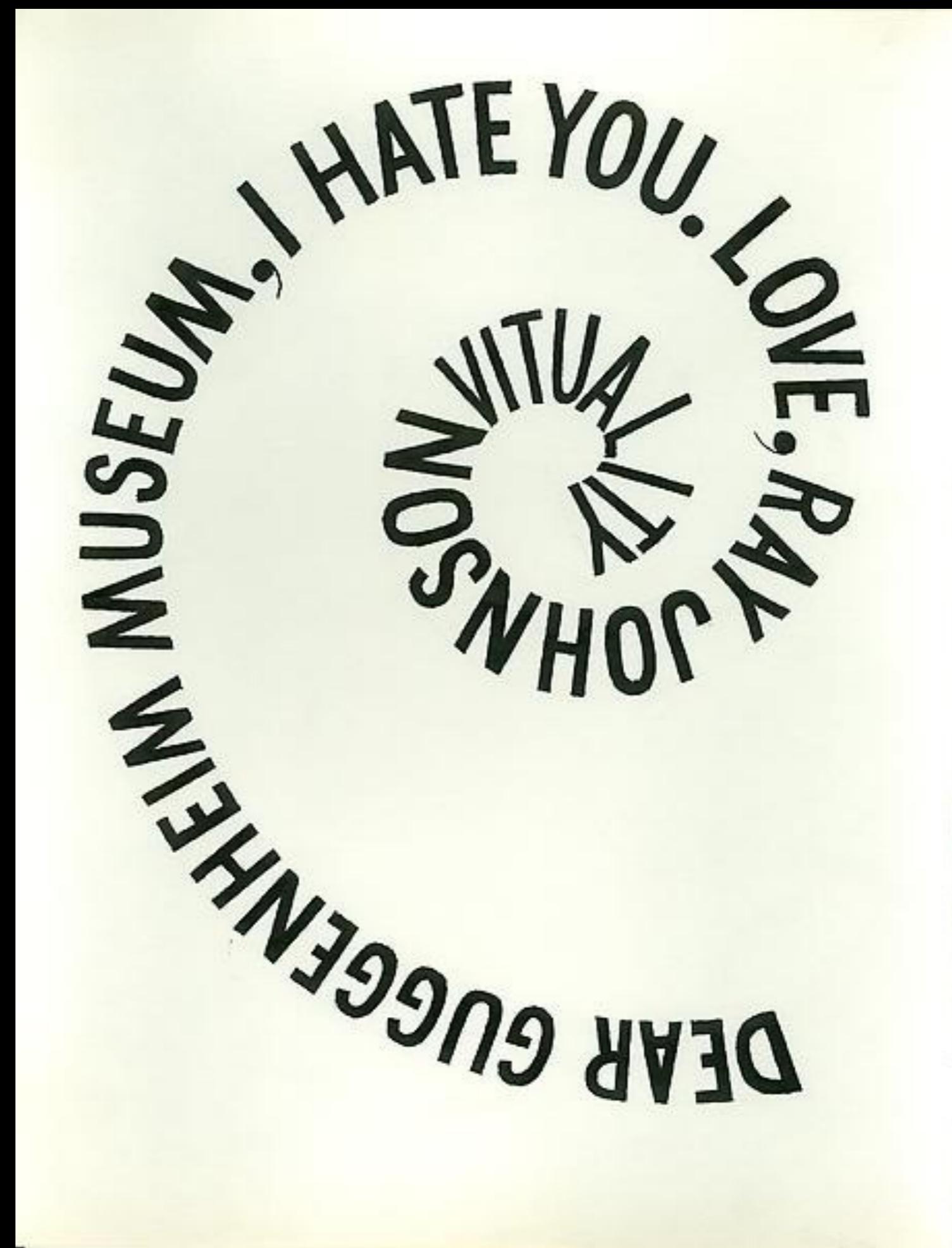


Correspondence School
Ray Johnson



Mail Art Ray Johnson

PLEASE ADD TO & RETURN TO RAY JOHNSON
44 WEST 7 ST., LOCUST VALLEY, N.Y. 11560



主要工业国家对塑料材料及橡胶，出口配额成逐年递增趋势后，在较少增多的情况下，商品配额出口的事件屡有发生，不久的将来将更甚。

一盆用已頤。尤須有效。

主要工业国家对塑料材料及
橡胶，出口配额成逐年增
加，在较少争多的情况下，
商品配额出口的事件屡出
不穷的非常事态。

真，所以謂罰，可以收到其種種效果之
嚇阻，但如某政府抓不到廢舊古用、
偽造，則獎勵也是虛的。
事實上，自該政府在抓偽造輸出許

據，對多數商賈以及我們的出口，均
有不利，所以增加一聯，押匯更行也。
不十分贊同。

因此，對防衛係透輸出許可證方面

年動輒高達
萬名稱和進
他們有一個
易觀在

「請恩賜貿易商天運營務有關經理會
「不肯廉價售賣初級品輸出等事項及
開特種發票案」，或謂此項問題極
為重要，除了軍對外，必須有效的查
才能防止。

此為第那部屬加薪工作，除非增加人手，
惟以「以該公司如此的規模及信譽，
謀其也不敢為。」而為了解案。
因為一家廠商交易成功，一筆生意
就是數千萬元，發售成功是白機來的
政策，要發問誰出口急如星火。此府專為防
止少數不去發售，而採取許多防護措

的物品配備用具，一律通關，至關合法廉賤的機器，部事務，必須也得要來。

況如何？每件工程可賺到多少外匯，沒有過嚴考核。由這些公司自己去爭取，許多在國內生存都有困難的丙級公司。

政府一概在海外承包工程，達到一定標準，可以預備外
籍資本不斷增加以供發展，因此
分之二十或百分之三十在海外使用，其餘應如
此劃分，如此化暗為明，反能增加外債收益。
此等選擇，也
數匯回，如此化暗為明，反能增加外債收益。
出的責任。

輕心，也透望新成立的「承辦國」，確能負起修建工程的重任。

其就是政府以往對鐵路建設公司
工程，設有建立道班考核制度，由
主管一層級建設公司承擔之外工程部
，經濟部鐵礦工務人員出席審查會
一部份，結果兩端均分別考核了一

是以窮苦營業者工在於廠，技工在於礦場，都是有被壓迫的。行政部營業司又一些宋用金，公司得利大部份的利潤，都存人國外銀行，縱橫套匯行爲，最影響海外匯款員會也主管人，反覆的國庫規定公司利潤百分之八十應歸公司，政府爲防止這種起碼，除了應加強追查，當各項稅收，支派到公司，並且不買之

對其國內人民而往中國工作，這是
利祿參，故今後嚴懲乙、丙級
吏來提供實力，雖然倒忙的事
最易發展潛力的外銷市場，我國
又大，已過九一八事變，反

雖然這些年來，我們已有一些
業績，但不容認否，我們的營運
工程輸出，沒有幫上貿易的忙，
尤其「空頭」建設公司的冒出，
更暴露出幾大問題。

**掛空頭賣勞力問題不少
搞套匯吃佣金全是騙局**

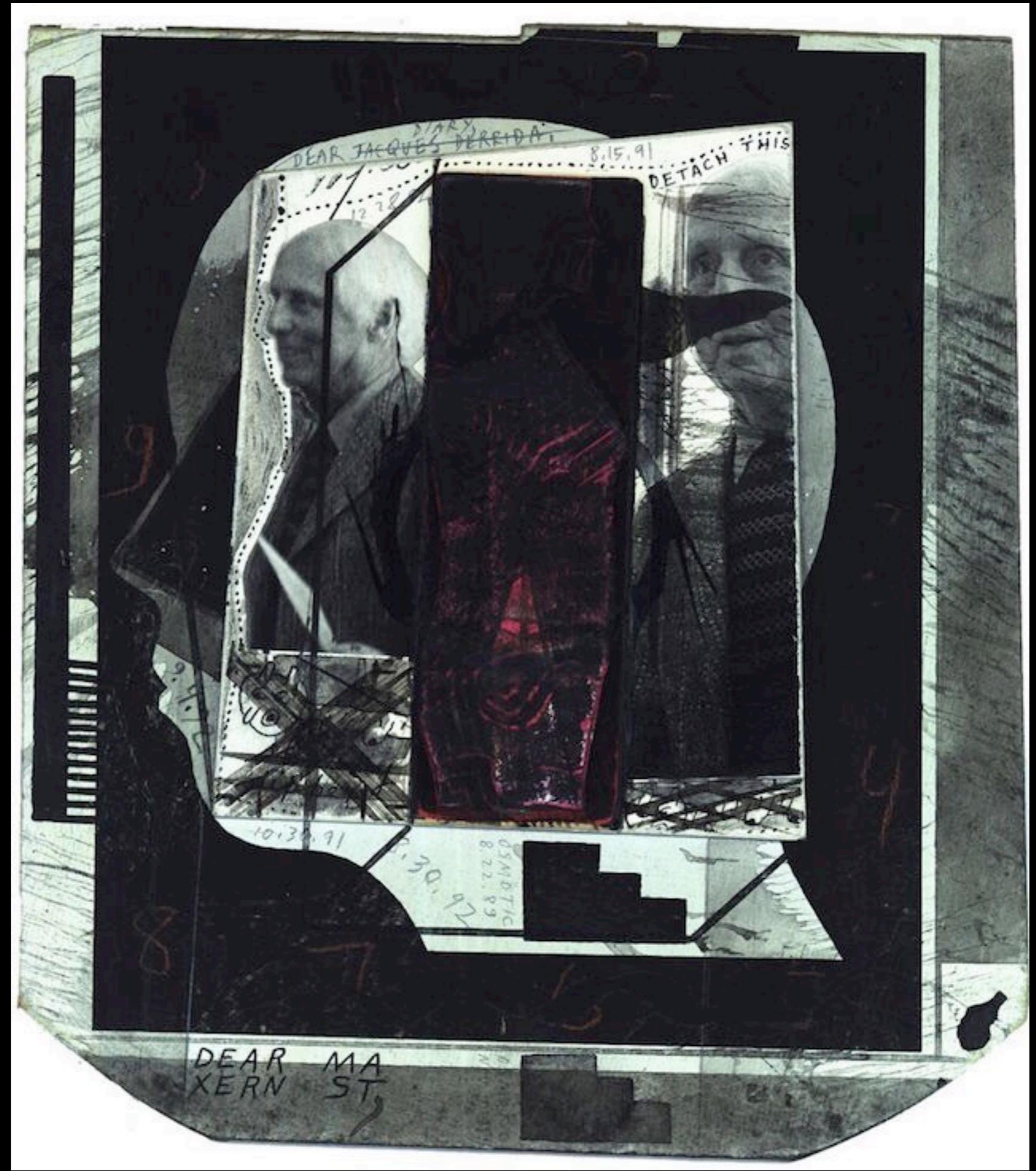
其四為政府令發給國內工程公司承包海外工程的條件，應作合理的提高，因為在國外承辦工程，設有較高的資本額，光實的難以和工程人員，和其他國家工程

人是沙烏地阿拉伯，成為我國獨占市場；因此，政府一方面鼓勵國內產運加強對中東的貿易，一方而鼓勵國內公民營工工程公司前往當地參與營建工作，及對中東輸出

新舊爭取的。雖然外國的國內者，這些公司的辦法，大多訓練，政府對

輪往中東貨品也實行全面檢驗，
照說，這些問題應該已茅塞頓開。
因此，政府應如何督促國內工
程公司使用國內建材，以帶動資
品出口，刻不容緩。

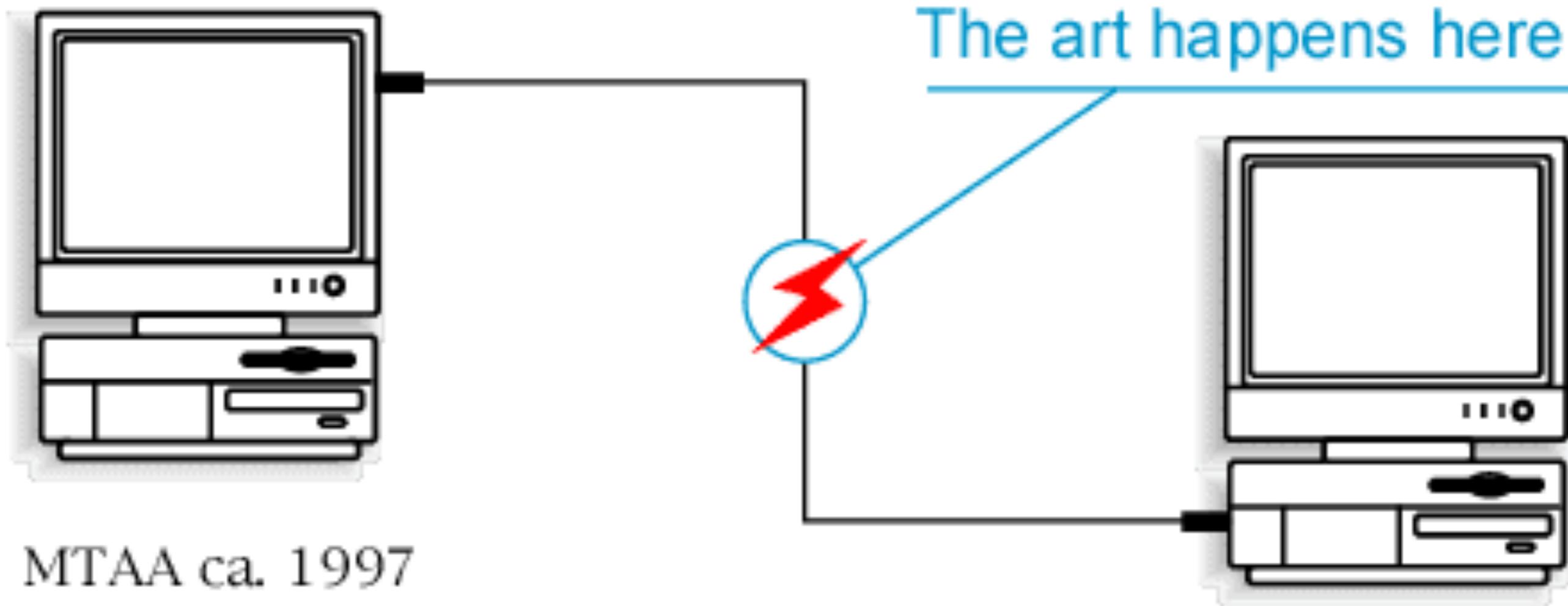
Mail Art
Ray Johnson



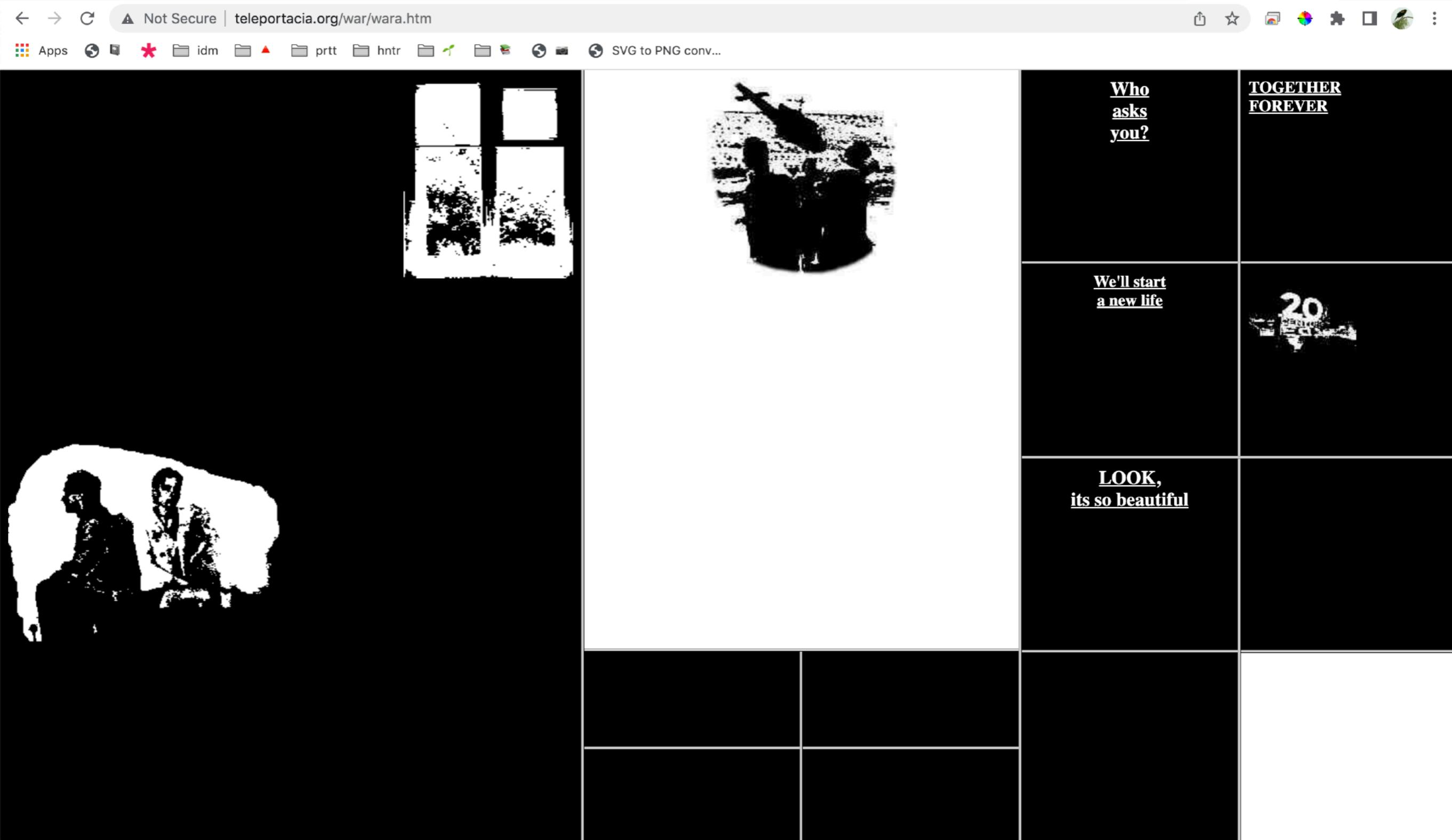
net.art

Vuk Cosic 1995

Simple Net Art Diagram

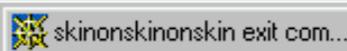


MTAA ca. 1997



My Boyfriend Came Back From War, 1996
Olia Lialina

ose grid hands horoscope air entropy8zuper entropy8zuper2 untouched come freezing obsessed missing control control2 before|after words net.love forest time past future technical

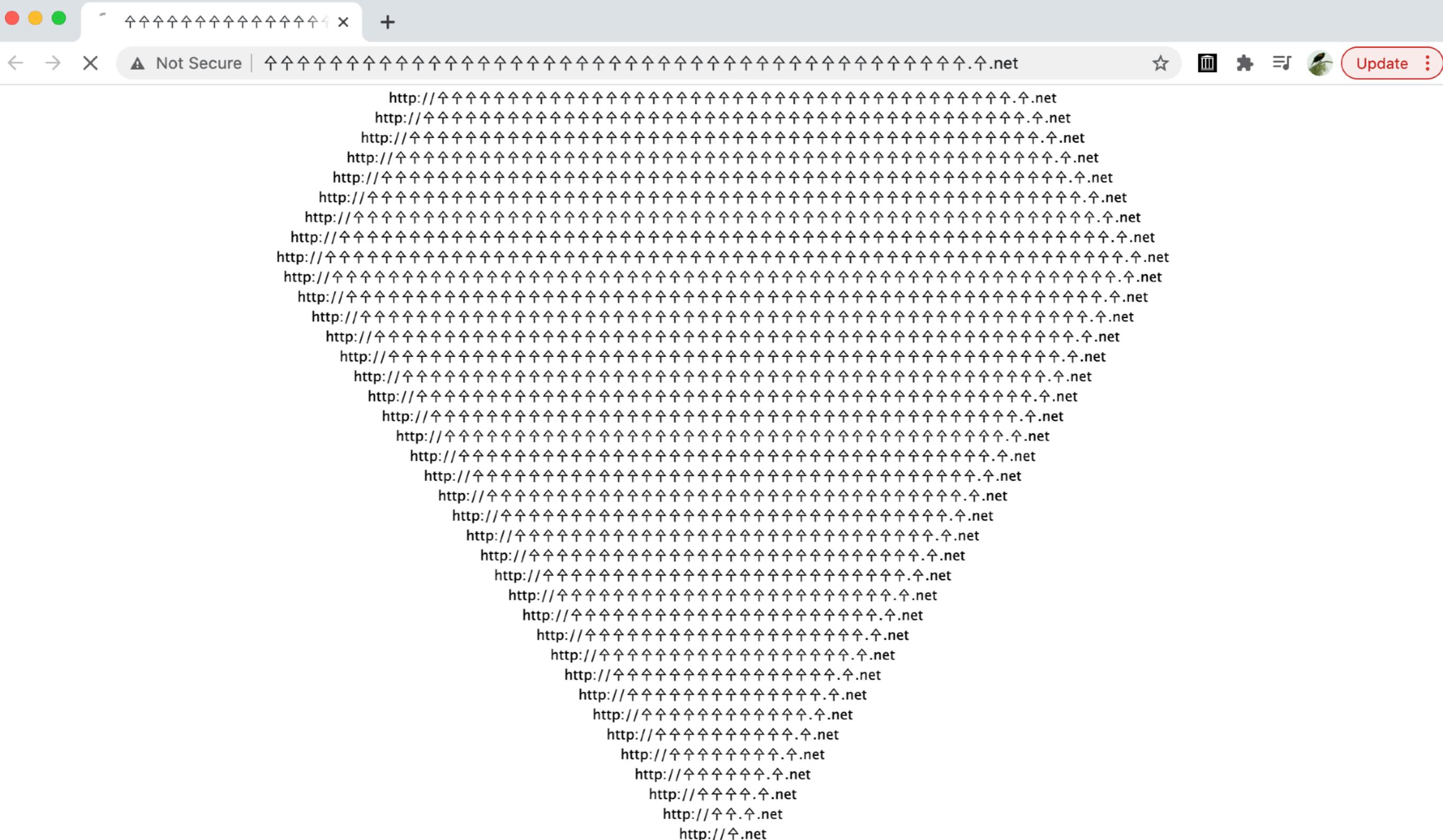


4:43 PM

[skinonskinonskin](#), 1999

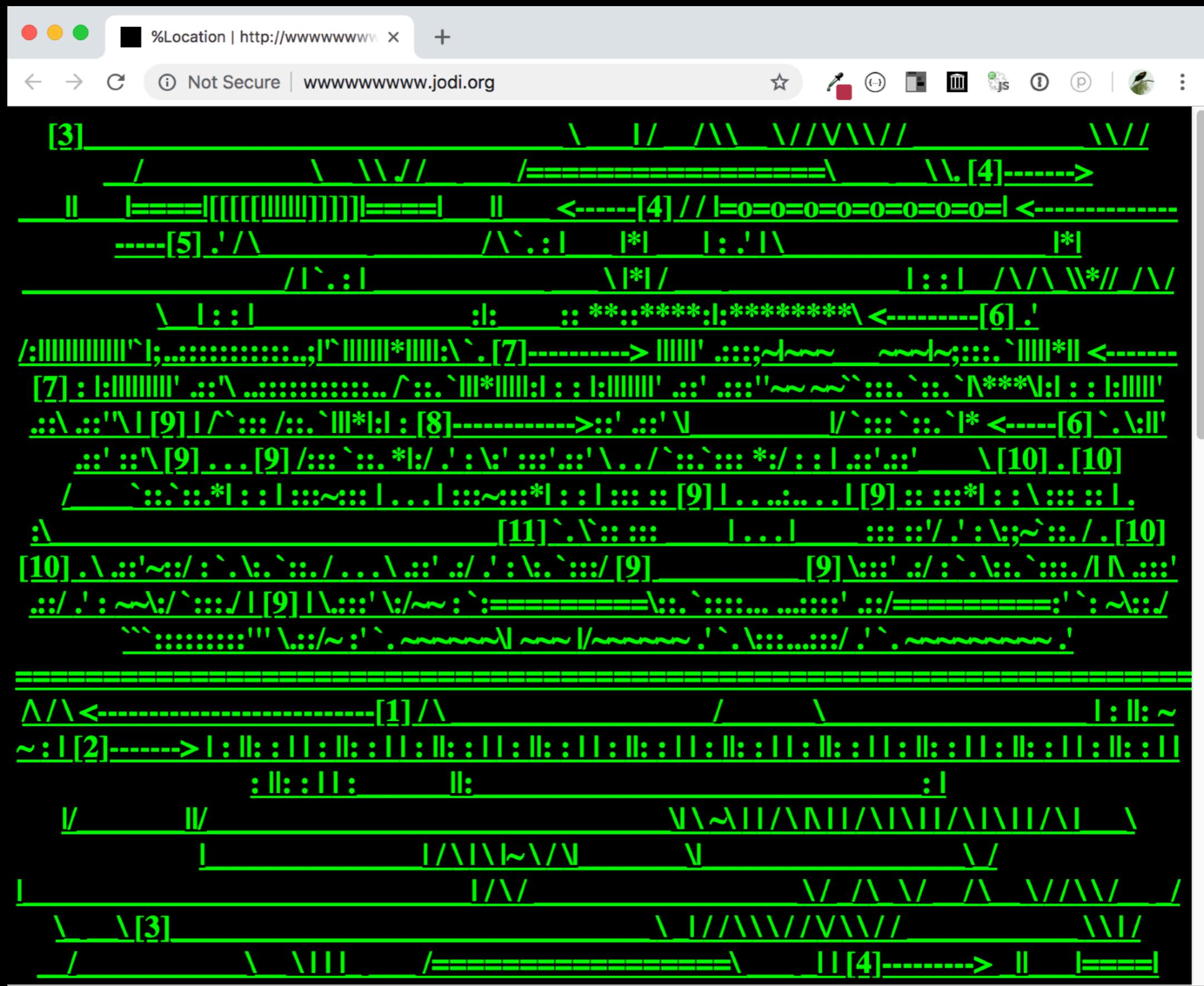
Auriea Harvey (Entropy8) + Michaël Samyn (Zuper!)

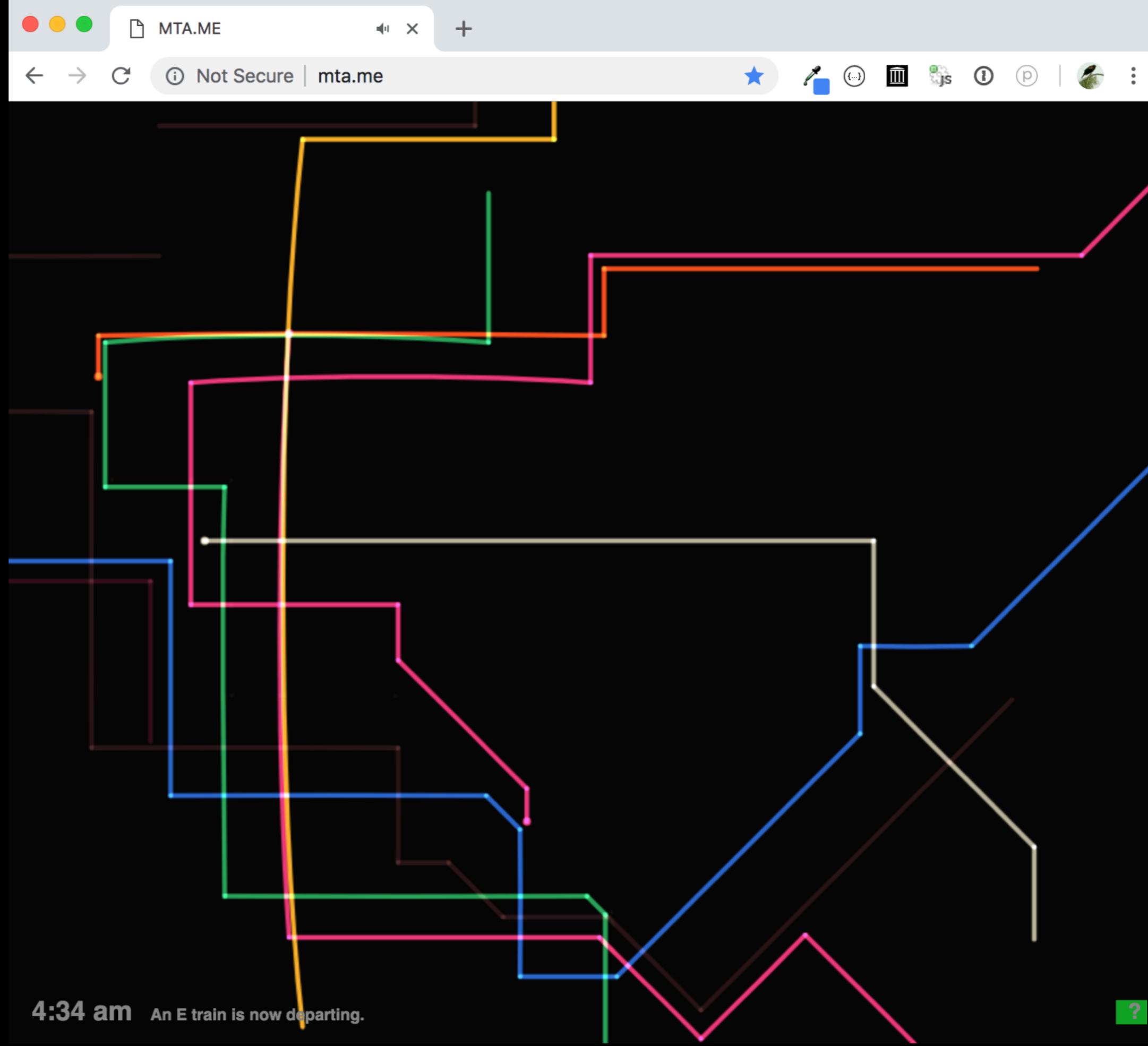
Entropy8Zuper!



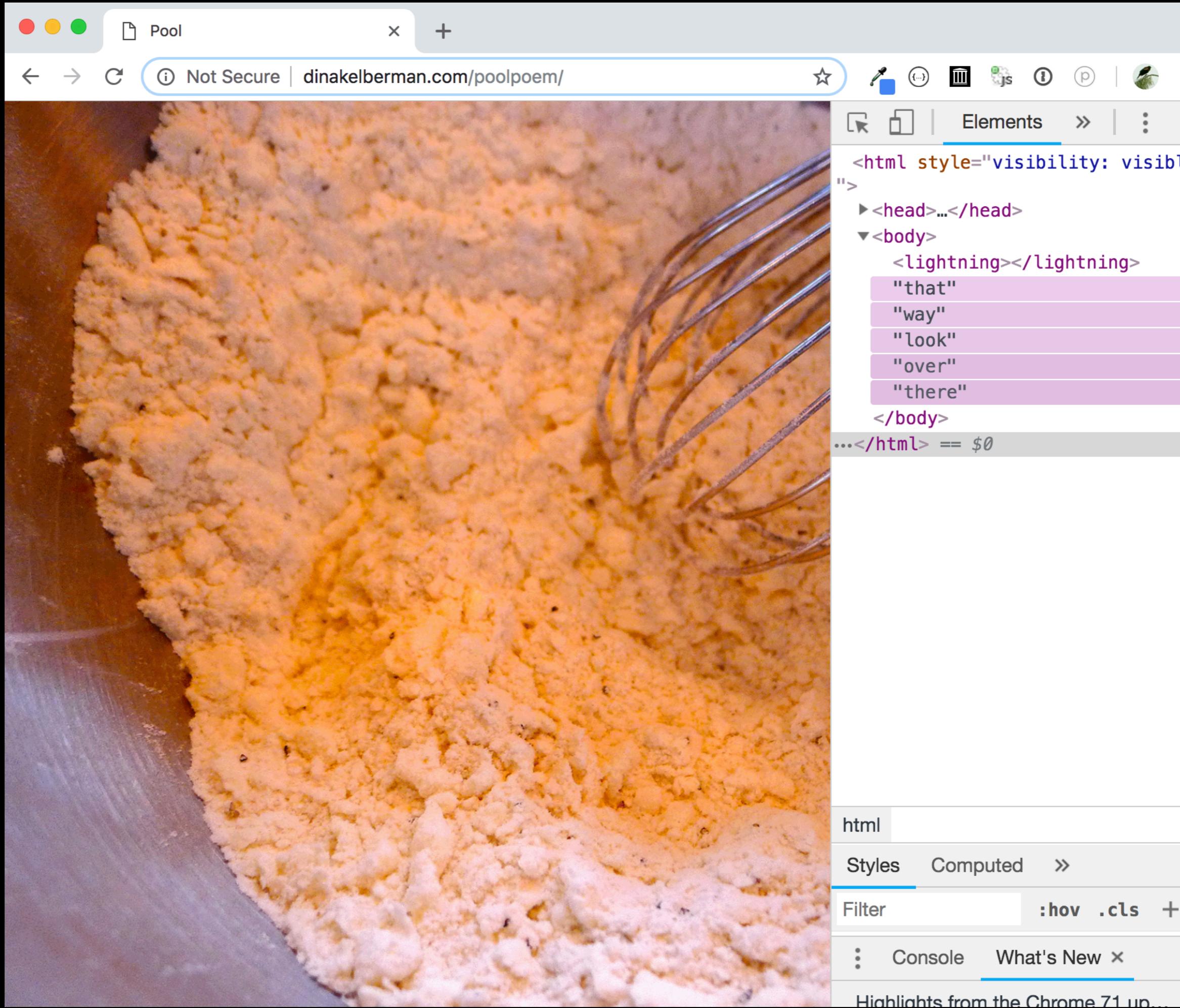
<http://xn--10kaaaaaaaaaaaaaaaaaaaaaa.xn--10k.net/>

jodi.org, 1999 - 2001





MTA.ME, 2011
Alexander Chen



```
<html style="visibility: visible">
  ><head>...</head>
  ><body>
    <lightning></lightning>
    "that"
    "way"
    "look"
    "over"
    "there"
  </body>
...</html> == $0
```

html

Styles Computed »

Filter :hov .cls +

⋮ Console What's New ×

Highlights from the Chrome 71 up...



WE=LINK: | TEN EASY PIECES



ⓘ Not Secure | we-link.chronusartcenter.org



<http://we-link.chronusartcenter.org/>, 2020



NEW YORK APARTMENT

FOR SALE
\$43,869,676,331

65,764 bedrooms
55,588 bathrooms
36,672,535 sq ft

Are you constantly frustrated with seeing the same low grade renovations and design choices in townhouses?

Are you in love with pre-war?

Are you looking for a charming well-priced 1 Bedroom home in a sought-after area?

Are you looking for a cozy, elegant home close to all that is held dear to a New Yorker?

Are you looking for a deal?
Are you looking for a great investment home?

Are you looking for a loft-like open space with both light, view, and luxury condo services?

Are you looking for Beautiful Open Views?

Are you looking for that House that is in your Price Range, is DETACHED, has 3 Bedrooms, 4 Bathrooms, Den, Garage, & a Yard all in the Princess Bay Section of Staten Island with Water View & NOT in a FLOOD ZONE surrounded by Million Dollar Homes?

Are you looking for that perfect balance of convenience and serenity?

Are you looking for the perfect primary residence, pied a terre or investment property?

Are you looking to do a Lease or Rent to Own Home?

Are you looking to get into a home?

Are you our discerning home buyer?

Are you priced out of other neighborhoods?

Are you ready for the next level?



Bedrooms

1 of 20753



Bathrooms

1 of 17596



Kitchens

1 of 14333



Dining Rooms

1 of 8093

About the listing

THE APARTMENT IS AVAILABLE.

The apartment abounds with marvelous Beaux-Arts elements, which include a unique grand circular dining room located within one of the building's iconic rounded corner towers, oversized windows along all three of the home's exposures, and herringbone hardwood flooring.

The apartment allows for a comfortable living room and formal dining room if desired, perfect for entertaining.

The apartment also boasts a galley kitchen with full-sized appliances, new lighting, hardwood floors, a walk-in entrance closet, linen closet and new thru-the-wall AC for year round comfort.

The apartment also boasts a very large coat closet near the entry, as well as a linen closet.

The apartment also boasts a washer/dryer.

The apartment also boasts an additional oversized closet and coat closet at the entryway along with a separate linen closet.

The apartment also comes equipped with an in-unit washer/dryer.

The apartment also comes with 1 parking spot.

The apartment also comes with 2 storage bins in the basement.

The apartment also comes with a large storage cage in the basement.

The apartment also comes with a storage area, through wall AC and washer dryer.

The apartment also comes with a terrific outfitted work space in the gallery and an enlarged outfitted walk-in closet in the master bedroom, as well as other tasteful built-ins, custom blackout shades and a Bosch washer and dryer.

The apartment also comes with additional storage space.

The apartment also comes with its own private storage unit.

The apartment also comes with two deeded storage rooms.

The apartment also contains an all-weather air conditioning system.

The apartment also enjoys the luxury of an in-unit washing machine & dryer and great attic that could be utilized as a storage space.

The apartment also features 11 ft high ceilings and a full size Samsung front load washer and dryer!

The apartment also features 9 ft ceilings in living room, oak flooring, solid wood core doors, electronic window shades, additional customized closets, a washer/dryer, and central air.

The apartment also features 9-foot beamed ceilings and generous South and West exposures, bathing the space in natural sunlight throughout the day.

The apartment also features Bosch washer and dryer and private storage.

The apartment also features Lutron lighting, wood floors, custom cabinetry and through wall air-conditioning.

The apartment also features a 212 Sq Ft private terrace, not included in the above square footage, with breathtaking City views and lovely backlit stained glass window.

The apartment also features a Bosch washer/dryer, a generous entry coat closet, linen closet, and oak engineered wood flooring throughout.

The apartment also features a Bosch washer/dryer.

The apartment also features a Frigidaire washer/dryer set, herringbone floor, powder room, great closet space, and entry foyer.

The apartment also features a beautifully appointed kitchen, beautifully detailed hardwood floors, 10.5' ceilings, and 2 wood-burning fireplaces.

The apartment also features a butler staircase for basement access and/or yard access.

The apartment also features a customized lighting control system allowing you to set different scenes and moods, and an open chef's kitchen with beautiful appliances and granite countertops.

The apartment also features a guest powder room, a full laundry room along with 3 zones Central AC and a private storage in the basement.

The apartment also features a guest powder room, a full laundry room along with 3 zones Central AC.

The apartment also features a hardwood floors throughout, French doors, unusually high ceilings, classic moldings, custom made radiator covers, lots of windows allowing for plenty of light throughout the day and ample closet space.

The apartment also features a huge second bedroom with en suite bathroom and ample closet space.

The apartment also features a huge walk-in closet and a renovated ½ bath for you or your guests to easily access.

New York Apartment, 2020

Tega Brain + Sam Levine

screen time clock, 2020
Helmut Smith



Display Property

display: none; — html elements default **visible**

— override default html position

display: inline;
display: block;

— responsive way to deal with positioning

display: flex;
display: grid;

responsive

"A pixel is not a pixel"
— Peter Paul Koch

"If the pixel density of the output device is very different from that of a typical computer display, the user agent should rescale pixel values. It is recommended that the pixel unit refer to the whole number of device pixels that best approximates the reference pixel. It is recommended that the reference pixel be the visual angle of one pixel on a device with a pixel density of 96dpi and a distance from the reader of an arm's length." — **w3 consortium**

<!

- - Tells the browser to match the device's width for the viewport
- Sets an initial zoom value -->

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

<!- Moving forward this line of code should
be in EVERY web page you author. —>

Metadata: `viewport`

The user's visible area of a web page

HTML5 introduced a method to let web designers take control over the viewport, through the `<meta>` tag.

Let's breakdown the `content` value:

- + Values are comma separated, letting you specify a list of values for `content`
- + The `width` value is set to `device-width`. This will cause the browser to render the page at the same width of the device's screen size.
- + `initial-scale` set to `1` indicates the "zoom" value if your web page when it is first loaded. `1` means "no zoom."

There are other values you can specify for the `content` list -

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

Metadata: `viewport`

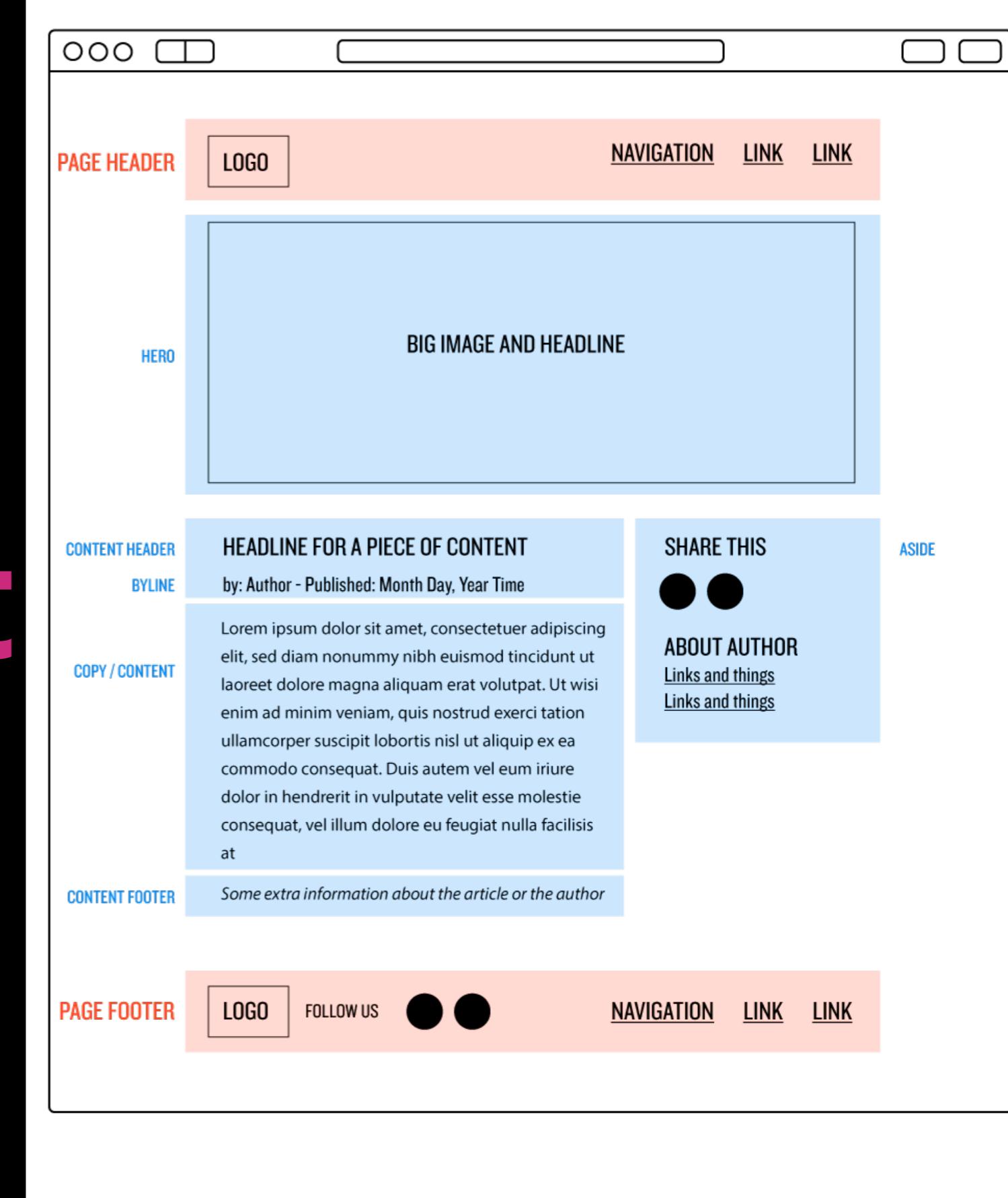
There are other **values** you can specify for the ``content`` attribute -

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

500px

minimum-scale
maximum-scale
user-scalable

CSS layout



— Learn Enough CSS + Layout

So basically up until now I've instructed to do things a particular way. Bc w/ html, git, unix, etc there is only one way to do something (or a piece of software over the process). W/ CSS - there is no "right" answer. When designing websites many solutions to yr problem will exist - which means subjective judgment is the rule rather than the exception.

— Learn Enough CSS + Layout

You have to get used to the idea that no site is going to be exactly the same when viewed by different people. You'll learn to design (or implement other people's designs) in a way that allows room for CSS's inherent ambiguity. Unlike the tightly constrained world of print design, getting things to look exactly the same in every browser and on every operating system is just something you have to give up worrying about.

— Learn Enough CSS + Layout

Absolute length units

The following are all **absolute** length units — they are not relative to anything else, and are generally considered to always be the same size.

Unit	Name	Equivalent to
cm	Centimeters	$1\text{cm} = 38\text{px} = 25/64\text{in}$
mm	Millimeters	$1\text{mm} = 1/10\text{th of } 1\text{cm}$
Q	Quarter-millimeters	$1\text{Q} = 1/40\text{th of } 1\text{cm}$
in	Inches	$1\text{in} = 2.54\text{cm} = 96\text{px}$
pc	Picas	$1\text{pc} = 1/6\text{th of } 1\text{in}$
pt	Points	$1\text{pt} = 1/72\text{th of } 1\text{in}$
px	Pixels	$1\text{px} = 1/96\text{th of } 1\text{in}$

Relative length units

Relative length units are relative to something else, perhaps the size of the parent element's font, or the size of the viewport. The benefit of using relative units is that with some careful planning you can make it so the size of text or other element scales relative to everything else on the page. Some of the most useful units for web development are listed in the table below.

Unit	Relative to
em	Font size of the parent, in the case of typographical properties like <code>font-size</code> , and font size of the element itself, in the case of other properties like <code>width</code> .
ex	x-height of the element's font.
ch	The advance measure (width) of the glyph "0" of the element's font.
rem	Font size of the root element.
lh	Line height of the element.
vw	1% of the viewport's width.
vh	1% of the viewport's height.
vmin	1% of the viewport's smaller dimension.
vmax	1% of the viewport's larger dimension.

VIEWPORT WIDTH // VIEWPORT HEIGHT

- Use units **vh** and **vw** to set height and width to the percentage of the viewport's height and width, respectively
- $1\text{vh} = 1/100\text{th}$ of the viewport height
- $1\text{vw} = 1/100\text{th}$ of the viewport width

```
div {  
width:10vw;  
height: 10vw;  
}
```

responsive text

The text size can be set with a "vw" unit, which means the "viewport width".

That way the text size will follow the size of the browser window.

```
div {  
    font-size:10vw  
}
```

Media Queries

the @media rule tells the browser to include a block of CSS properties only if a certain condition is true.

So this:

```
@media only screen and (max-width: 500px) {  
    body {  
        background-color: light blue;  
    }  
}
```

Translates to:

if (the maximum width of the web page is 500 pixels) {
 then do this stuff
}

Media Queries

Breakpoint

add a **breakpoint** where certain parts of the design will behave differently on each side of the breakpoint

```
/* For mobile phones: */  
[class*="col-"] {  
    width: 100%;  
}  
  
@media only screen and (min-width: 768px) {  
    /* For desktop: */  
    .col-1 {width: 8.33%;}  
    .col-2 {width: 16.66%;}  
    .col-3 {width: 25%;}  
    .col-4 {width: 33.33%;}  
    .col-5 {width: 41.66%;}  
    .col-6 {width: 50%;}  
    .col-7 {width: 58.33%;}  
    .col-8 {width: 66.66%;}  
    .col-9 {width: 75%;}  
    .col-10 {width: 83.33%;}  
    .col-11 {width: 91.66%;}  
    .col-12 {width: 100%;}  
}
```

many examples: https://www.w3schools.com/Css/css_rwd_mediaqueries.asp

Mobile-first! (Images)



```
/* For width smaller than 400px: */
body {
    background-image: url('void_newspaper.jpg');
}

/* For width 400px and larger: */
@media only screen and (min-width: 400px) {
    body {
        background-image: url('void.jpg');
    }
}
```

flex display

Flex - different rendering model

When you set a container to **display: flex**, the direct children in that container are **flex items** + follow a new set of rules.

Flex items are not block or inline; they have different rules for their height, width + layout.

- The **contents** of a flex item follow the usual block/inline rules, relative to the flex item's boundary. Also padding, margin + border properties are still at work.

Flex Basics



Flex layouts are composed of:

- a **Flex container**, which contains one or more:
Flex item(s)

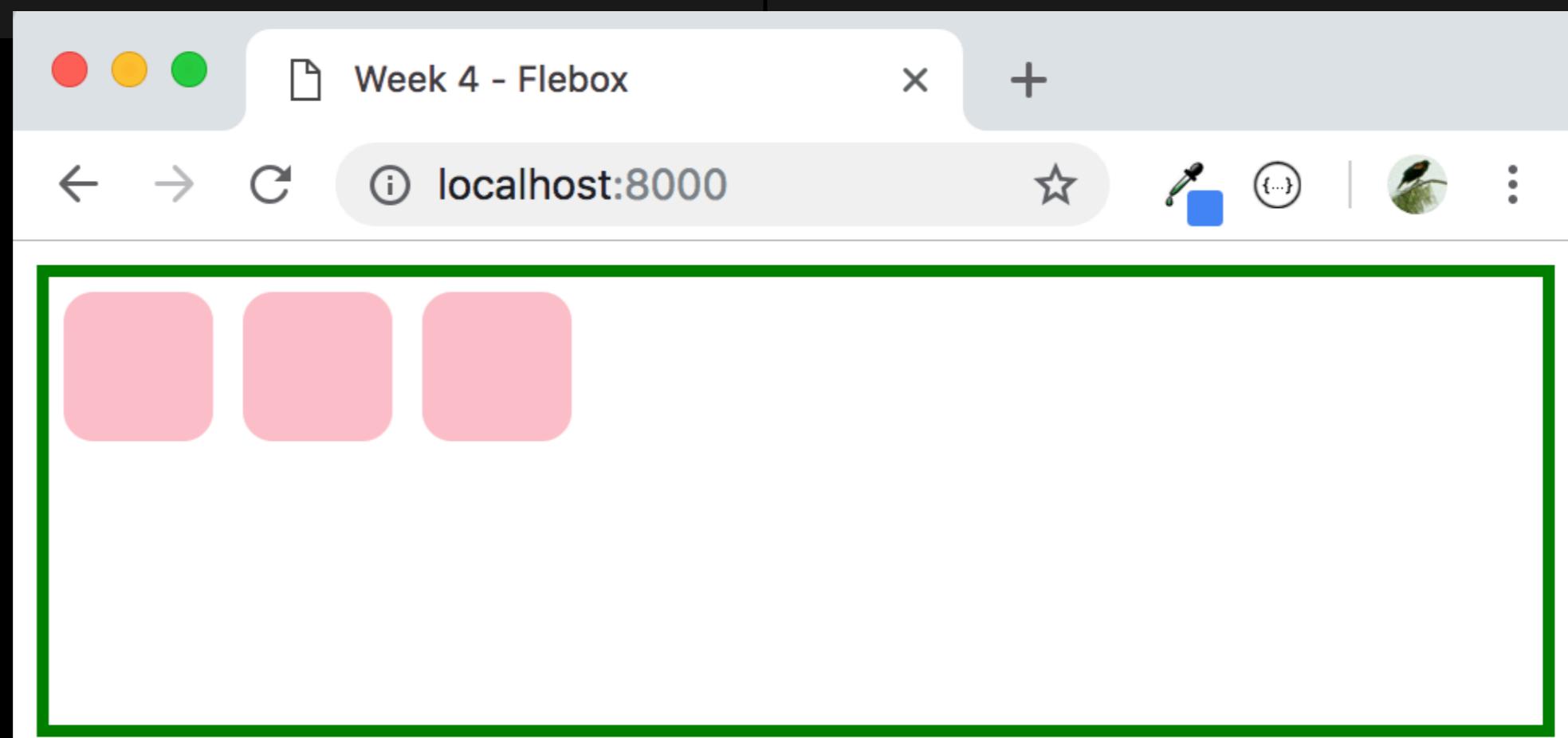
To make an element a flex container, change display:

- Block container: `display: flex;`
- Inline container: `display: inline-flex;`

Flex Basics

```
<body>  
  
<div id="flexBox">  
  <div class="flexThing"></div>  
  <div class="flexThing"></div>  
  <div class="flexThing"></div>  
</div>  
</body>
```

```
#flexBox {  
  display: flex;  
  border: 4px solid Green;  
  height: 150px;  
}  
  
.flexThing {  
  border-radius: 10px;  
  background-color: pink;  
  height: 50px;  
  width: 50px;  
  margin: 5px;  
}
```



Flex Basics: justify-content

You can control where the item is horizontally in the box by setting **justify-content** in the flex container.

```
#flexBox {  
    display: flex;  
    border: 4px solid Green;  
    justify-content: flex-start;  
    padding: 10px;  
    height: 150px;  
}
```



Flex Basics: justify-content

You can control where the item is horizontally in the box by setting **justify-content** in the flex container.

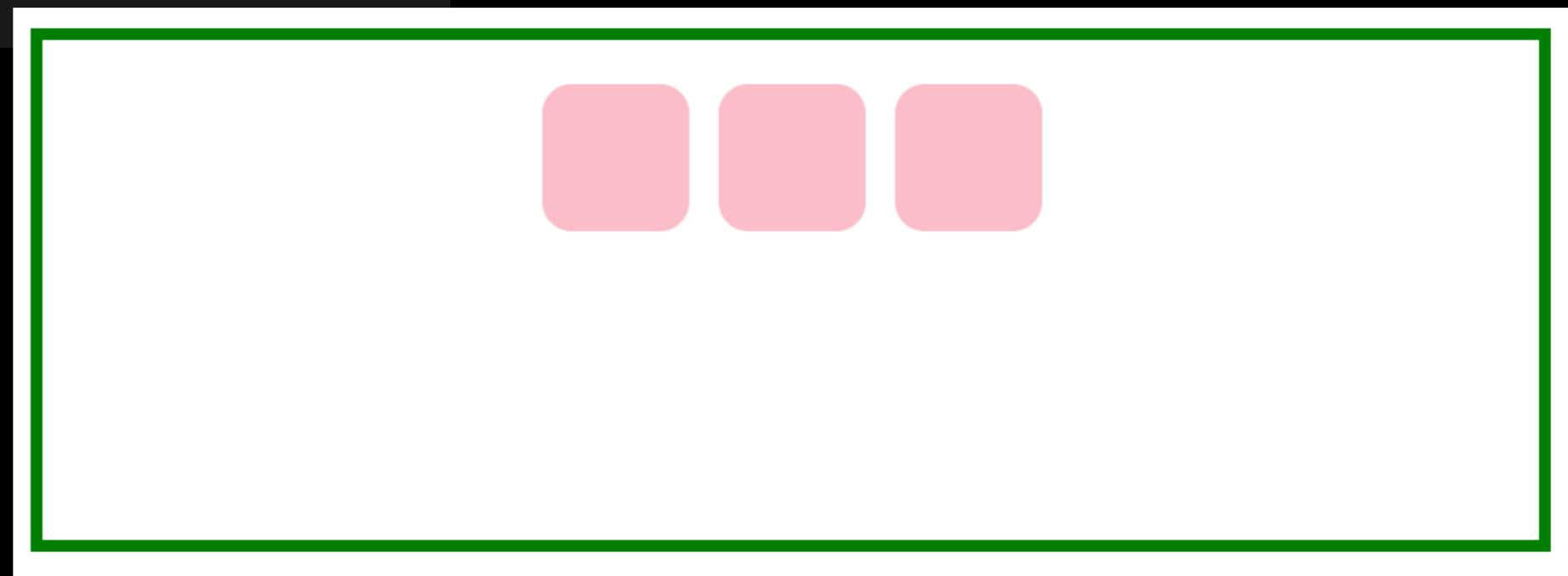
```
#flexBox {  
    display: flex;  
    justify-content: flex-end;  
    padding: 10px;  
    height: 150px;  
    border: 4px solid Green;  
}
```



Flex Basics: justify-content

You can control where the item is horizontally in the box by setting **justify-content** in the flex container.

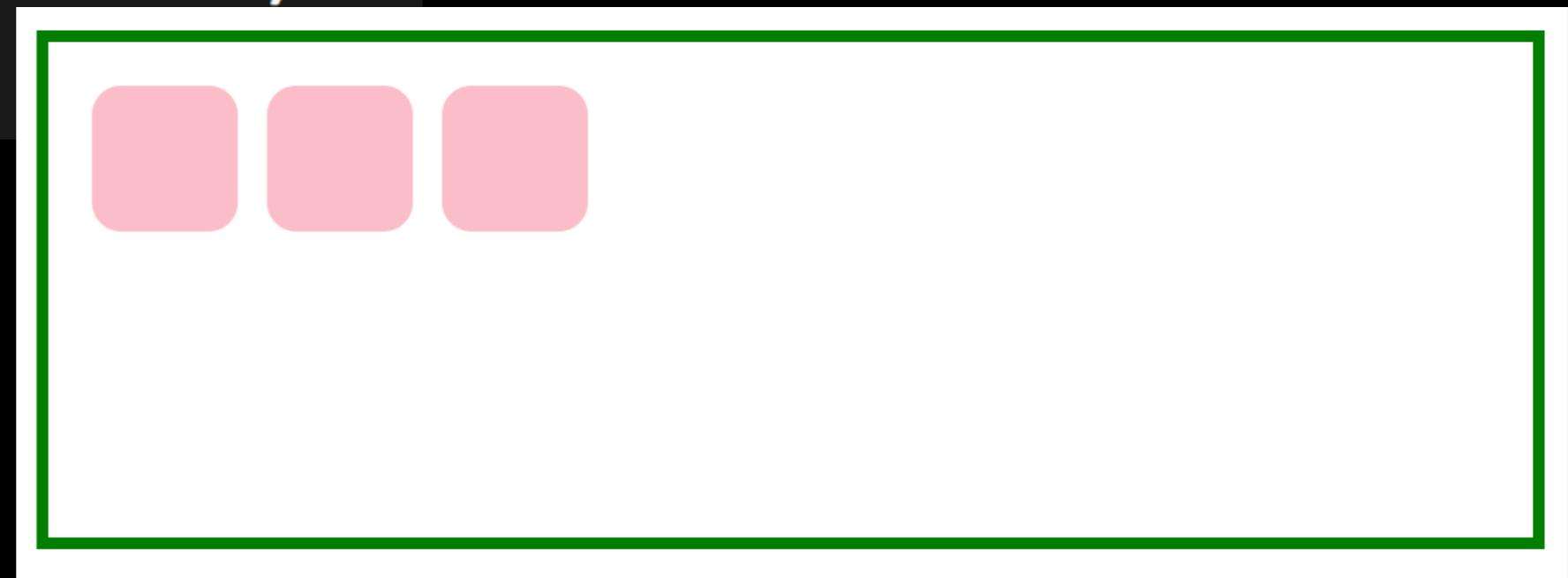
```
#flexBox {  
    display: flex;  
    justify-content: center;  
    padding: 10px;  
    height: 150px;  
    border: 4px solid Green;  
}
```



Flex Basics: align-items

You can control where the item is vertically in the box by setting **align-items** in the flex container.

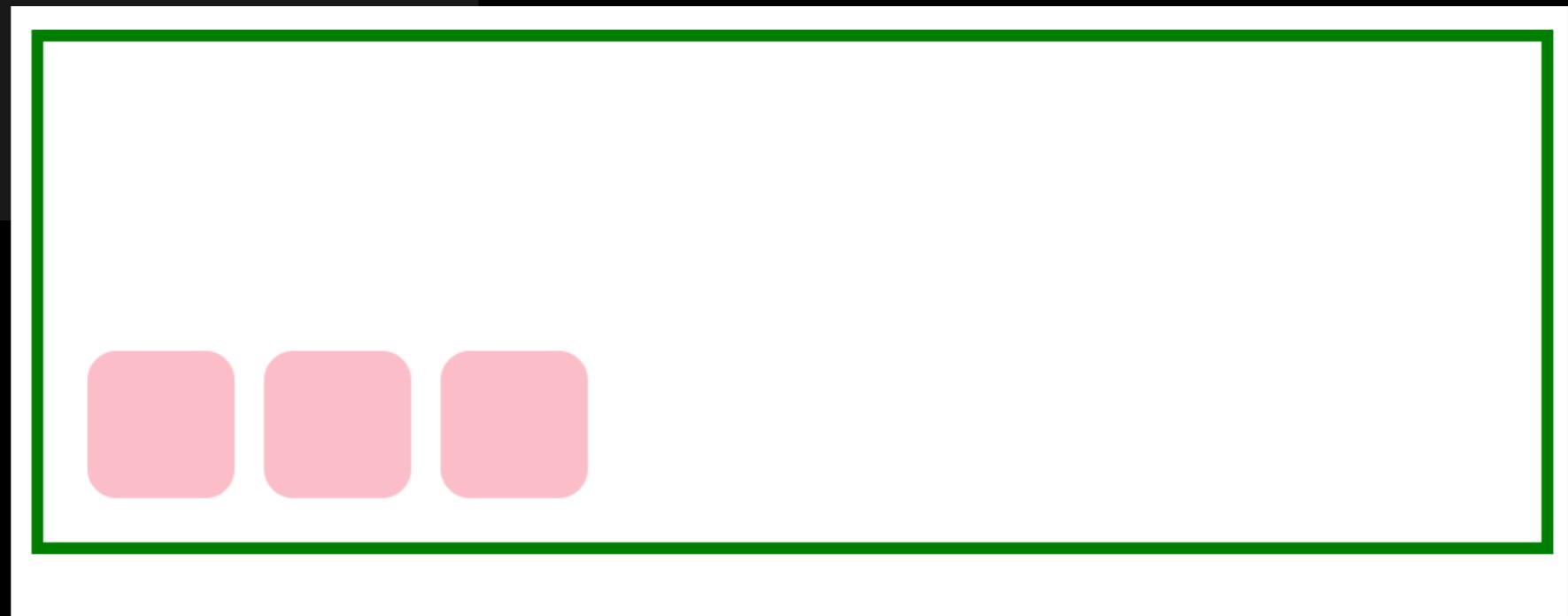
```
#flexBox {  
  display: flex;  
  align-items: flex-start;  
  padding: 10px;  
  height: 150px;  
  border: 4px solid Green;  
}
```



Flex Basics: align-items

You can control where the item is vertically in the box by setting **align-items** in the flex container.

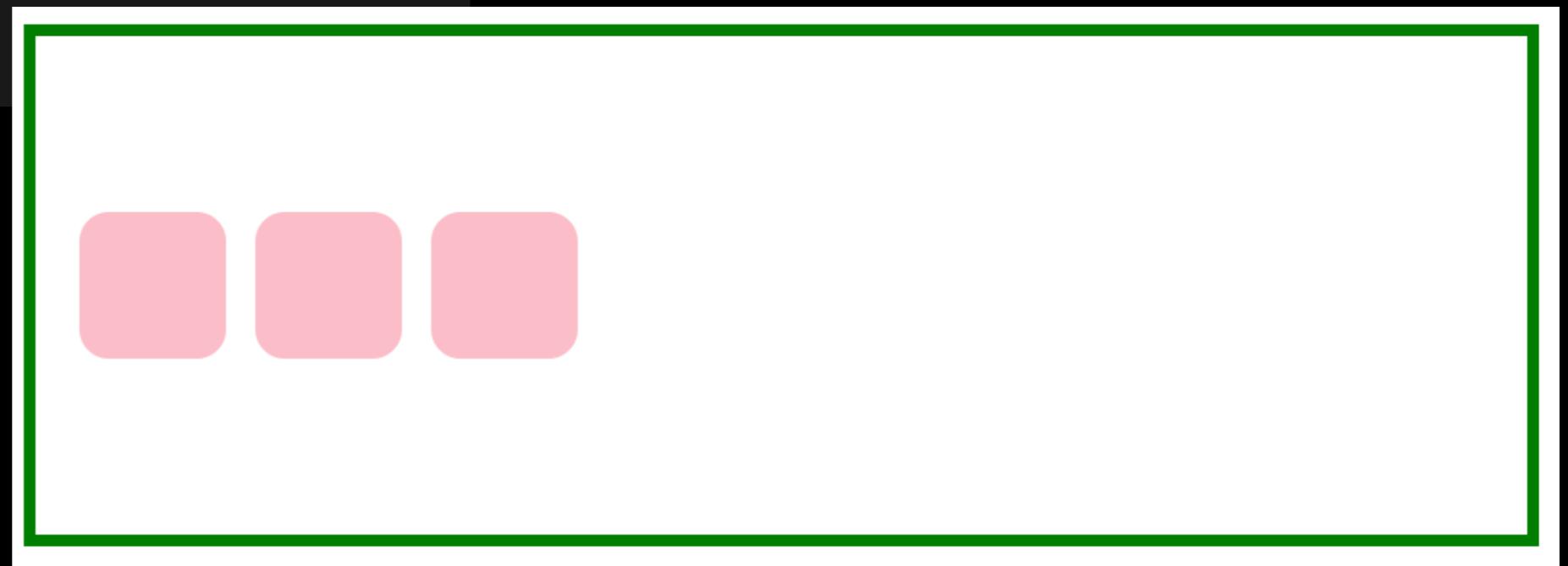
```
#flexBox {  
  display: flex;  
  align-items: flex-end;  
  padding: 10px;  
  height: 150px;  
  border: 4px solid  
}
```



Flex Basics: align-items

You can control where the item is vertically in the box by setting **align-items** in the flex container.

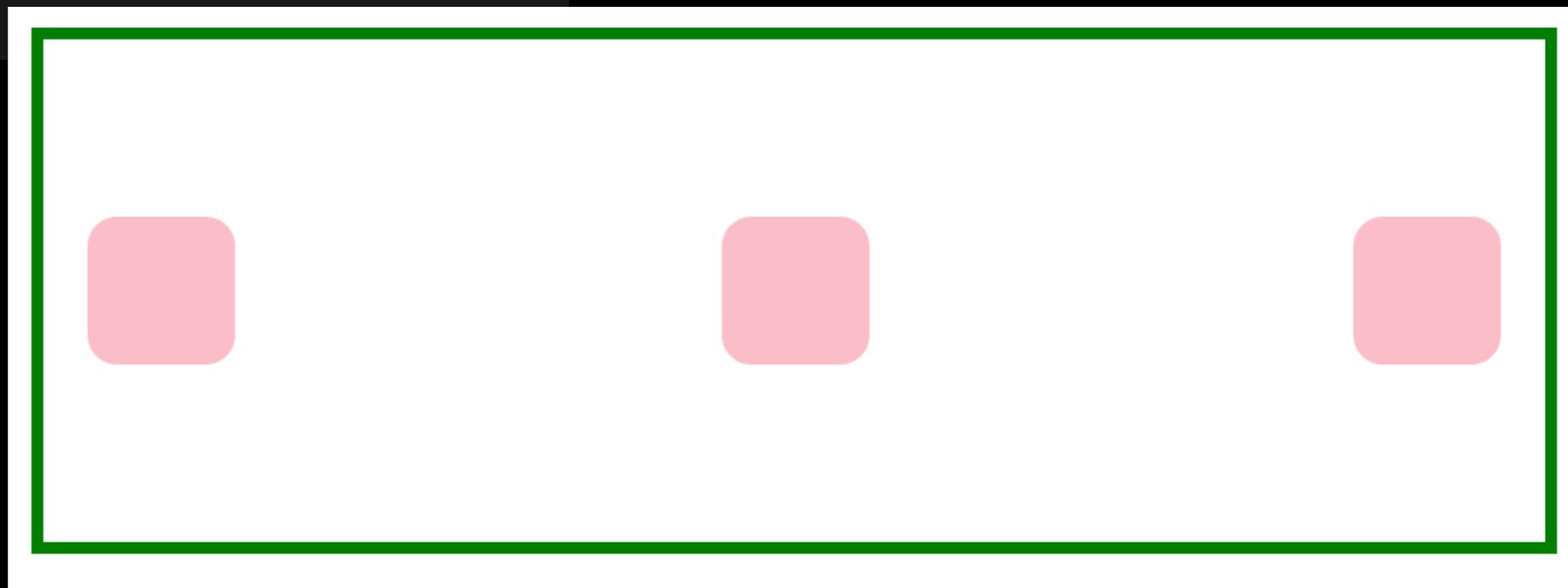
```
▼ #flexBox {  
    display: flex;  
    align-items: center;  
    padding: 10px;  
    height: 150px;  
    border: 4px solid Green;  
}
```



Flex Basics:

justify-content: space-between + space-around

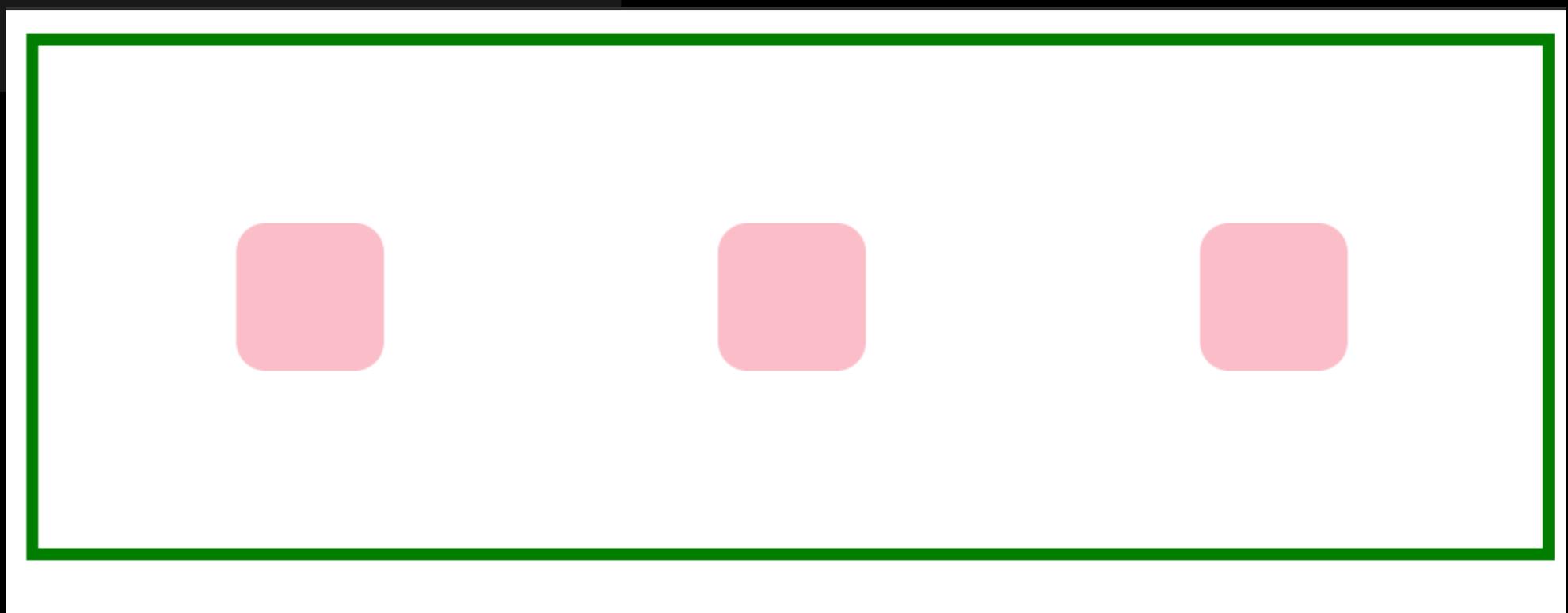
```
#flexBox {  
    display: flex;  
    justify-content: space-between;  
    align-items: center;  
    padding: 10px;  
    height: 150px;  
    border: 4px solid Green;  
}
```



Flex Basics:

justify-content: space-between + space-around

```
#flexBox {  
    display: flex;  
    justify-content: space-around;  
    align-items: center;  
    padding: 10px;  
    height: 150px;  
    border: 4px solid Green;  
}
```



Flex Basics: flex-direction

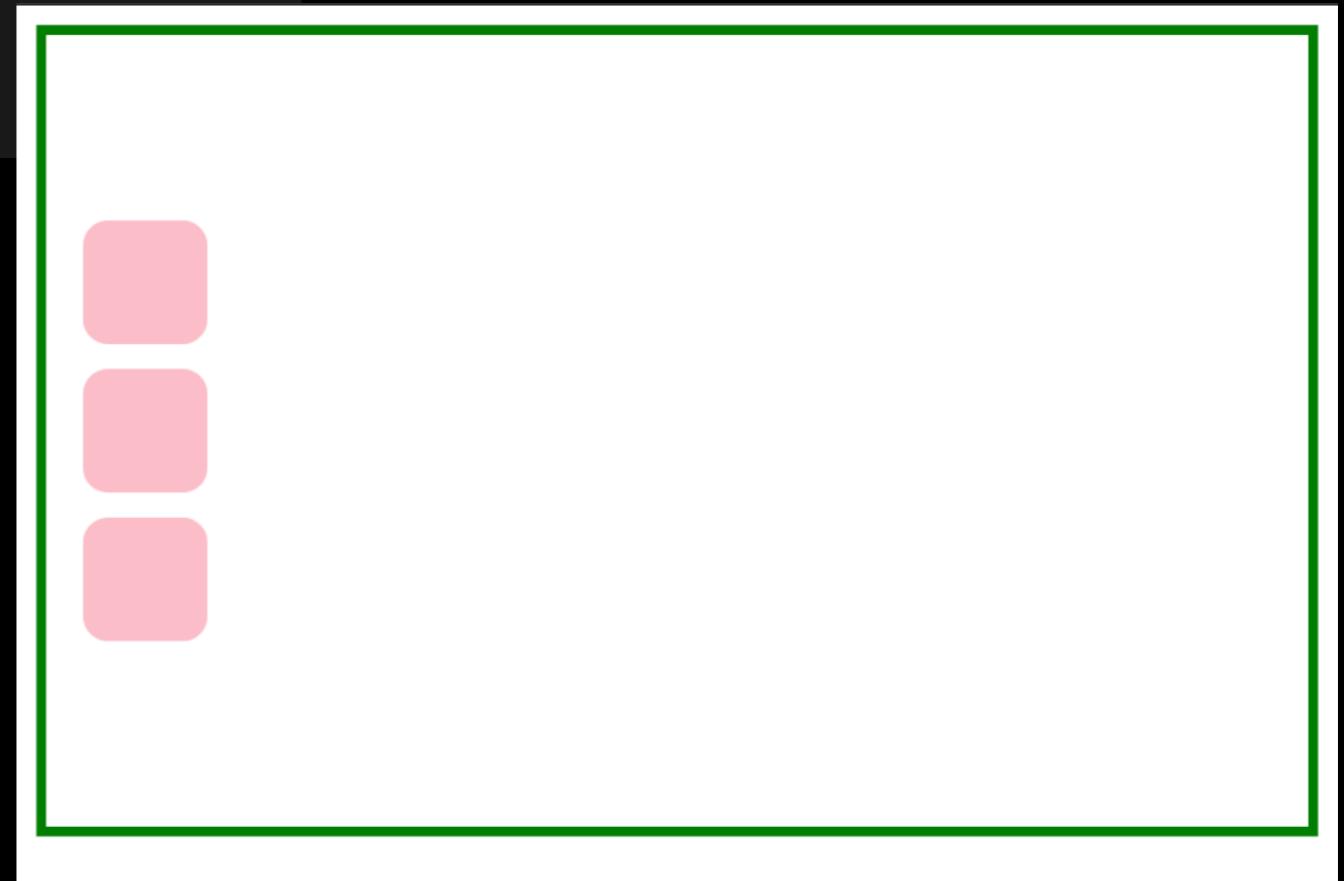
```
#flexBox {  
    display: flex;  
    flex-direction: column;  
    padding: 10px;  
    height: 150px;  
    border: 4px solid Green;  
}
```



Flex Basics: flex-direction

```
#flexBox {  
    display: flex;  
    flex-direction: column;  
    justify-content: center;  
    padding: 10px;  
    height: 300px;  
    border: 4px solid Green;  
}
```

Now **justify-content** controls where the column is vertically in the box.



Flex Basics: flex-direction

```
▼ #flexBox {  
    display: flex;  
    flex-direction: column;  
    justify-content: space-around;  
    padding: 10px;  
    height: 300px;  
    border: 4px solid Green;  
}
```

Now **justify-content** controls where the column is vertically in the box.

And you can also lay out columns instead of rows.

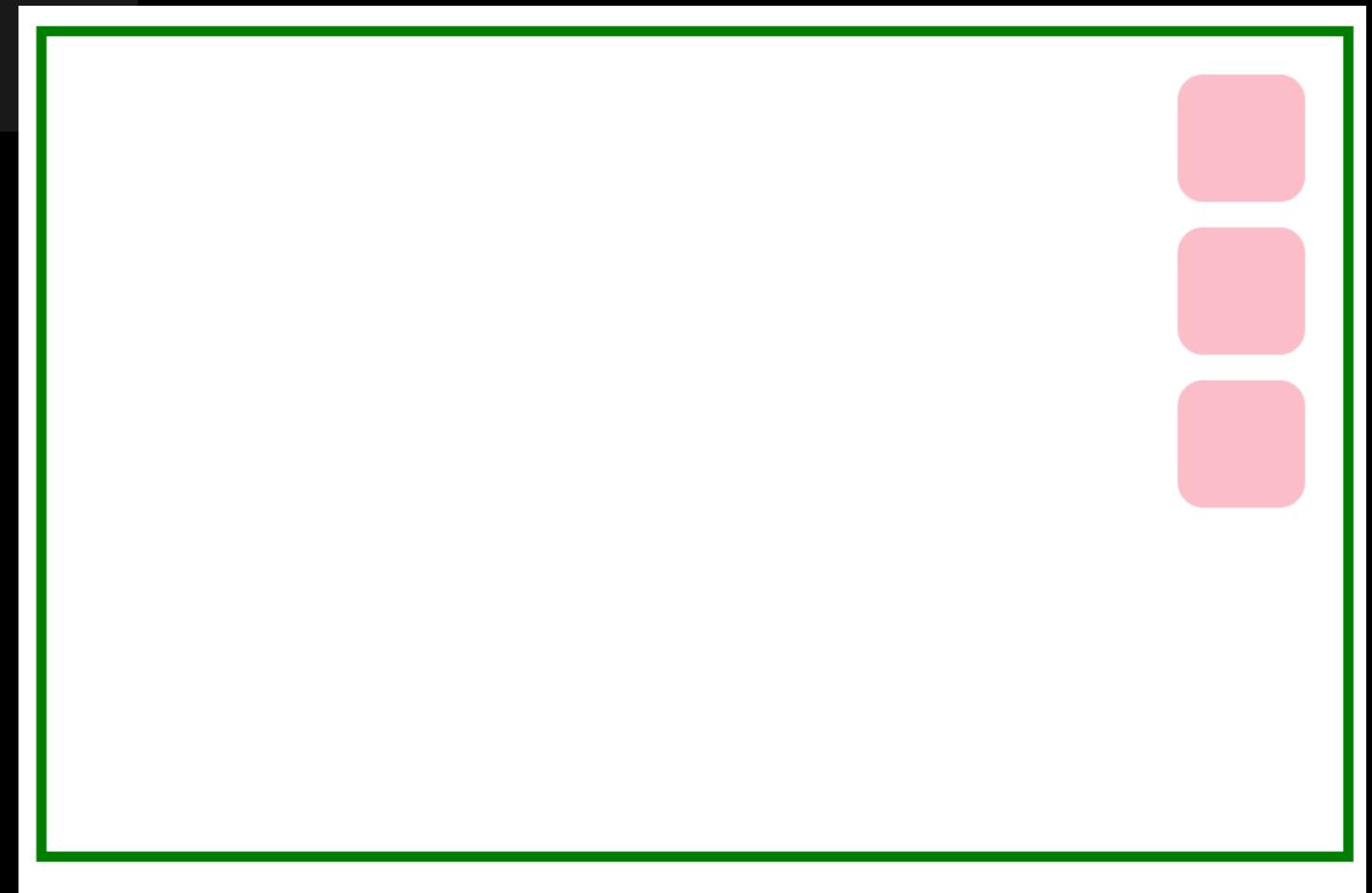


Flex Basics: flex-direction

```
▼ #flexBox {  
    display: flex;  
    flex-direction: column;  
    align-items: flex-end;  
    padding: 10px;  
    height: 300px;  
    border: 4px solid Green;  
}
```

Now **align-items** controls where the column is horizontally in the box.

And you can also lay out columns instead of rows.



Flex Basis

Flex items have an initial width*, which, by default is either:

- The content width, or
- The explicitly set **width** property of the element, or
- The explicitly set **flex-basis** property of the element

This initial width* of the flex item is called the **flex basis**.

The explicit width of a flex item is respected **for all flex items**, regardless of whether the flex item is inline, block, or inline-block.*

*width in the case of rows; height in
the case of columns

Flex Basis

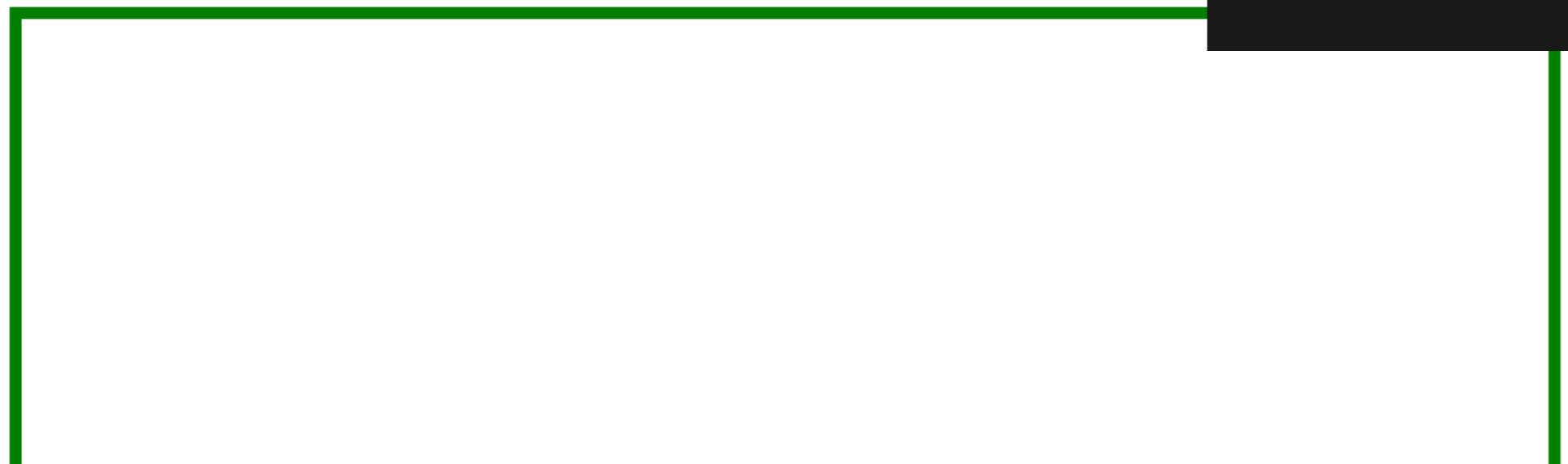
If we unset the height and width, our flex items disappears, because the **flex basis** is now the content size, which is empty:

```
<div id="flexBox">
  <span class="flexThing"></span>
  <div class="flexThing"></div>
  <span class="flexThing"></span>
</div>
```

```
#flexBox {
  display: flex;
  border: 4px solid Green;
  height: 150px;
}

.flexThing {
  border-radius: 10px;
  background-color: pink;
  margin: 5px;
}
```

localhost:8000



flex-shrink

The width* of the flex item can automatically shrink **smaller** than the **flex basis** via the **flex-shrink** property:

flex-shrink:

- If set to **1**, the flex item shrinks itself as small as it can in the space available
- If set to **0**, the flex item does not shrink.

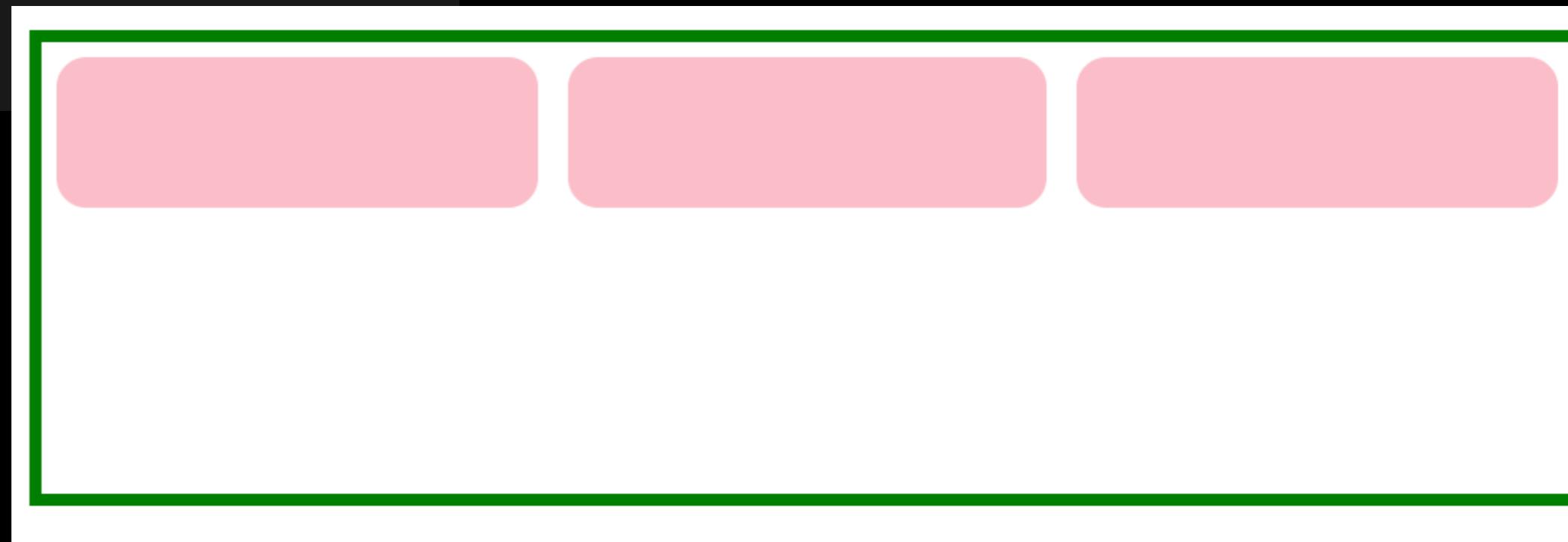
Flex items have **flex-shrink: 1 by default.**

*width in the case of rows;
height in the case of columns

flex-shrink

```
#flexBox {  
  display: flex;  
  align-items: flex-start;  
  border: 4px solid Green;  
  height: 150px;  
}  
  
.flexThing {  
  width: 500px;  
  height: 50px;  
  border-radius: 10px;  
  background-color: pink;  
  margin: 5px;  
}
```

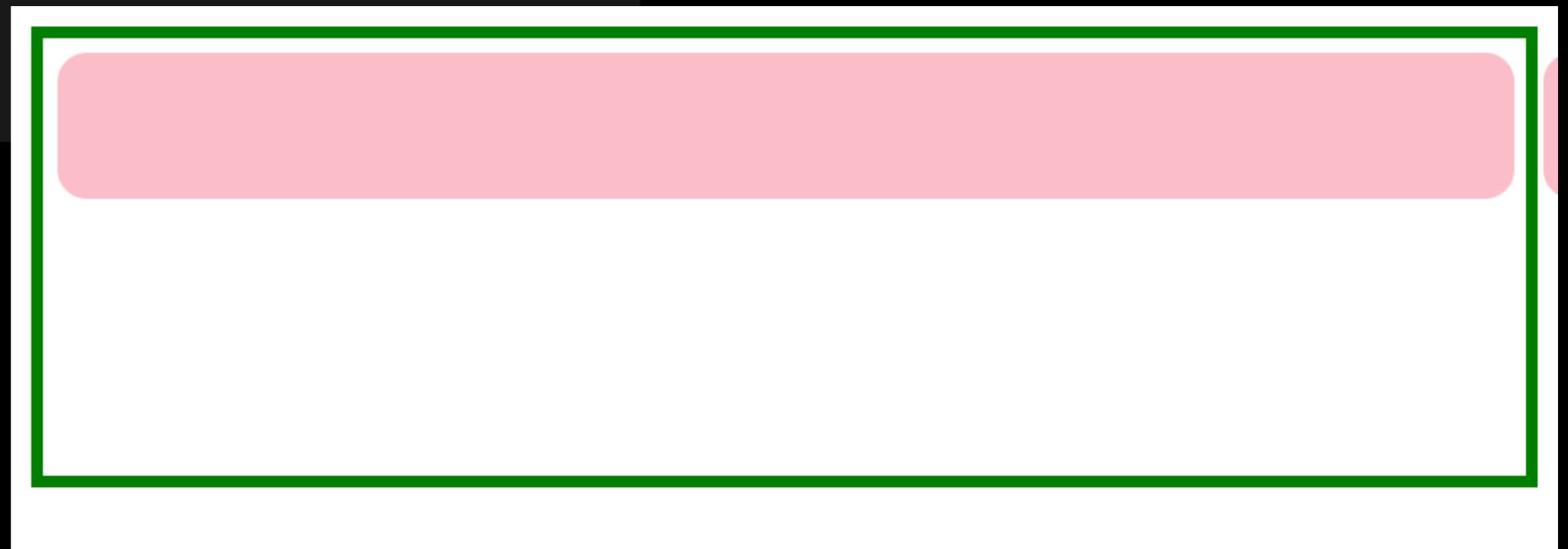
The flex items' widths all shrink to fit the width of the container.



flex-shrink

```
.flexThing {  
  width: 500px;  
  height: 50px;  
  flex-shrink: 0;  
  border-radius: 10px;  
  background-color: pink;  
  margin: 5px;  
}
```

Setting **flex-shrink: 0;** undoes the shrinking behavior, and the flex items do not shrink in any circumstance:



flex-grow

The width* of the flex item can automatically **grow larger** than the **flex basis** via the **flex-grow** property:

flex-grow:

- If set to **1**, the flex item grows itself as large as it can in the space remaining
- If set to **0**, the flex item does not grow

Flex items have **flex-grow: 0 by default.**

*width in the case of rows;
height in the case of columns

flex-grow

Let's unset the height + width of our flex items again.

```
<div id="flexBox">
  <span class="flexThing"></span>
  <div class="flexThing"></div>
  <span class="flexThing"></span>
</div>
```

```
#flexBox {
  display: flex;
  border: 4px solid Green;
  height: 150px;
}

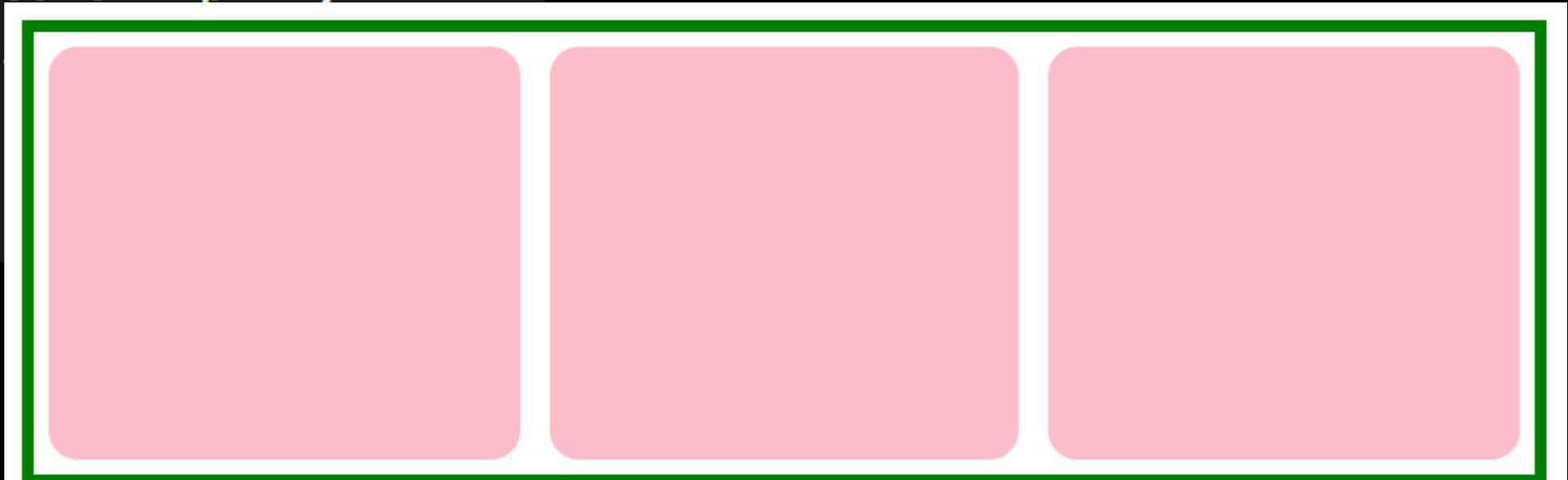
.flexThing {
  border-radius: 10px;
  background-color: pink;
  margin: 5px;
}
```



flex-grow

if we set **flex-grow: 1;**
the flex items fill the empty space

```
#flexBox {  
    display: flex;  
    border: 4px solid Green;  
    height: 150px;  
}  
  
.flexThing {  
    flex-grow: 1;  
    border-radius: 10px;  
    background-color: pink;  
    margin: 5px  
}
```



flex item height**?

note that **flex-grow** only controls width*

So why does the height** of the flex items seem to 'grow' as well?

```
#flexBox {  
  display: flex;  
  border: 4px solid Green;  
  height: 150px;  
}  
  
.flexThing {  
  flex-grow: 1;  
  border-radius:  
  background-color:  
  margin: 5px;  
}
```



*width in the case of rows; height in the case of columns

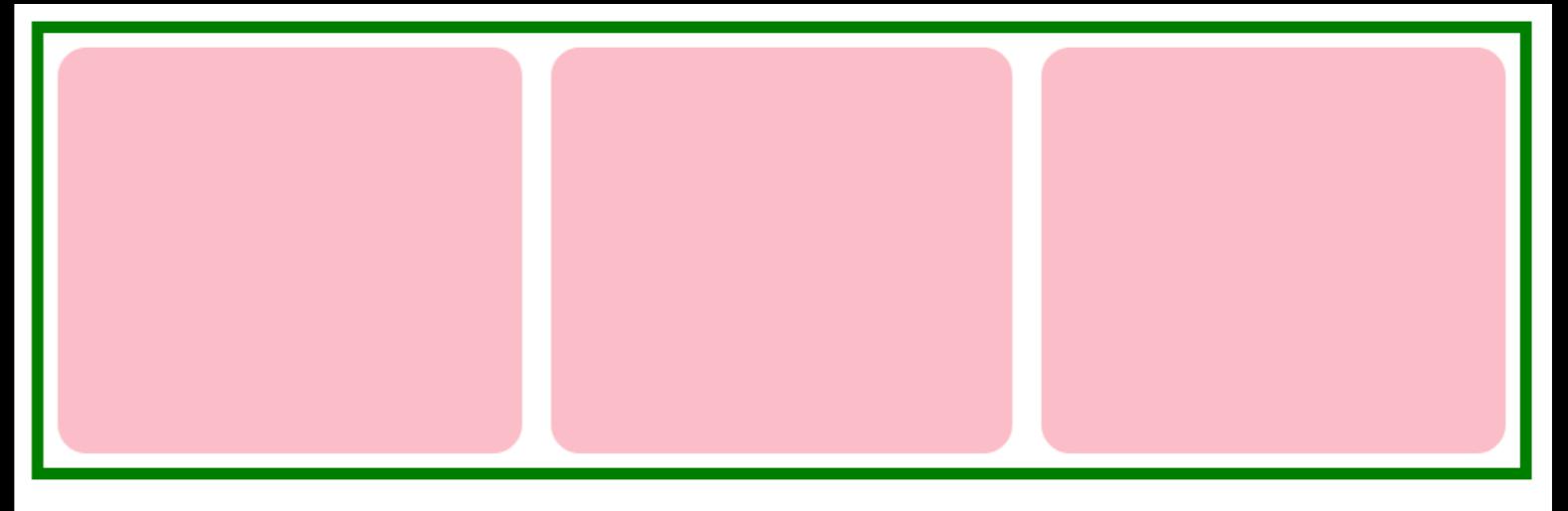
**height in the case of rows; width in the case of columns

align-items: stretch;

The default value of **align-items** is stretch, which means every flex item grows vertically* to fill the container by default.

(This will not happen if the height on the flex item is set)

```
#flexBox {  
  display: flex;  
  border: 4px solid Green;  
  height: 150px;  
}  
  
.flexThing {  
  flex-grow: 1;  
  border-radius: 10px;  
  background-color: pink;  
  margin: 5px;  
}
```



*vertically in the case of rows; horizontally in the case of columns

align-items: stretch;

If we set another value for align-items, the flex items disappear again because the height is now content height, which is 0:

```
▼ #flexBox {  
    display: flex;  
    align-items: flex-start;  
    border: 4px solid Green;  
    height: 150px;  
}  
  
▼ .flexThing {  
    flex-grow: 1;  
    border-radius: 10px;  
    background-color: pink;  
    margin: 5px;  
}
```



css grids

Flexbox & CSS Grid

"The basic difference between CSS Grid Layout and CSS Flexbox Layout is that flexbox was designed for layout in one dimension - either a row or a column. Grid was designed for two-dimensional layout - rows, and columns at the same time. The two specifications share some common features, however, and if you have already learned how to use flexbox, the similarities should help you get to grips with Grid."

[MDN](#)

The `flex-direction` property defines in which direction the container wants to stack the flex items - either `flex-direction: row` or `flex-direction: column`. However, by using `flex-wrap` property. Read all about [CSS Flexbox @ W3](#).

CSS Grid

A grid is an intersecting set of horizontal and vertical lines - one set defining columns and the other rows. Elements can be placed onto the grid, respecting these column and row lines.

How Grid Layout Works

The process for using the CSS Grid Layout Module is fundamentally simple:

- + Use the display property to turn an element into a grid container. The element's children automatically become grid items.
- + Set up the columns and rows for the grid. You can set them up explicitly and/or provide directions for how rows and columns should get created on the fly (the css grid is very flexible).
- + Assign each grid item to an area on the grid. If you don't assign them explicitly, they flow into the cells sequentially.

The element that has the display: **grid property** applied to it becomes the grid container and defines the context for grid formatting. All of its direct child elements automatically become grid items that end up positioned in the grid. You can define an explicit grid with grid layout but the specification also deals with the content added outside of a declared grid, which adds additional rows and columns when needed. Features such as adding "as many columns that will fit into a container" are included.

Grid line

The horizontal and vertical dividing lines of the grid are called grid lines.

Grid cell

The smallest unit of a grid is a grid cell, which is bordered by four adjacent grid lines with no grid lines running through it.

Grid area

A grid area is a rectangular area made up of one or more adjacent grid cells.

Grid track

The space between two adjacent grid lines is a grid track, which is a generic name for a grid column or a grid row. Grid columns are said to go along the block axis, which is vertical (as block elements are stacked) for languages written horizontally. Grid rows follow the inline (horizontal) axis.

The structure established for the grid is independent from the number of grid items in the container. You could place 4 grid items in a grid with 12 cells, leaving 8 of the cells as 'whitespace.' That's the flexibility of grids. You can also set up a grid with fewer cells than grid items, and the browser adds cells to the grid to accommodate them.

Grid Container Properties:

`display`
`grid-template-columns`
`grid-template-rows`
`grid-template-areas`
`grid-template`
`grid-column-gap`
`grid-row-gap`
`grid-gap`
`justify-items`
`align-items`
`place-items`
`justify-content`
`align-content`
`place-content`
`grid-auto-columns`
`grid-auto-rows`
`grid-auto-flow`
`grid`

CSS Tricks w/ links!

Grid Item Properites

`grid-column-start`

`grid-column-end`

`grid-row-start`

`grid-row-end`

`grid-column`

`grid-row`

`grid-area`

`justify-self`

`align-self`

`place-self`