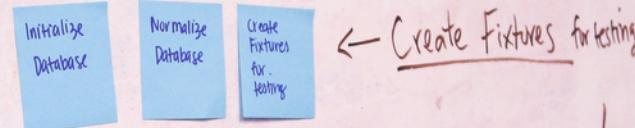
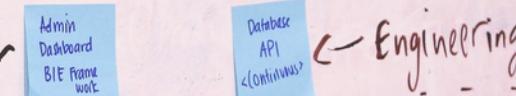


1) WEEK 4: Design



2) WEEK 5: Design



← Engineering

3) WEEK 6: Dev

B/E Sorting
(for All Dashboard View)
W/ pagination

B/E Filter
(icon for all views)

B/E
CMD for
all DB
Tables

Exporting

API

CRON
Automated
(send)
email
B/E

Source: Tommy Wong

RESPONSIVE WEB DEVELOPMENT WITH BOOTSTRAP & JQUERY

Bernard Suen
Center for Entrepreneurship
Chinese University of Hong Kong

RECAP

1. **Visual communication principles:** the psychology, components, structure, patterns, and process.
2. **Encoding:** A well-defined purpose (story) for determining the proper functions and forms for selecting and designing the appropriate patterns to present the data.
3. **Trigger interactions (include navigation) ** with the chosen patterns by combining signifiers (well established patterns), affordance (visual and tactile cues), and mental models (cognitive preferences).**

****** Equivalent to the “**event**” concept in programming.

PROGRAMMING PATTERNS

To transform data, we need **input/output,
mathematical, **logical**, and **loop** operations.**

Blocks JavaScript Python PHP Lua Dart XML



1

Variables - Equation Assignment

Blocks
Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

Blocks JavaScript Python PHP Lua Dart XML



2

Math - Operations for Calculation

Blocks
Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

Blocks JavaScript Python PHP Lua Dart XML



3

Logic - Conditions for Comparison

Blocks
Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

Blocks JavaScript Python PHP Lua Dart XML



4

Loop - Repetition

Blocks
Logic
Loops
Math
Text
Lists
Colour
Variables
Functions

Application of Loop in LocalStorage

Let try out an example in Chrome console

```
>students = [];
> student1 = {name:'Peter Chan', id:'1001'};
> student2 = {name:'David Li', id:'1002'};
> student3 = {name:'Joyce Xu', id:'1003'};
> students.push(student1);
> students.push(student2);
> students.push(student3);
> for (i=0; i< 3 ;i++) { alert(students[i].id);}
> for (i=0; i< students.length ;i++) { alert(students[i].id);}
> for (i=0; i< students.length ;i++)
{document.getElementById("result").innerHTML += "<br>"+
students[i].id;}
```

Section 1

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.



Article 2

```
document.getElementById("retrieve_btn").addEventListener("click", function() {
    json_string = localStorage.getItem("studentDB");
    student_list = JSON.parse(json_string);
    for (i=0;i<student_list.length;i++) {
        display_list = display_list + "Student ID:"+student_list[i].id+"<br>"+"Student Name: "+student_list[i].name;
        students.push(student_list[i]);
    }
});
```

Section 2

Article 1

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User Name:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Send"/>	

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

Student Id:	<input type="text" value="3333"/>
Student Name:	<input type="text" value="John"/>
<input type="button" value="Enter"/> <input type="button" value="Store"/> <input type="button" value="Clear Screen"/> <input type="button" value="Retrieve"/> <input type="button" value="Delete All"/>	

Student List
Student ID:1111
Student Name: Peter
Student ID:2222
Student Name: David
Student ID:3333
Student Name: John

Article 2

Vestibulum ullamcorper nisl elit, non semper nunc viverra eu. Etiam vitae consectetur sapien. Vestibulum lorem ante, dignissim vel orci et, luctus luctus erat. Vestibulum at lorem vitae massa mollis sollicitudin non in dui. Duis venenatis, felis euismod faucibus vulputate, enim arcu laoreet elit, et interdum magna erat non mauris. Nulla vel accumsan augue. Suspendisse id vehicula libero, nec eleifend arcu. Proin sed pellentesque diam. Suspendisse quis sem maximus orci tristique volutpat quis quis mauris. Phasellus a urna enim. Sed pharetra, ipsum ac eleifend mattis, dolor velit pulvinar neque, at ultricies elit libero nec ex. Proin tempor ipsum sed dolor feugiat suscipit. Donec gravida tellus maximus ex auctor laoreet.

```
document.getElementById("store_btn").addEventListener("click", function() {
  localStorage.setItem("studentDB", JSON.stringify(students));
});
```

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie pharetra massa aenean placerat lectus. Aenean pharetra dolor sed odio vehicula ut commodo.



Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

Student Id:	<input type="text" value="3333"/>
Student Name:	<input type="text" value="John"/>
<input type="button" value="Enter"/> <input type="button" value="Store"/> <input type="button" value="Clear Screen"/> <input type="button" value="Retrieve"/> <input type="button" value="Delete All"/>	

Student List	
Student ID:1111	
Student Name: Peter	
Student ID:2222	
Student Name: David	
Student ID:3333	
Student Name: John	

Elements Console Sources Network Performance Memory Application Security Lighthouse ✖ 4 | ⚙️ : X

Application

- Manifest
- Service Workers
- Clear storage

Storage

- Local Storage http://127.0.0.1:5502
- Session Storage

Application

Filter

Key	Value
studentDB	[{"id": "1111", "name": "Peter"}, {"id": "2222", "name": "David"}, {"id": "3333", "name": "John"}]

studentDB

- ▼ [{"id": "1111", "name": "Peter"}, {"id": "2222", "name": "David"}, {"id": "3333", "name": "John"}]
- ▶ 0: {"id": "1111", "name": "Peter"}
- ▶ 1: {"id": "2222", "name": "David"}
- ▶ 2: {"id": "3333", "name": "John"}

Use of LocalStorage

- Remember status from previous session (e.g. points).
- Save variables that are used repeatedly (e.g. email address and password).
- Minimize constant communication with the server to reduce performance load.
- Require synchronisation with server to maintain consistency between server and local information
- There are many ways to store variables locally.
LocalStorage is only one of them, perhaps the easiest.

DESIGN PATTERNS

BASIC VISUAL ELEMENTS

- **Line**
- **Shape**
- **Form**
- **Texture**
- **Balance**
- **Composition**

BASIC COMPOSITION PRINCIPLES

- **Proximity**
- **White Space**
- **Alignment**
- **Contrast**
- **Repetition**

COMMON UI PATTERNS

- **TOOLBAR**
- **APP BAR**
- **TAB**
- **DROPDOWN**
- **APPLICATION DRAWERS**
- **LIST TO DETAILS**
- **MULTI PLANE**

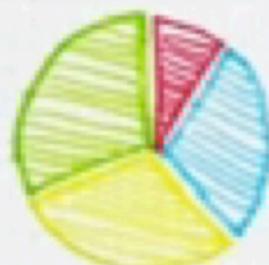
BASIC CHART TYPES

- **Line Chart**
- **Bar Chart**
- **Pie Chart**
- **Scatter Plot**
- **Box and Whisker Graph**

Nuts *and* Bolts of Chart Types

Created by

online-behavior.com



PIE CHART

Extremely useful when creating a well-designed document that is intended to people that will not read the data (e.g. management)



LINE CHART

Useful to show trends, especially upwards (or downwards) trends people tend to use more obscure charts, like the waterfall chart, see below



AREA CHART

Please don't use this chart, I beg you! And please buy one of Tufte's books.



HISTOGRAM

Chart used by responsible analysts who understand the power of segmentation and the sadness that comes from aggregating data.



BAR CHART

Safe choice. But make sure you read Stephen Few's lecture you show the chart to your boss, it will increase the probability of getting a raise.



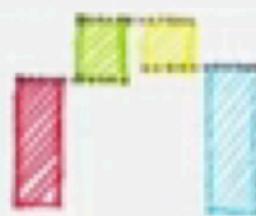
BUBBLE CHART

If you manage to extract insights from this graph your name is Name Roasting.



RADAR CHART

If you want to build a complex model around which you have done a lot of research, that's your choice but only PhDs will understand you.



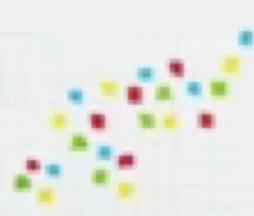
WATERFALL CHART

Perfect if you want to hide information or impress other people. Seriously can you think a chart that is also known as a "Flying Saucer Chart" or "Water Chart"? No.



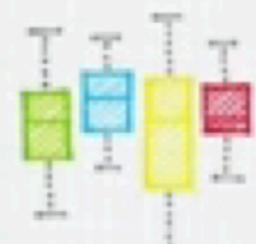
TREE MAP

I have seen trees and I have seen maps, but how many times is a combination of both? If you use it, good for you.



SCATTERPLOT

Very useful to find outliers, just like the people that commonly create them. Human beings just know up until they're much to the age of 16.



BOX PLOT

This one is for geeks. If you use it successfully you will get a seat in between Ronaldinho and Adriano (at friendlies) because

<https://www.youtube.com/watch?v=2RCy5hTxuYA>

With the various **chart types and **patterns** to
choose from, WHICH ONE should I pick?**

VISUAL ENCODING

- Choosing the right **chart type (pattern)** to fit its **purpose**
- Use of titles and legends
- Length or height and line weight
- Position, Angle, and Area
- Color, Hue and Shade
- **Interactions** with the encoded patterns

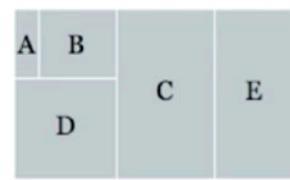
Length or height



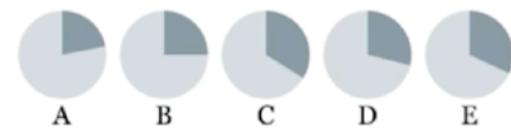
Position



Area



Angle/area



Line weight



Hue and shade



Figures represented
in all these graphics:
20% 25% 34% 30% 39%

Visual encoding

Main steps on any information graphics project.

1. Define the focus, the story, the goals, the tasks
 2. Do some preliminary research
 3. Choose graphic forms according to 1.
4. Sketches and storyboards; structure the information
5. Complete the research and write the copy
6. Create the graphics, maps, and diagrams

Source: The Functional Art by Alberto Cairo

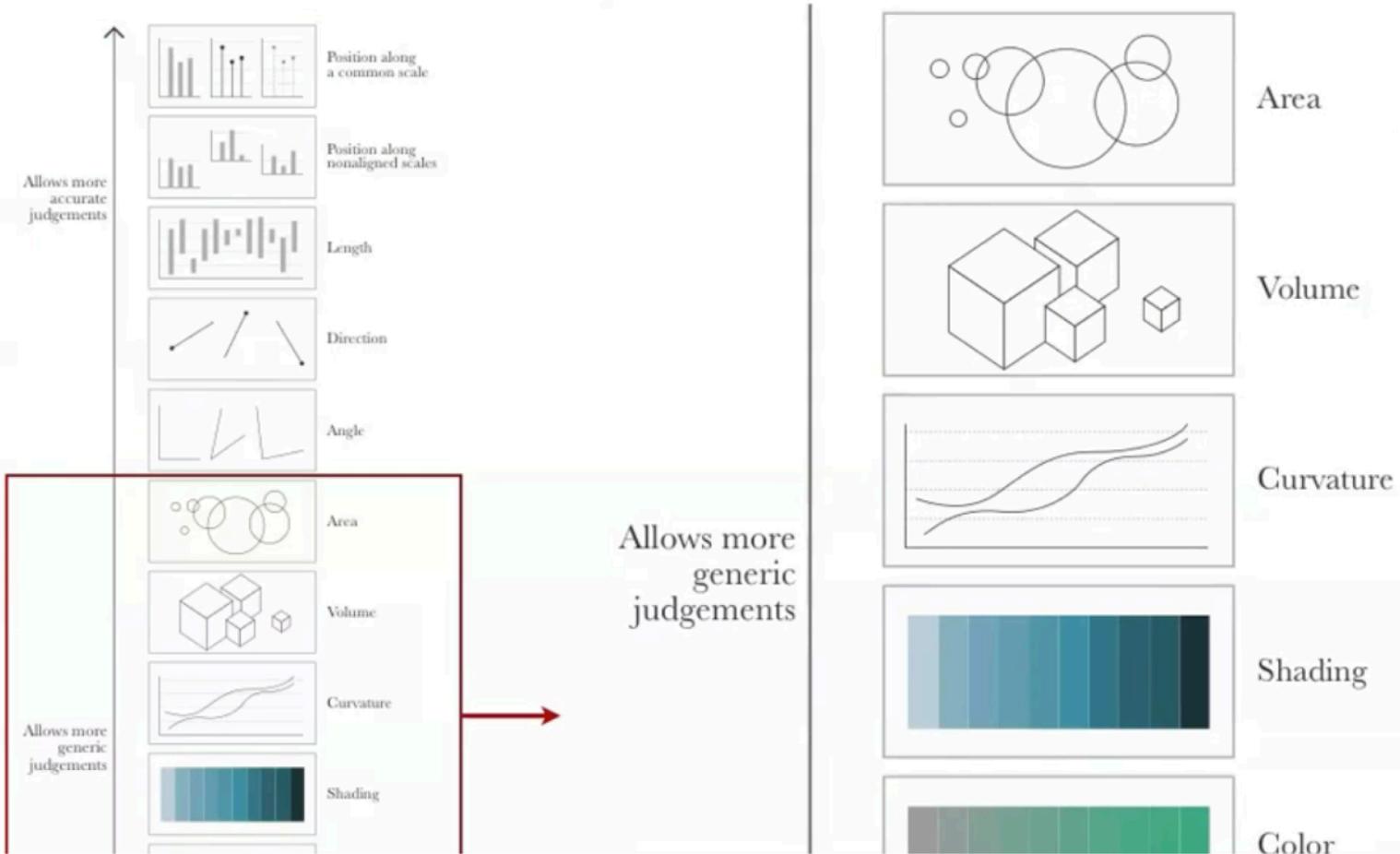
William Cleveland and Robert McGill

"Graphical perception: theory, experimentation, and application to the development of graphical methods"



William Cleveland and Robert McGill

"Graphical perception: theory, experimentation, and application to the development of graphical methods"





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JOURNAL ARTICLE

Graphical Perception: Theory, Experimentation, and Application to the Development of Graphical Methods

William S. Cleveland and Robert McGill

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Abstract

<https://www.jstor.org/stable/2288400>

Graphical Perception: Theory, Experimentation, and Application to the Development of Graphical Methods

WILLIAM S. CLEVELAND and ROBERT MCGILL*

The subject of graphical methods for data analysis and for data visualization is a broad one. In this article we take a few steps in the direction of establishing such a foundation. Our approach is based on *graphical perception*—the visual decoding of information encoded on graphs. This approach provides a way to evaluate the theory. The theory deals with a small but important piece of the whole process of graphical perception. The first part of the theory concerns a set of elementary tasks people make that are carried out by people extract quantitative information from graphs. The second part is an ordering of the tasks on the basis of how well they can be done. The third part of the theory is tested by experimentation in which subjects record their judgments of the quantitative information on graphs. The theory includes those elements that also suggest that the set of elementary tasks should be expanded. The theory provides a procedure for graph construction. Graphs should employ elementary tasks as high in the ordering as possible. The theory also suggests a variety of graphs, including bar charts, divided bar charts, pie charts, and statistical maps with shading. The conclusion is that radial sunburst graphs for perceptual graphs is needed, and in response we offer alternative graphical forms—dot charts, dot charts with grouping, and frame-decoration charts.

KEY WORDS: Computer graphics; Psychophysics.

1. INTRODUCTION

Nearly 200 years ago William Playfair (1786) began the serious use of graphs for looking at data. More than 50 years ago a battle raged in the pages of the *Journal of the American Statistical Association* over the relative merits of bar charts and pie charts (Ellis 1926; Croxton 1927; Croxton and Stoyler 1927; von Hahn 1927). Today graphs are visible everywhere in data analysis and a vital part of communication in science and technology, business, education, and the mass media.

Still, graph design for data analysis and presentation is

largely unsystematic. This is why Cox (1976) argued, "There is a great need for a theory of graphical methods" (p. 5), and why Kosslyn (1975) wrote, "In constructing, and comparing graphical methods we have little to go on but intuition, rule of thumb, and a kind of masterless tradition." Cox's point is that there is no theory, "no either theory nor systematic body of experiment as a guide" (p. 28–29).

There is, of course, much good common sense about how to make a graph. There are many treatises on graph construction (e.g., Tukey 1963; Schmid and Schmid 1979), but practice has been unstructured (e.g., Tukey 1963; graphic theorists have been interested (e.g., Marcus et al. 1989); statisticians have thought intensely about graphical methods for data analysis (e.g., Tukey 1977; Cleveland et al. 1980); and cartographers have developed almost entirely the construction of statistical maps (Bertin 1973; Robinson, Sale, and Morrison 1978). The ANSI manual on time series analysis (American National Standards Institute 1979) provides guidelines for making graphs, but the manual admits, "The standard . . . sets forth the best current usage, and offers standards by general agreement rather than by consensus" (p. 1).

In this article we approach the science of graphs through human graphical perception. Our approach includes both theory and experimentation.

The first part of the theory is a list of elementary per-

* William S. Cleveland and Robert McGill are statisticians at AT&T Bell Laboratories, Murray Hill, NJ 07974. They thank an anonymous referee, John Chambers, Ken Grunendack, David Keim, Wilson Keim, Carl Morris, and Michael Stein for comments on earlier versions of this JASA research; for important comments on an earlier version of this article.

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September 1984, Volume 79, Number 387
Applications Section

531

BEYOND ENCODING: INTERACTIONS & NAVIGATIONS

Basic Human Computer Interaction (HCI) Principles

- **Affordance** (i.e. visual and tactile cues for triggering actions)
- **Signifiers** (i.e. well established patterns)
- **Mental models** (i.e. bias, habits, preconceived notions)

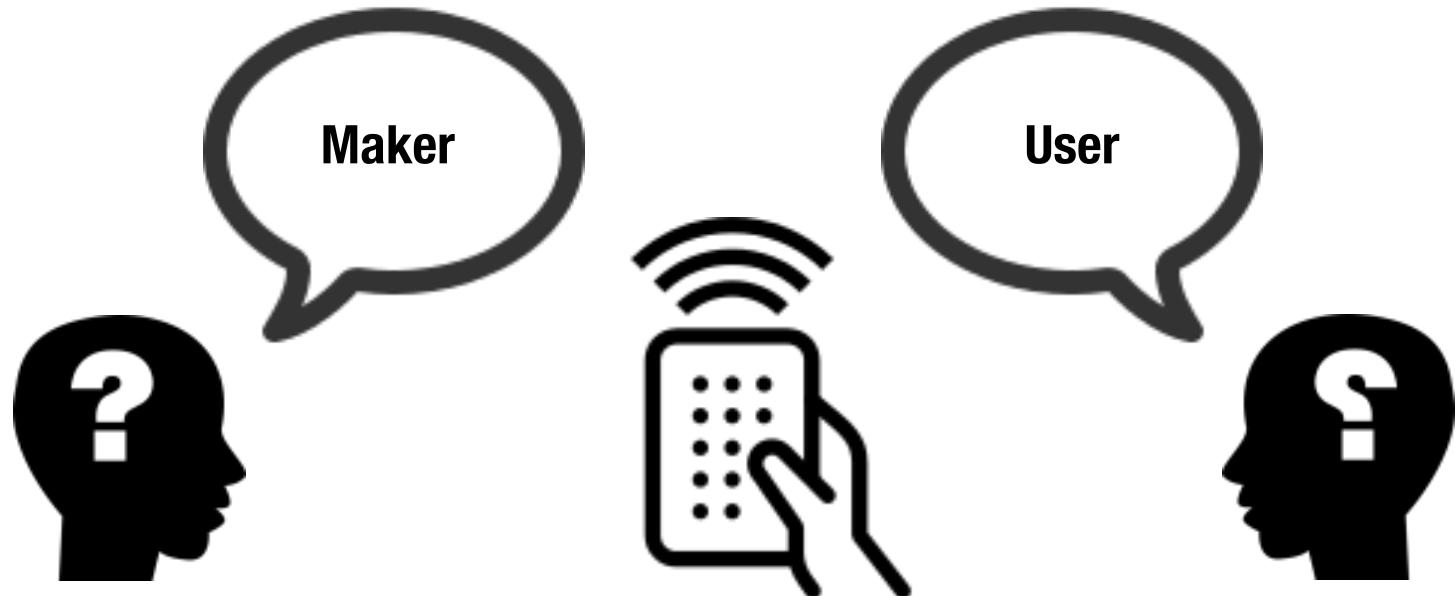


Affordance



Signifier

Gap exists between their mental models



Adapted from Donald Norman, "The Design of Everyday Thing"

Mental Models



Mental Models

**Good interaction design requires alignment of
mental model, signifier, and affordance.**

The Design of Everyday Things

by Don Norman



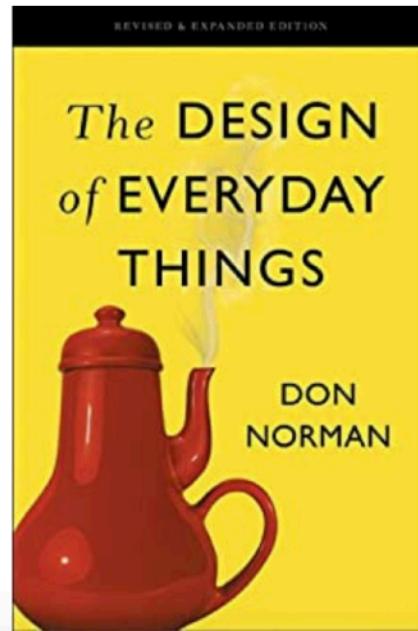
Blake Reichmann

Follow

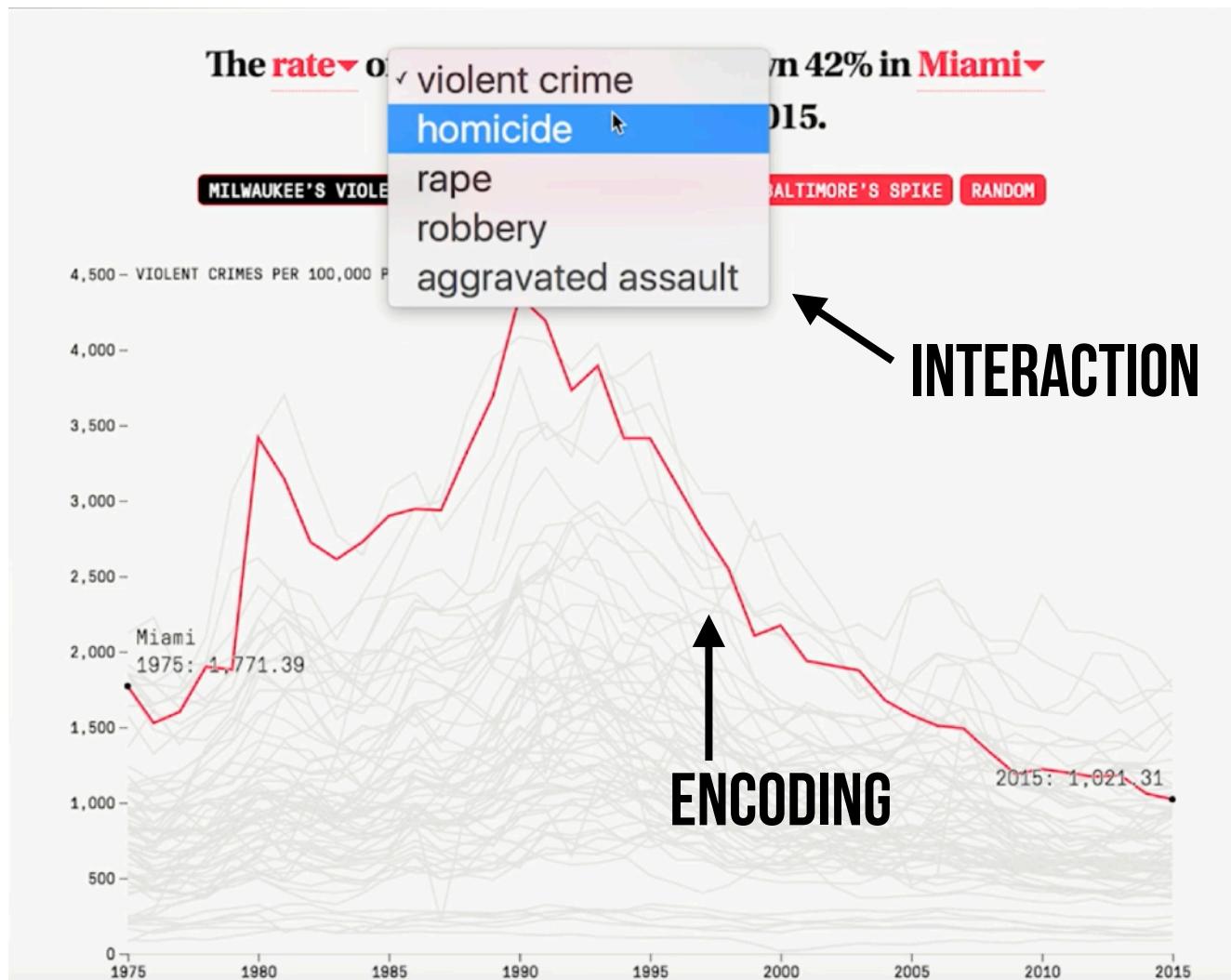
Jun 9 · 12 min read



...

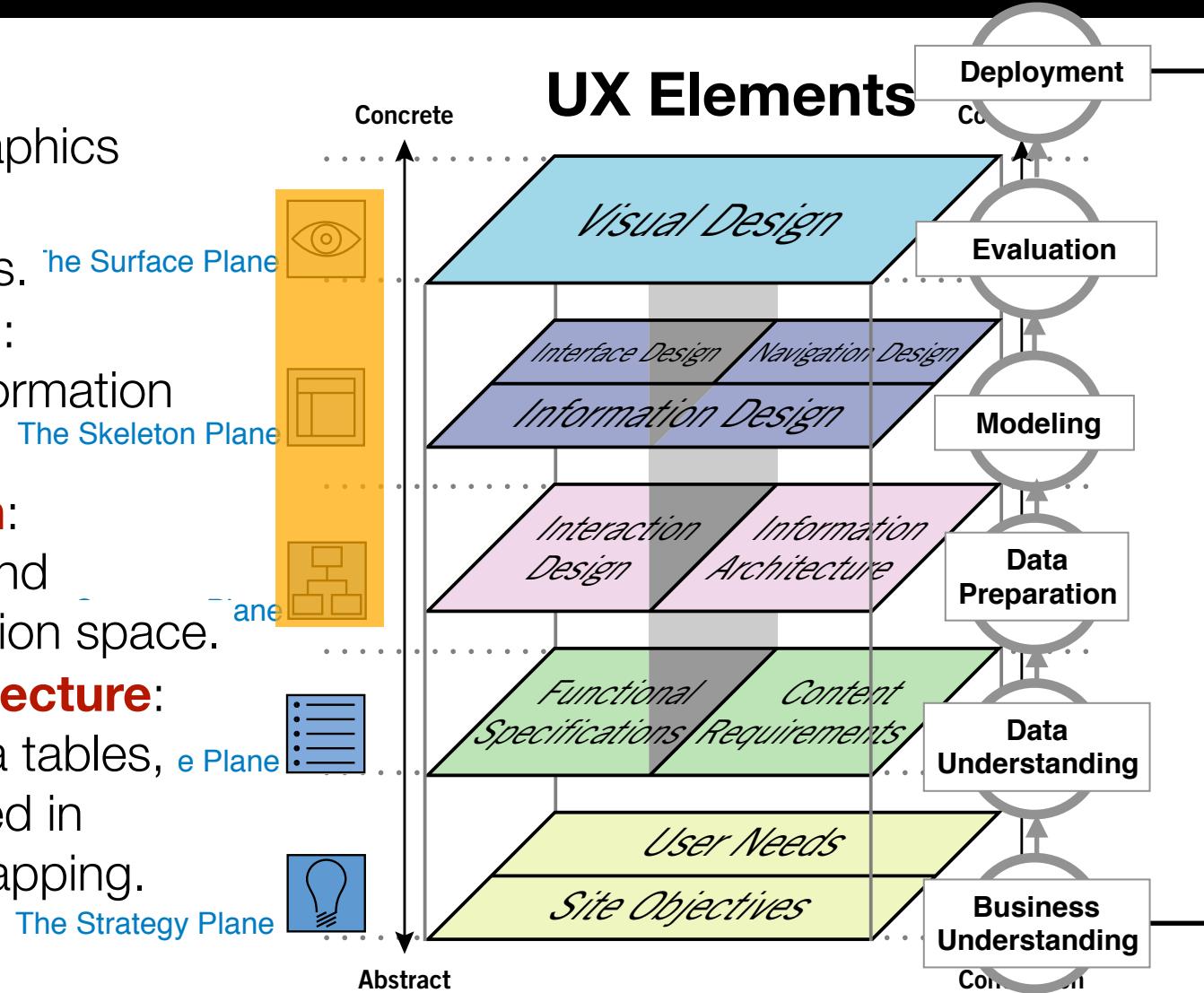


<https://uxdesign.cc/book-notes-the-design-of-everyday-things-by-don-norman-debe462ffc04>

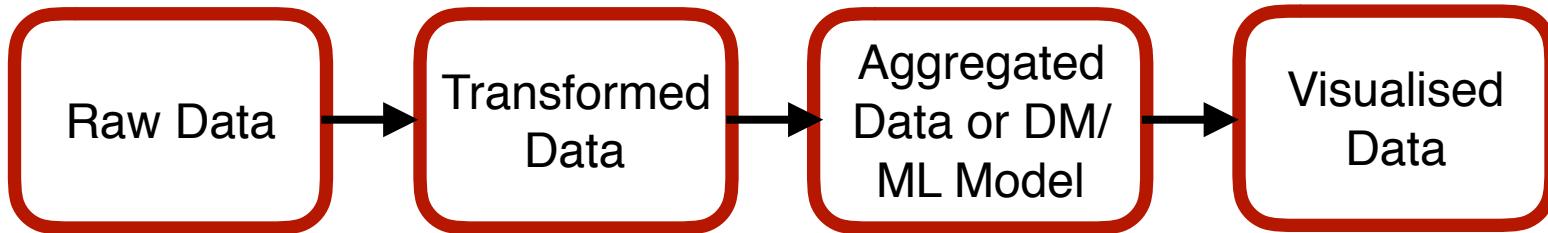


Source: The Marshall Project

- **Visual Design:**
Color, Typeface, Graphics
- **Interface Design:**
Component patterns.
The Surface Plane
- **Navigation Design:**
Journey through information space.
- **Interaction Design:**
Context, medium, and artefacts of information space.
- **Information Architecture:**
Keyword, label, data tables, and search tags used in journey and data mapping.
The Skeleton Plane
- **Content Strategy:**
User needs, Site Objectives
The Strategy Plane

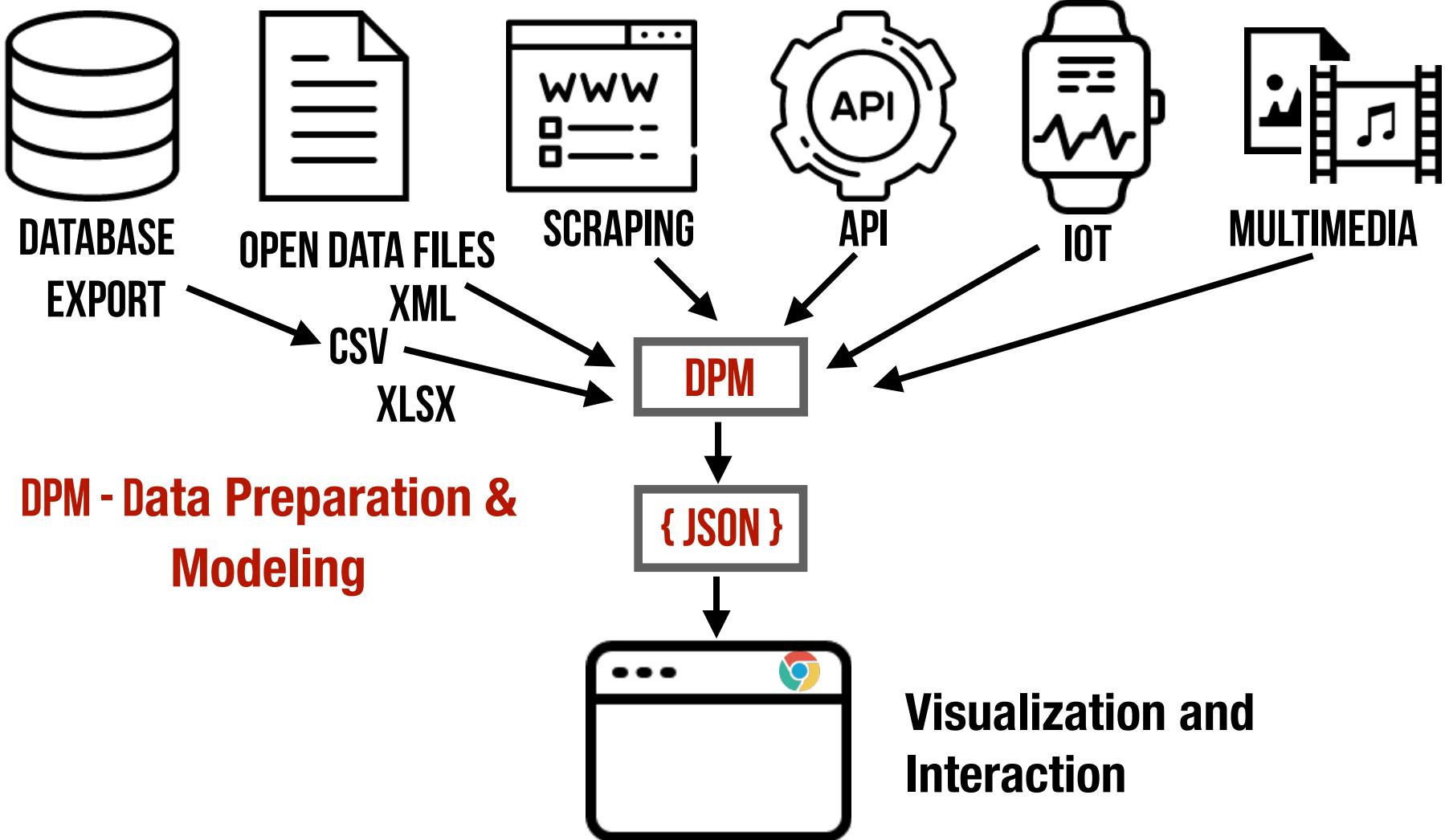


Source: Elements of User Experience
by Jesse James Garrett



- CSV or JSON data scrapped from websites, collected through survey, downloaded from open data or acquired through API and IoT
- Identify incomplete, inconsistent and inaccurate dataset for storage, processing and transformation before being used.
- Find patterns in data through aggregates, metrics/KPI, and machine learning algorithms.
- Visualise data to support decision making across contexts and media throughout the user journey using a dashboard approach.

*DM - Data Mining
ML - Machine Learning



Today's Agenda

1. **3 key elements of responsive design.**
2. **CSS Grid, CSS Flexbox, and Bootstrap framework for layout composition in responsive design.**
3. **Wire-framing and prototyping in Figma**

WHAT IS RESPONSIVE DESIGN ?

**RESPONSIVE DESIGN = VIEW PORT + MEDIA QUERY + MAX/MIN
WIDTH SETTING**

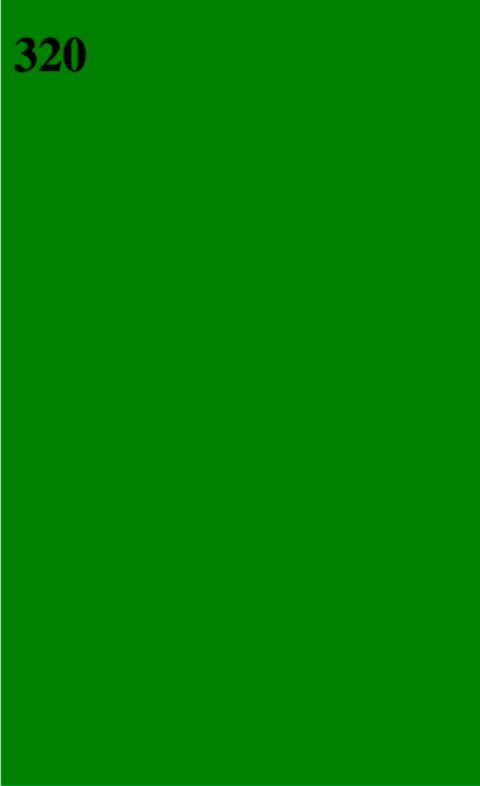
EXAMPLE

Higher than 960

960

768

550



320

VIEW PORT

```
<meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=0">
```

mq_demo.css

```
body {  
    background-color: grey;  
}  
  
@media screen and (max-width: 960px) {  
    body {  
        background-color: red;  
    }  
}  
  
@media screen and (max-width: 768px) {  
    body {  
        background-color: orange;  
    }  
}  
  
@media screen and (max-width: 550px) {  
    body {  
        background-color: yellow;  
    }  
}  
  
@media screen and (max-width: 320px) {  
    body {  
        background-color: green;  
    }  
}
```

MEDIA QUERY + MAX/MIN WIDTH SETTING

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=0">
```

```
<title>Workshop</title>
```

```
<link href="mq_demo.css" rel="stylesheet" type="text/css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.4/jquery.min.js"></script>
```

```
<script>
```

```
\$(document).ready(function() {
```

```
    \$(window).resize(function() {
```

```
        if (\$(window).width() >= 960) {
```

```
            \$(".showview").html('<h1>Higher than 960</h1>');
```

```
        }
```

```
        if (\$(window).width() < 960) {
```

```
            \$(".showview").html('<h1>960</h1>');
```

```
        }
```

```
        if (\$(window).width() < 768) {
```

```
            \$(".showview").html('<h1>768</h1>');
```

```
        }
```

```
        if (\$(window).width() < 550) {
```

```
            \$(".showview").html('<h1>550</h1>');
```

```
        }
```

```
        if (\$(window).width() < 320) {
```

```
            \$(".showview").html('<h1>320</h1>');
```

```
        }
```

```
    });
```

media_query_demo.html

VIEW PORT

```
$document.ready(function() {
    $window.resize(function() {
        if ($window.width() >= 960) {
            $(".showview").html('<h1>Higher than 960</h1>');
        }
        if ($window.width() < 960) {
            $(".showview").html('<h1>960</h1>');
        }
        if ($window.width() < 768) {
            $(".showview").html('<h1>768</h1>');
        }
        if ($window.width() < 550) {
            $(".showview").html('<h1>550</h1>');
        }
        if ($window.width() < 320) {
            $(".showview").html('<h1>320</h1>');
        }
    });
});
```

</script>

</head>

<body>

 <div class="showview">

 </div>

 </body>

</html>

Layout (Composition) Using Float

Section 1

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.



Article 2

Vestibulum ullamcorper nisl elit non semper nunc viverra eu

User Name:

Password:

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

```
<div id='main'>
  <div class='section'>
    <h1><center>Section 1</center></h1>
    <br>
    <h2>Article 1</h2>
    
    <div class='article'>
```

Creating a class div called 'wrapper'.

n 1

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.



Article 2

Vestibulum ullamcorper nisl elit non semper nunc viverra eu

User Name:

Password:

Send

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

```
        </tr>
      </table>
    <div id='answer'></div>
  </div><!-- end of sidebar -->
</div><!-- end of wrapper -->
```

```
.wrapper {  
    display:grid;  
    grid-template-columns: 69.5% 29.5%;  
}  
  
#main {  
    /* float:left;  
    width:69.5%; */  
    box-sizing:border-box;  
    border:0px;  
}
```

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.

Article 2

Vestibulum ullamcorper nisl elit non semper nunc viverra eu

Define .wrapper as a 'grid' and comment out the 'float'.



<input type="text"/>
Password:
<input type="text"/>
<input type="button" value="Send"/>

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

```
#sidebar {  
    /* float:right;  
    width:29.5%; */  
    box-sizing:border-box;  
    border:0px;  
}
```

```
.wrapper {  
  display:grid;  
  /* grid-template-columns: 69.5% 29.5%; */  
  grid-template-columns: 2fr 1fr;  
}
```

```
#main {  
  /* float:left; */  
  width:69.5%;  
  box-sizing:border-box;  
  border:0px;  
}
```

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.

Article 2

Vestibulum ullamcorper nisl elit non semper nunc viverra eu

Define the grid columns using fraction (fr).

on 1



User Name:

Password:

Send

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

#sidebar {

```
/* float:right; */  
width:29.5%;  
box-sizing:border-box;  
border:0px;  
}
```

```
.wrapper {  
  display:grid;  
  /* grid-template-columns: 69.5% 29.5%; */  
  grid-template-columns: 2fr 1fr;  
  grid-gap: 1em;  
}
```

1

Use 'grid-gap' to expand the distance between columns.

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.



Event	Month	Day	Venue
lesson 5	Oct	5th	Online
lesson 6	Oct	12th	Online
lesson 7	Oct	19th	Online
lesson 8	Oct	26th	Online

```
.wrapper {  
  display:grid;  
  /* grid-template-columns: 69.5% 29.5%; */  
  grid-template-columns: 2fr 1fr;  
  grid-gap: 2em;  
}
```

1

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.



User Name:

Password:

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

```
.wrapper {  
  display:grid;  
  /* grid-template-columns: 69.5% 29.5%; */  
  grid-template-columns: 1fr 1fr;  
  grid-gap: 2em;  
}
```

Section 1

Article 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus eu ligula consequat nisl tempor ultricies. Suspendisse porta tempus eleifend. Suspendisse potenti. Nam ultrices, dolor ac faucibus ornare, nulla enim feugiat ante, a bibendum velit felis in libero. Nullam feugiat metus lacinia urna mollis venenatis. Mauris mollis erat molestie, pharetra massa eget, placerat lectus. Aenean pharetra dolor sed odio vehicula, ut commodo lacus fringilla. Duis et diam placerat, eleifend orci eget, egestas erat.



```
.wrapper {  
  display:grid;  
  /* grid-template-columns: 69.5% 29.5%; */  
  grid-template-columns: repeat(2,1fr);  
  grid-gap: 2em;  
}
```

User Name:

Password:

Send

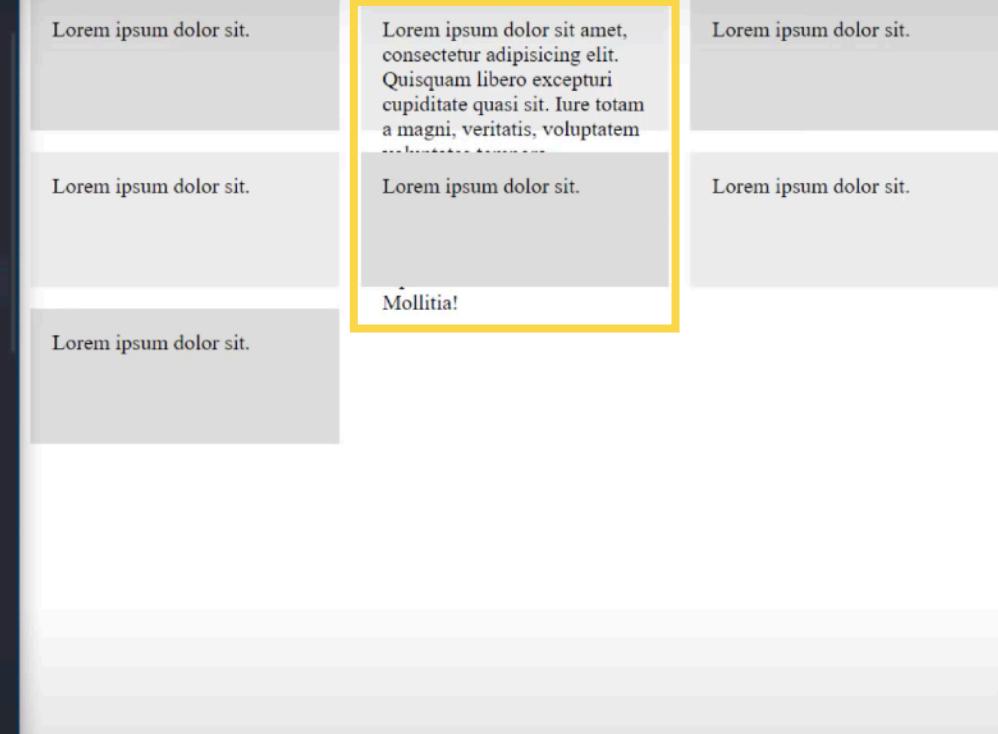
Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

Two ways to define the grid columns.

Handling of auto height constraint of a row.

```
<style>
  .wrapper{
    display:grid;
    /* grid-template-columns:1fr 1fr 1fr; */
    grid-template-columns:repeat(3, 1fr);
    grid-gap:1em;
    /* grid-auto-rows:100px; */
  }

  .wrapper > div{
    background:#eee;
    padding:1em;
  }
  .wrapper > div:nth-child(odd){
    background:#ddd;
  }
</style>
```



Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

Handling of auto height constraint of a row.

```
<style>
  .wrapper{
    display:grid;
    /* grid-template-columns:1fr 1fr 1fr; */
    grid-template-columns:repeat(3, 1fr);
    grid-gap:1em;
    /* grid-auto-rows:100px; */
    grid-auto-rows: minmax(100px, auto);
  }

  .wrapper > div{
    background:#eee;
    padding:1em;
  }
  .wrapper > div:nth-child(odd){
    background:#ddd;
  }
</style>
```

Lorem ipsum dolor sit.

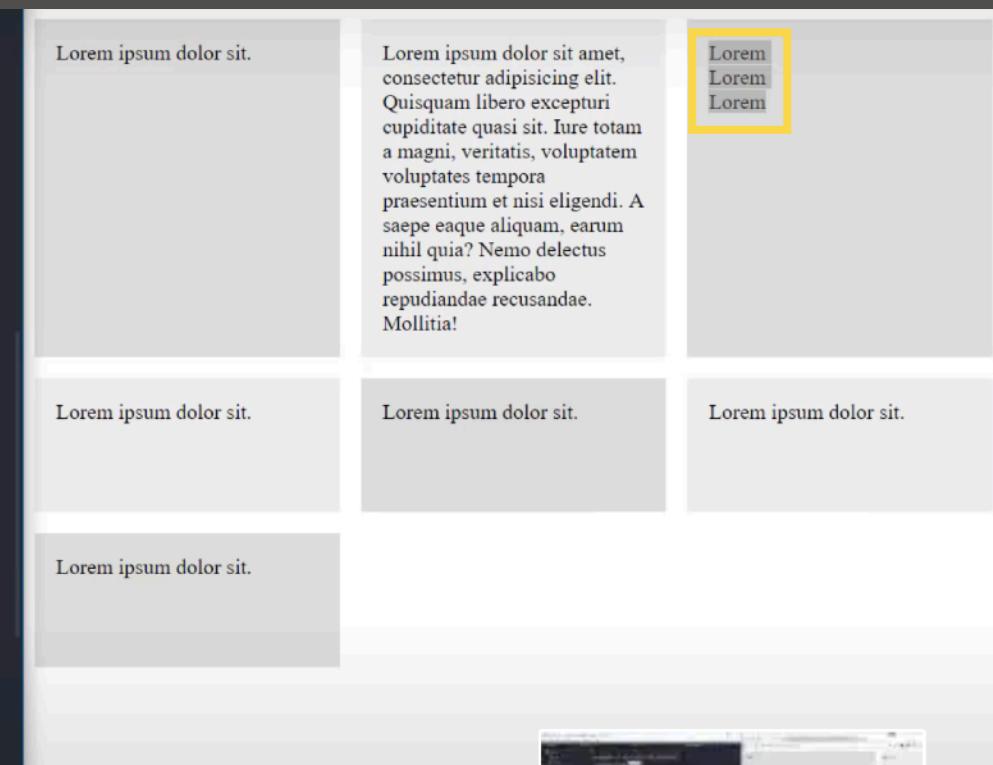
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Quisquam libero excepturi cupiditate quasi sit. Iure totam a magni, veritatis, voluptatem voluptates tempora praesentium et nisi eligendi. A saepe eaque aliquam, earum nihil quia? Nemo delectus possimus, explicabo repudiandaec recusandae. Mollitia!

Lorem ipsum dolor sit.

Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

Handling of grid within a grid (nested grid).

```
<div>
    Lorem ipsum dolor sit.
</div>
<div>
    Lorem ipsum dolor sit amet, consectetur
    adipisicing elit. Quisquam libero excepturi
    cupiditate quasi sit. Iure totam a magni,
    veritatis, voluptatem voluptates tempora
    praesentium et nisi eligendi. A saepe eaque
    aliquam, earum nihil quia? Nemo delectus
    possimus, explicabo repudiandae recusandae.
    Mollitia!
</div>
<div class="nested">
    <div>Lorem</div>
    <div>Lorem</div>
    <div>Lorem</div>
</div>
```



Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

Handling of grid within a grid (nested grid).

```
<style>
  .wrapper{
    display:grid;
    /* grid-template-columns:1fr 1fr 1fr; */
    grid-template-columns:repeat(3, 1fr);
    grid-gap:1em;
    /* grid-auto-rows:100px; */
    grid-auto-rows: minmax(100px, auto);
  }

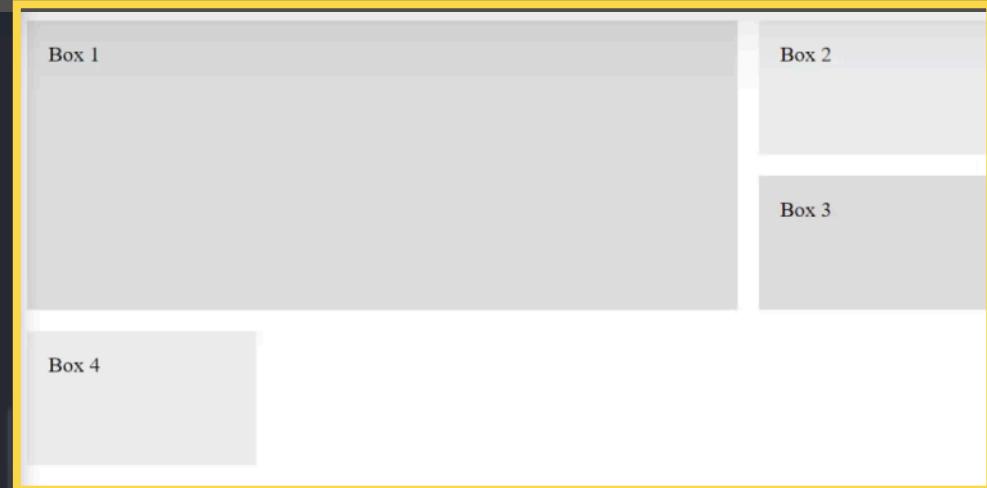
  .nested{
    display:grid;
    grid-template-columns:repeat(3, 1fr);
    grid-auto-rows: 70px;
    grid-gap:1em;
  }
}
```

Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

Handling of more complicated grid (nested grid with different column and row size).

```
.box2{  
  /*align-self:end; */  
}  
  
.box3{  
  /*justify-self:end; */  
}  
  
.box4{  
}  
  
  }  
  
</style>  
</head>  
<body>
```

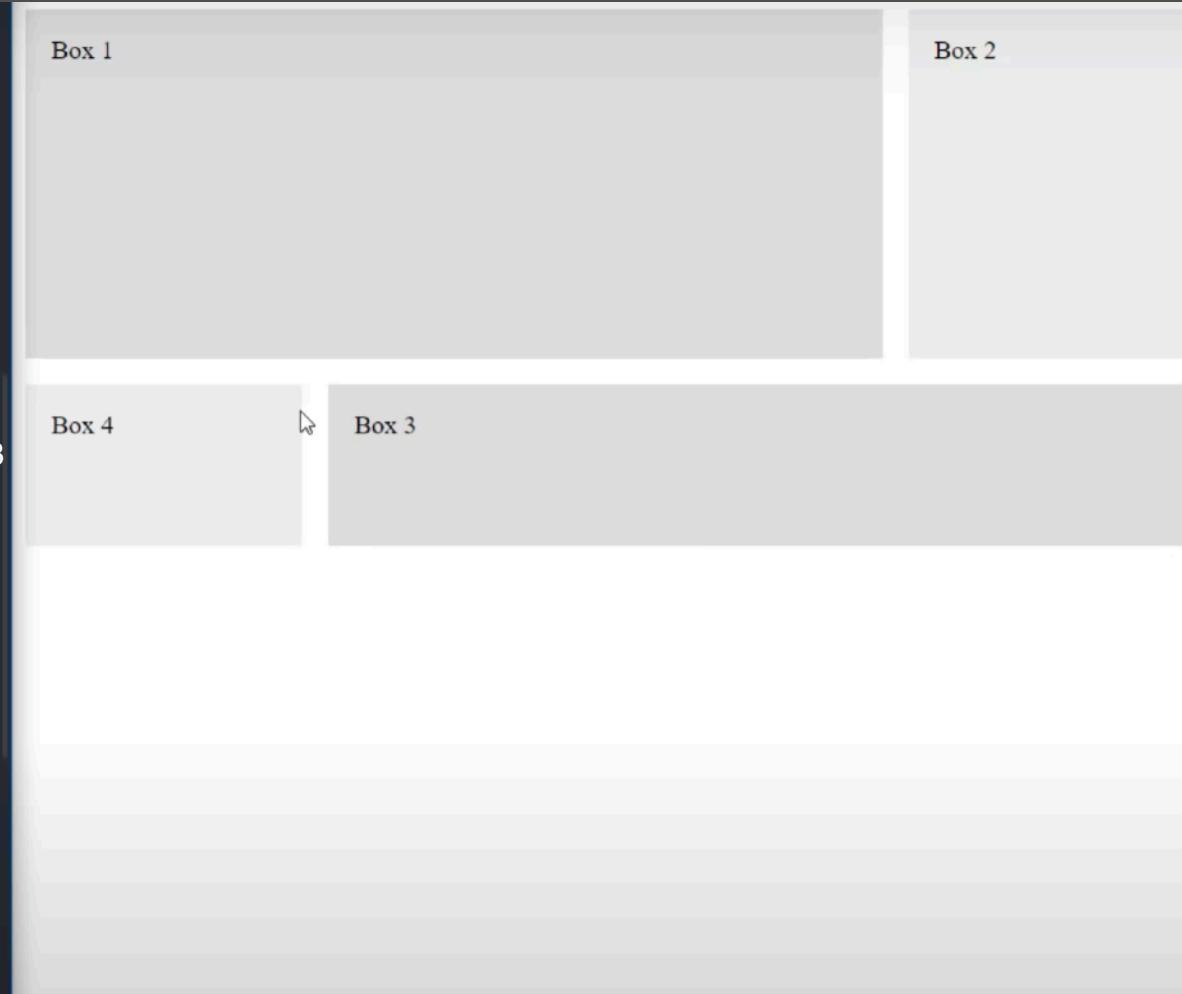
```
<div class="wrapper">  
  <div class="box box1">Box 1</div>  
  <div class="box box2">Box 2</div>  
  <div class="box box3">Box 3</div>  
  <div class="box box4">Box 4</div>  
</div>
```



Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

```
col 1           col 2           col 3           col 4
```

```
.box1{  
  /*align-self:start; */  
  grid-column:1/3;  
  grid-row:1/3;  
}  
  
.box2{  
  /*align-self:end; */  
  grid-column:3;  
  grid-row:1  
}  
  
.box3{  
  /*justify-self:end; */  
  grid-column:2/4;  
  grid-row:3;  
}  
  
.box4{  
}
```



Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

```
.box1{  
  /*align-self:start; */  
  grid-column:1/3;  
  grid-row:1/3;  
}
```

```
.box2{  
  /*align-self:end; */  
  grid-column:3;  
  grid-row:1  
}
```

```
.box3{  
  /*justify-self:end; */  
  grid-column:2/4;  
  grid-row:3;  
}
```

```
.box4{  
}
```



You can ignore this because the auto pushing and resizing of the boxes are confusing.

Source: Traverse Media (https://www.youtube.com/watch?time_continue=767&v=jV8B24rSN5o&feature=emb_logo)

Handling of responsive grid in media query.

The screenshot shows a browser developer tools window with the following details:

- Responsive View:** Set to 570px width and 223px height, at 100% zoom, in online mode.
- Preview Area:** Shows a yellow header bar with menu items "About Courses Meetings Blogs" and a white section below it with the heading "Section 1".
- DOM Tree:** The "Elements" tab is active, showing the following structure:

```
<div class="container">
  <div id="header">...</div>
  <div class="wrapper"> == $0
    <div id="main">
      <div class="section">
        <h1>...</h1>
        <br>
        <h2>Article 1</h2>
        
      </div>
      <div class="article">
```

The `<div class="wrapper">` element is highlighted with a red box.
- Styles Panel:** The "Styles" tab is active, displaying the CSS rules for the selected element:

```
@media (max-width: 600px)
.wrapper {
  display: grid;
  grid-template-columns: none;
}
```

This media query is also highlighted with a red box.

Screen Layout (Composition) Using Flexbox

Creating a class div called 'wrapper'.

```
<div id='main'>
  <div class='wrapper'>
    <div class='box1'>
      <h3>box 1</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.
         Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box2'>
      <h3>box 2</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.
         Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box3'>
      <h3>box 3</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.
         Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
  </div>
  <div class='wrapper'>
    <div class='box4'>
      <h3>box 4</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.
         Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box5'>
      <h3>box 5</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.
         Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box6'>
      <h3>box 6</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.
         Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
  </div>
</div>
```

Define wrapper as 'flex'.

```
.wrapper {
  display: flex;
}

.box1 {
  border: 1px solid silver;
  flex: 1;
  order: 1;
  padding: 1em;
}

.box2 {
  border: 1px solid silver;
  flex: 1;
  order: 2;
  padding: 1em;
}

.box3 {
  border: 1px solid silver;
  flex: 1;
  order: 3;
  padding: 1em;
}
```



User Name:

Password:

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

Create class selector for box1- box3

Assign class properties to box1-box3

```

<div id='main'>
  <div class='wrapper'>
    <div class='box1'>
      <h3>box 1</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.  

          Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box2'>
      <h3>box 2</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.  

          Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box3'>
      <h3>box 3</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.  

          Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
  </div>
  <div class='wrapper'>
    <div class='box4'>
      <h3>box 4</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.  

          Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box5'>
      <h3>box 5</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.  

          Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
    <div class='box6'>
      <h3>box 6</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.  

          Phasellus eu ligula consequat nisl tempor ultricies.</p>
    </div>
  </div>
</div>

```

```

.box4 {
  border: 1px solid silver;
  flex: 2;
  order: 1;
  padding: 1em;
}

.box5 {
  border: 1px solid silver;
  flex: 1;
  order: 2;
  padding: 1em;
}

.box6 {
  border: 1px solid silver;
  flex: 1;
  order: 3;
  padding: 1em;
}

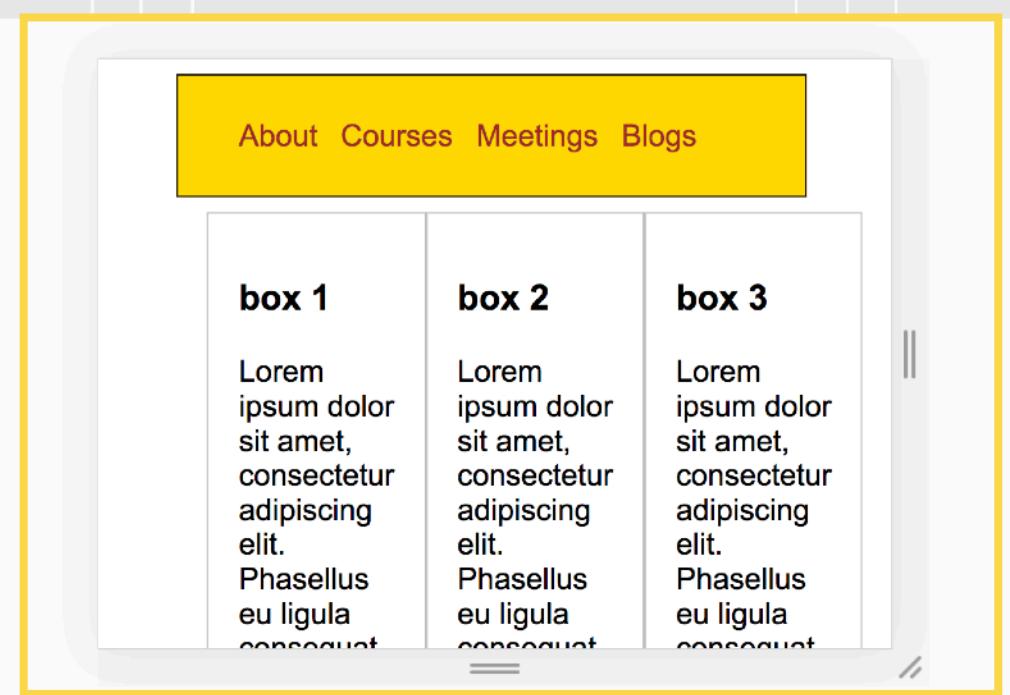
```

Event	Month	Day	Venue
Lesson 5	Oct	5th	Online
Lesson 6	Oct	12th	Online
Lesson 7	Oct	19th	Online
Lesson 8	Oct	26th	Online

Create class selector for box4- box6

Assign class properties to box4-box6

```
@media (max-width:600px) {  
    #main, #sidebar {  
        width:100%;  
        float:none;  
    }  
  
    .wrapper {  
        display:flex;  
    }  
  
    /* .wrapper {  
        display: grid;  
        grid-template-columns: none;  
    } */  
}
```

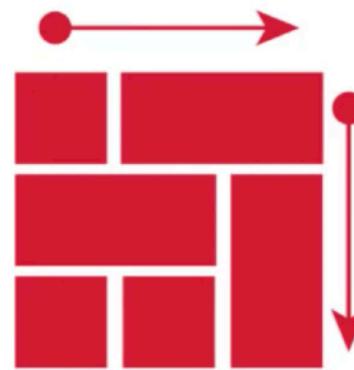


Use media query to handle responsive display.



Flexbox

ONE DIMENSION



CSS Grids

TWO DIMENSIONS

Source: Traverse Media

Screen Layout (Composition) Using Bootstrap

Bootstrap

Build responsive, mobile-first projects on the web with the world's most popular front-end component library.

Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with our Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery.

[Get started](#)[Download](#)

Currently v4.3.1

2



<https://getbootstrap.com/>

Use CDN link to access remote CSS and JS libraries for Bootstrap 4.5.2.

← → 🔍 cdnjs.com/libraries/twitter-bootstrap/4.5.2

Tags: css, less, mobile-first, responsive, front-end, framework, web, twitter, bootstrap

Version 4.5.2 Asset Type All

Some files are hidden, click to show all files

<https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/js/bootstrap.min.js> ⚡ ↗ 🛡

<https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/css/bootstrap-grid.min.css> ⚡ ↗ 🛡

<https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/css/bootstrap-reboot.min.css> ⚡ ↗ 🛡

<https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/css/bootstrap.min.css> ⚡ ↗ 🛡

<https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/js/bootstrap.bundle.min.js> ⚡ ↗ 🛡

<https://cdnjs.com/libraries/twitter-bootstrap/4.5.2>

[Getting started](#)[Layout](#)[Overview](#)[Grid](#)[Utilities for layout](#)[Content](#)[Components](#)[Utilities](#)[Extend](#)

Grid system

Use our powerful mobile-first flexbox grid to build layouts of all shapes and sizes thanks to a twelve column system, five default responsive tiers, Sass variables and mixins, and dozens of predefined classes.

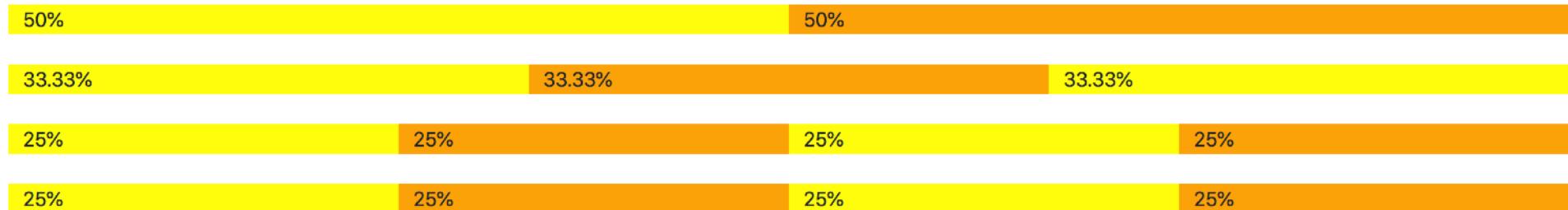
How it works

Bootstrap's grid system uses a series of containers, rows, and columns to layout and align content. It's built with [flexbox](#) and is fully responsive.

Basic Grid Structure

Resize the browser window to see the effect.

The first, second and third row will automatically stack on top of each other when the screen is too small:



Use CDN link to access remote CSS and JS libraries for Bootstrap 4.5.2.

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
```

Source: https://www.w3schools.com/bootstrap4/tryit.asp?filename=trybs_grid_ex_structure&stacked=h

Basic Grid Structure

Resize the browser window to see the effect.

The first, second and third row will automatically stack on top of each other when the screen is too small.

**Number of columns add up to 12
then auto resize.**



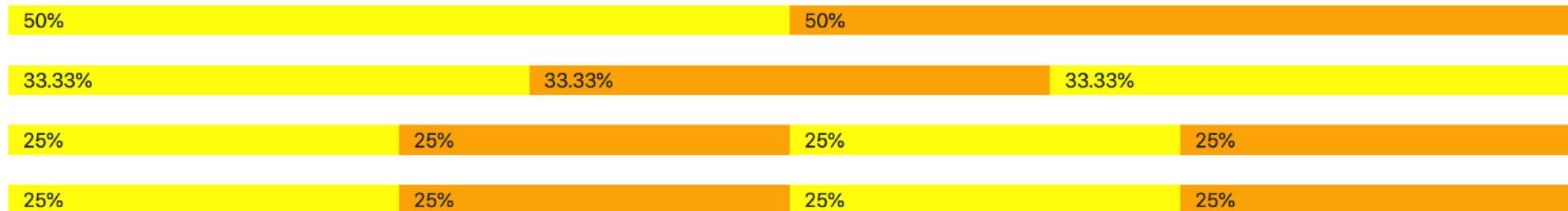
```
<div class="container-fluid">
  <!-- Control the column width, and how they should appear on different devices -->
  <div class="row">
    <div class="col-sm-6" style="background-color: #yellow;">50%</div>
    <div class="col-sm-6" style="background-color: #orange;">50%</div>
  </div>
  <br>

  <div class="row">
    <div class="col-sm-4" style="background-color: #yellow;">33.33%</div>
    <div class="col-sm-4" style="background-color: #orange;">33.33%</div>
    <div class="col-sm-4" style="background-color: #yellow;">33.33%</div>
  </div>
  <br>
```

Basic Grid Structure

Resize the browser window to see the effect.

The first, second and third row will automatically stack on top of each other when the screen is less than 576px wide.



```
<div class="row">
  <div class="col-sm" style="background-color: #yellow;">25%</div>
  <div class="col-sm" style="background-color: #orange;">25%</div>
  <div class="col-sm" style="background-color: #yellow;">25%</div>
  <div class="col-sm" style="background-color: #orange;">25%</div>
</div>
<br>

<div class="row">
  <div class="col" style="background-color: #yellow;">25%</div>
  <div class="col" style="background-color: #orange;">25%</div>
  <div class="col" style="background-color: #yellow;">25%</div>
  <div class="col" style="background-color: #orange;">25%</div>
</div>
```



**Auto resize disabled
without column
specification.**

```
<div class="row">
  <div class="col-sm" style="background-color: #yellow;">25%</div>
  <div class="col-sm" style="background-color: #orange;">25%</div>
  <div class="col-sm" style="background-color: #yellow;">25%</div>
  <div class="col-sm" style="background-color: #orange;">25%</div>
</div>
<br>

<div class="row">
  <div class="col" style="background-color: #yellow;">25%</div>
  <div class="col" style="background-color: #orange;">25%</div>
  <div class="col" style="background-color: #yellow;">25%</div>
  <div class="col" style="background-color: #orange;">25%</div>
</div>
```

DESIGN PATTERNS IN BOOTSTRAP

Common Bootstrap Components

Components

Over a dozen reusable components built to provide iconography, dropdowns, input groups, navigation, alerts, and much more.

Glyphicons

Available glyphs

Includes over 250 glyphs in font format from the Glyphicon Halflings set. [Glyphicons](#) Halflings are normally not available for free, but their creator has made them available for Bootstrap free of cost. As a thank you, we only ask that you include a link back to [Glyphicons](#) whenever possible.

 glyphicon glyphicon-asterisk	 glyphicon glyphicon-plus	 glyphicon glyphicon-euro	 glyphicon glyphicon-eur	 glyphicon glyphicon-minus	 glyphicon glyphicon-cloud	 glyphicon glyphicon-envelope	 glyphicon glyphicon-pencil
 glyphicon glyphicon-glass	 glyphicon glyphicon-music	 glyphicon glyphicon-search	 glyphicon glyphicon-heart	 glyphicon glyphicon-star	 glyphicon glyphicon-star-empty	 glyphicon glyphicon-user	 glyphicon glyphicon-film
 glyphicon glyphicon-th-large	 glyphicon glyphicon-th	 glyphicon glyphicon-th-list	 glyphicon glyphicon-ok	 glyphicon glyphicon-remove	 glyphicon glyphicon-zoom-in	 glyphicon glyphicon-zoom-out	 glyphicon glyphicon-off

Glyphicons
Dropdowns
Button groups
Button dropdowns
Input groups
Navs
Navbar
Breadcrumbs
Pagination
Labels
Badges
Jumbotron
Page header
Thumbnails
Alerts
Progress bars
Media object
List group
Panels
Responsive embed
Wells

<https://getbootstrap.com/docs/3.3/components/#nav>

[Getting started](#)[Layout](#)[Overview](#)[Grid](#)[Utilities for layout](#)[Content](#)[Components](#)[Utilities](#)[Extend](#)

Overview

Components and options for laying out your Bootstrap project, including wrapping containers, a powerful grid system, a flexible media object, and responsive utility classes.

Containers

Containers are the most basic layout element in Bootstrap and are **required when using our default grid system**. Choose from a responsive, fixed-width container (meaning its `max-width` changes at each breakpoint) or fluid-width (meaning it's `100%` wide all the time).

Components

[Alerts](#)[Badge](#)[Breadcrumb](#)[Buttons](#)[Button group](#)[Card](#)[Carousel](#)[Collapse](#)[Dropdowns](#)[Forms](#)

Alerts

Provide contextual feedback messages for typical user actions with the handful of available and flexible alert messages.

Examples

Alerts are available for any length of text, as well as an optional dismiss button. For proper styling, use one of the eight **required** contextual classes (e.g., `.alert-success`). For inline dismissal, use the [alerts jQuery plugin](#).

Search...

Input group

Jumbotron

List group

Media object

Modal

Navs

Navbar

Pagination

Popovers

Progress

Scrollspy

Alerts

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[Popovers](#)[Progress](#)[Scrollspy](#)[Spinners](#)[Toasts](#)[Tooltips](#)[Utilities](#)[Extend](#)[Migration](#)[About](#)

Bootstrap “spinners” can be used to show the loading state in your projects. They’re built only with HTML and CSS, meaning you don’t need any JavaScript to create them. You will, however, need some custom JavaScript to toggle their visibility. Their appearance, alignment, and sizing can be easily customized with our amazing utility classes.

For accessibility purposes, each loader here includes `role="status"` and a nested `Loading...`.

Border spinner

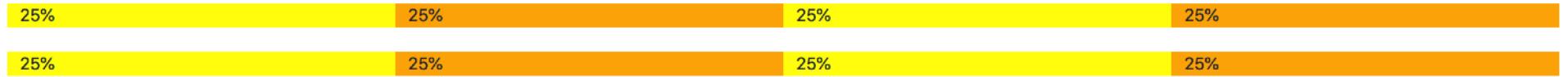
Use the border spinners for a lightweight loading indicator.



Popular Components

- a. Container
- b. Navbar
- c. Glphicons
- d. Grid/Row/Column
- e. Thumbnail
- f. Button
- g. Form
- h. Panel/Wells/Jumbotron
- i. Carousel/Collapse
- j. Tabs
- k. Table
- l. Pagination
- m. Badges/List Group/Cards
- n. Modal/Tooltip/Popover

<https://www.w3schools.com/bootstrap4/default.asp>



John Doe

Some example text some example text. John Doe is an architect and engineer

[See Profile](#)

- First item
- Second item
- Third item

```
<div class="row">
  <div class="col" style="background-color: #yellow;">25%</div>
  <div class="col" style="background-color: #orange;">25%</div>
  <div class="col" style="background-color: #yellow;">25%</div>
  <div class="col" style="background-color: #orange;">25%</div>
</div>

</div><!-- end container fluid-->
<div class="card" style="width:20rem; margin:20px 0 24px 0">
  
  <div class="card-body">
    <h4 class="card-title">John Doe</h4>
    <p class="card-text">Some example text some example text. John Doe is an architect and engineer</p>
    <a href="javascript:void(0)" class="btn btn-primary">See Profile</a>
  </div>
</div>

<ul class="list-group">
  <li class="list-group-item">First item</li>
  <li class="list-group-item">Second item</li>
  <li class="list-group-item">Third item</li>
</ul>
```

50%

33.33%

25%

25%

33.33%

50%

33.33%

25%

25%



John Doe

Some example text some example text. John Doe is an architect and engineer

[See Profile](#)

First item

Second item

Third item



Start Bootstrap

THEMES ▾ TEMPLATES ▾ SNIPPETS LEARN ▾ RESOURCES

BLOG  

Bootstrap themes, templates, and more to help you start your next project!

Start Bootstrap creates free, open source, MIT license, Bootstrap [themes](#), [templates](#), and [code snippets](#) for you to use on any project, [guides](#) to help you learn more about designing and developing with the Bootstrap framework, and premium Bootstrap products.



<https://startbootstrap.com/>

URL REFERENCES FOR UNDERSTANDING BOOTSTRAP RESPONSIVE WEB FRAMEWORK

1. <https://bootstraptaste.com/>
2. <https://startbootstrap.com/template-categories/all/>
3. <http://blacktie.co/>
4. <https://adminlte.io/blog/10-Free-Responsive-Bootstrap-Templates-For-2016>

Introducing Figma



Features ▾ Enterprise ▾ Pricing Community ▾ Company ▾ Log in

Sign up

Tony

Mae

Where teams design together

Luis

Sunni

Figma helps teams create, test, and ship better designs from start to finish.

Try Figma for free

▶ See how it works

Starter

Free

for up to 2 editors and 3 projects

- ✓ 3 projects
- ✓ 30-day version history
- ✓ Up to 2 editors
- ✓ Unlimited cloud storage
- ✓ Unlimited free viewers

[Choose Starter](#)

Professional

\$12 per editor/month

Billed annually or \$15 month-to-month

- ✓ Unlimited projects
- ✓ Unlimited version history
- ✓ Custom file/user permissions
- ✓ Invite-only private projects
- ✓ Shareable team libraries

[Choose Professional](#)

Free for students and educators

Organization

\$45 per editor/month

Annual billing only

Everything in Professional, plus...

- ✓ Org-wide design systems
- ✓ Centralized teams
- ✓ Private plugins
- ✓ Plugin administration
- ✓ Shared fonts
- ✓ SSO + advanced security
- ✓ Design System Analytics

[Choose Organization](#)

Contact sales (best for 9+ editors)



<https://www.youtube.com/watch?v=WhINnf1711M>

Bootstrap-v4-uikit (Copy) Bootstrap Demo Untitled +

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Community Beta

Drafts

+ Upgrade to collaborate with more teammates

Upgrade

Your Teams and favorite Projects will appear here

Create New Team

Bootstrap4

Files 2 Projects 0 People 0

Relevance Relevance grid list



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In Drafts · Edited 5 days ago

1140 px 960 px 720 px 540 px

bootstrap_grid_templates_for_figma
In Drafts · Edited 10 months ago

See 14 results from Community

?

Bootstrap-v4-uikit (Copy) × Bootstrap Demo × ▶ Untitled × +

Layers Assets Page 1

Design Prototype Inspect

Background F2F2F2 100%

Export

?

Navbar

Supported content

Navbar Home Feature Pricing About Search Search

Brand

Navbar

Navbar

Nav

Navbar Home Feature Pricing About

Color schemes

Navbar Home Feature Pricing About Search Search

Navbar Home Feature Pricing About Search Search

Navbar Home Feature Pricing About Search Search

Collapsible content

Collapsed content
Toggleable via the navbar brand.

☰

Buttons

Button group

Button dropdown

Forms

Input group

Dropdowns

Jumbotron

Labels

Alerts

Cards

Navs

Navbar

Collapsible content

Color schemes

Color schemes

Color schemes

navbar navbar-light

navbar navbar-dark bg-p...

navbar navbar-dark bg-in...

Nav

6500 6750 7000 7250 7500 7750

6250 6500 6750 7000 7250

7000 7250 7500 7750

Bootstrap-v4-UIKit (Copy) Bootstrap Demo Untitled

Drafts / Bootstrap Demo

B Share 25%

Layers Assets Page 1

Pages

Page 1

Home Page

- nav navbar-dark bg-primary
- form-inline
- nav navbar-nav
- nav-item copy 2
- nav-item copy
- nav-item
- T 0:0:0:0
- = BG
- nav-item active
- T 0:0:0:0
- = BG
- navbar-brand
- padding
- navbar

Feature Page

- nav navbar-dark bg-primary

Home Page

Feature Page

Device None

Background #000000

Starting Frame Home Page

Creating A Connection

Select a frame or object in a frame and use the circular node to drag a connection to another frame.

Running Your Prototype

Use the play button in the toolbar to play your prototype. If there are no connections, the play button can be used to play a presentation of your frames.

?

Bootstrap-v4-uikit (Copy) Bootstrap Demo

Drafts / Bootstrap Demo

B Share

25%

Layers Assets Page 1

Pages

✓ Page 1

Home Page

- nav navbar-dark bg-primary
- form-inline
- nav navbar-nav
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- nav-item copy
- nav-item
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- = BG
- nav-item active
- T 0:0:0:0
- = BG
- navbar-brand
- padding
- navbar

Feature Page

- nav navbar-dark bg-primary

Device None

Background #000000

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Share Bootstrap Demo

can edit

invite someone... can view Send Invite

Anyone with the link can view

B Sy Sin (You) owner

Copy link Get embed code Link to selected frame

Feature Page

The screenshot shows the Figma interface with a 'Bootstrap Demo' project open. A 'Share Bootstrap Demo' dialog is centered on the screen. The 'Share' button in the top right corner of the dialog is highlighted with a red box. A blue arrow points from the 'Send Invite' button in the dialog to the 'Feature Page' frame located below it. The 'Feature Page' frame contains a navigation bar with tabs like 'Home', 'About', 'Services', 'Contact', and 'Blog'. The 'Feature Page' frame is also highlighted with a red box. The left sidebar shows the 'Pages' panel with 'Page 1' selected, and the 'Layers' panel showing the visual structure of the 'Home Page' and 'Feature Page' components. The top right corner of the interface shows the zoom level at 25%.

Bootstrap-v4-uikit (Copy) +

B Sy Sin

Search

Recent

Community Beta

Drafts +

Upgrade to collaborate with more teammates

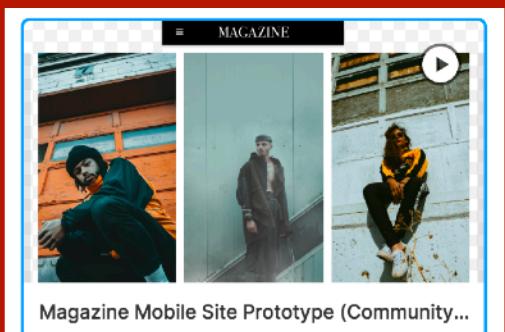
Upgrade

Your Teams and favorite Projects will appear here

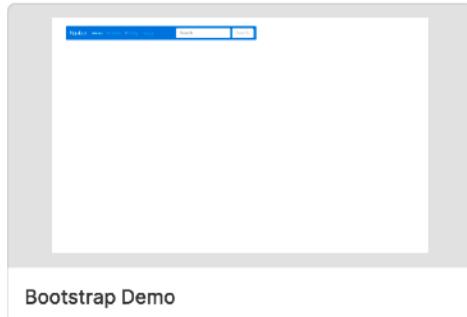
Create New Team

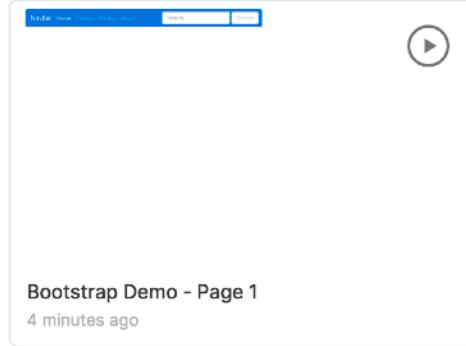
Recently viewed

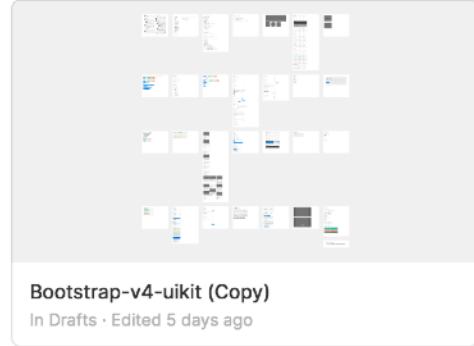
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 Magazine Mobile Site Prototype (Community...
1 minute ago

 bootstrap_grid_templates_for_figma
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 Bootstrap Demo
In Drafts · Edited 4 minutes ago

 Bootstrap Demo - Page 1
4 minutes ago

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In Drafts · Edited 5 days ago

 Figma Chicago
Prototyping in Figma

Prototyping with Figma - Figma Chicago Me...
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 Android UI
Dark theme Light

Magazine Mobile Site Prototype (Co... ▶ Magazine Mobile Site Prototype (Co... Doctor UI + prototype (Community) +

B Share ▶ 25% ▾

Layers Assets Finished ▾

Thumbnail

☰ Magazine Mobile Site Prototype

Global Header Footer

Feature 3 # Feature 2 # Feature 1 # NAVIGATION # HOME # Thumbnail

MAGAZINE

HOME Feature 1 Feature 2 Feature 3

JESSICA PIRMAN TWEET US YOUR MOST AWKWARD WORKPLACE QUESTIONS

EMMA HOWMAN CAN PAST FASHION & SUSTAINABILITY COEXIST TOGETHER?

AISHI COMINH TELLING STORIES IN SPANDEX, FAUX FUR, AND LOGOS

Pass Through 100%

Frame X: 1190 Y: -350 W: 375 H: 2230 Rotation: 0° Clip content: ✓

Auto Layout

Magazine Grid

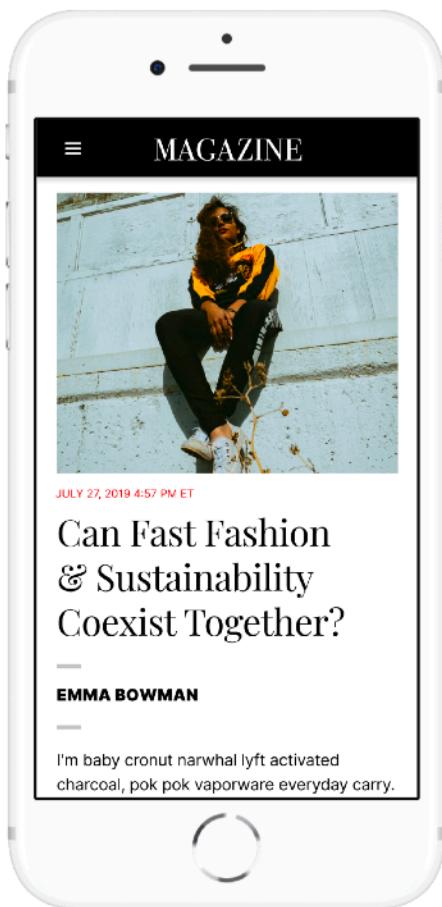
Layer Pass Through 100%

Fill FFFFFF 100%

Stroke

Selection Colors

000000 100% FFFFFF 100%



Problem Set #6

1. Redesign the home page and one other page of Design & Code (dc.cuhkcfe.io) beginning with wire-frames.
2. Improve the two wire-frames and turn them into clickable prototype in Figma.
3. Convert the Figma prototype into HTML layouts using Float, Grid, Flexbox, Bootstrap or any combination of these layout techniques.
4. Make sure you have one version for desktop and another version for mobile.

*** Remember to share your Figma

The End