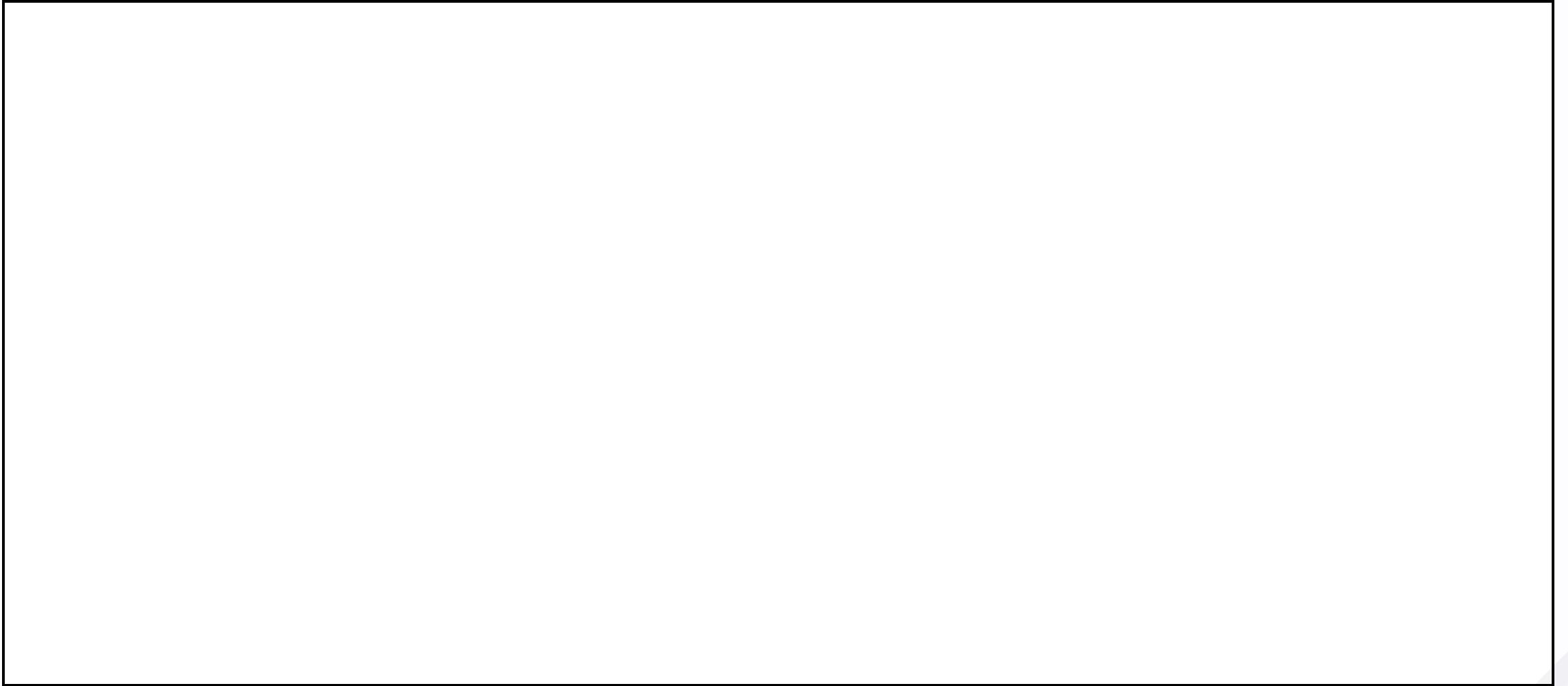
Forms Code

```
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
```

First name:

Last name:

Forms Demo



Actions Serverside

First name:

Last name:

on submit



php7



Mail Link

`mailto:hello@bildspur.ch`

- Click Me!
- [mailto:hello@bildspur.ch](#)
- [mailto:hello@bildspur.ch](#)

JS Mail Link

Using javascript to read the form fields and navigates to the create link.

```
<form onsubmit="return false;" method="post" name="myForm">
```

```
function sendMail() {  
    let name = document.getElementById("nameInput").value  
    let message = document.getElementById("messageTextarea").value  
    let ilikeyou = document.getElementById("ilikeyouCheckBox").value ?  
  
    let mailLink = `mailto:hello@bildspur.ch?subject=Email%20from%20${n  
    location.replace(mailLink);  
}
```

JS Forms Demo

Website Task

- Optional
 - Send it to me for feedback! ✨
 - Github Pages / Hosted if possible

Questions?