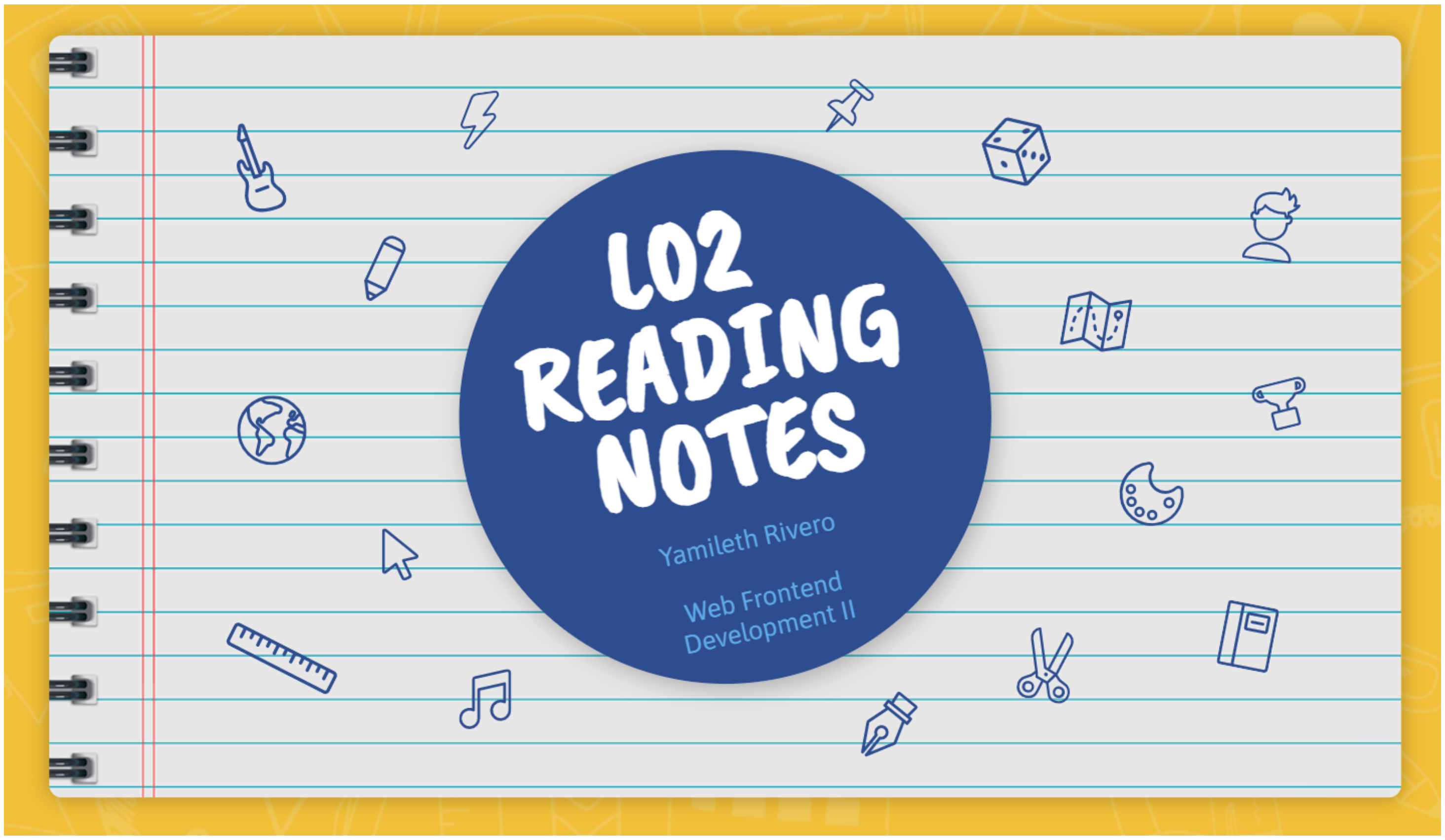


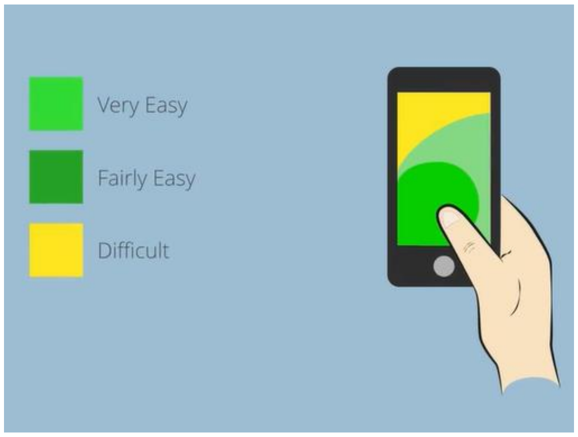
1.- Lessons on UX – SitePoint Course

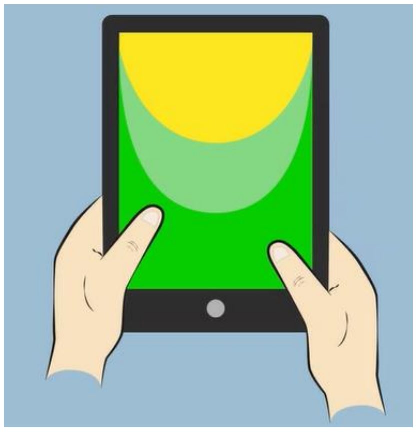
- Design from the smallest device is smarter and prettier
- Everything that I will build need to be seen through all possible devices
- "Whatever you are doing…do mobile first" Eric Schmidt
- Just because my website is responsive, doesn't mean is mobile first
- Advantages of starting to design for small devices first:
    - It's cheaper and faster (otherwise you might need to re-write code)
    - Users have a better mobile experience
    - Best experience across many devices
    - We can rewire brains and prepare for a new way of adaptation for the future
    - Desktop computers are declining
    - Mobiles can be carried everywhere
    - Mobiles are not a fad
- Start small and scale up!

3 things that you can do to engage users in your website/app:

- Be there
- Be useful
- Be Quick (excess of steps cause frustration, make their interaction clean. Make 0 steps! User experience need to avoid frustration)

- Reachability Matters! (The bottom of the devices is reachable for everybody, even when they use one hand)





- Speed Matters! (Users are more likely to stay on your app/website when things are quicker)
- Network Matters

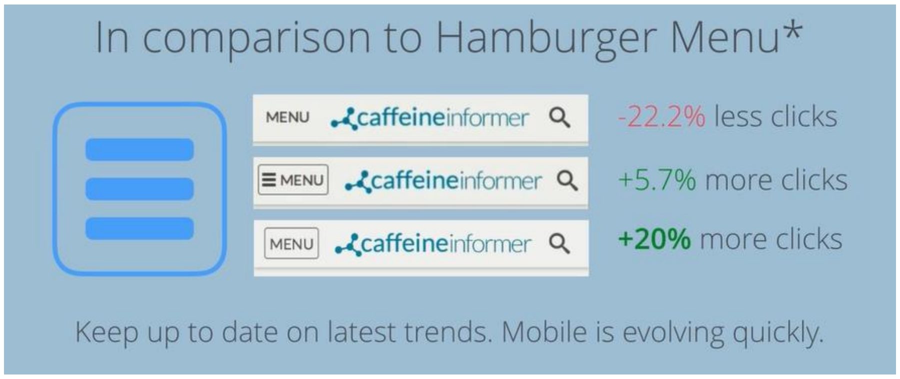
Things to ensure things are loading quickly for users:

- Reduce images (if you need, SVG/Webfonts are lower bandwidth)
- Optimize and minify CSS and JS files
- Use GZIP files to eliminate unnecessary data

What can I do to make things better to everyone?

- Most commonly use menu items should be located to the bottom for an easiest reaching area
- Placement matters: Address reachability issues, this can increase the user satisfaction

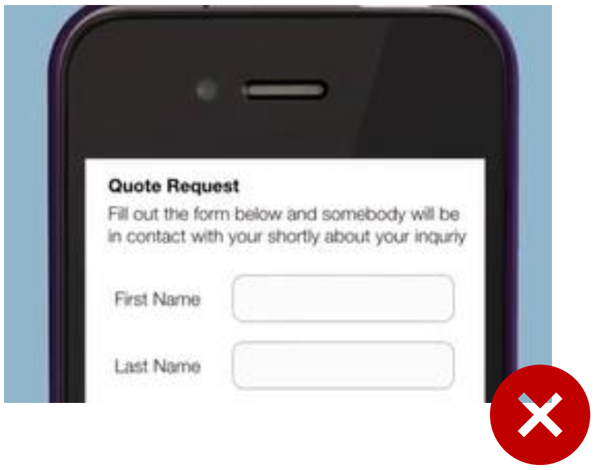
- The hamburger button is not as familiar as we think for users! You can include the word “MENU” inside a button.

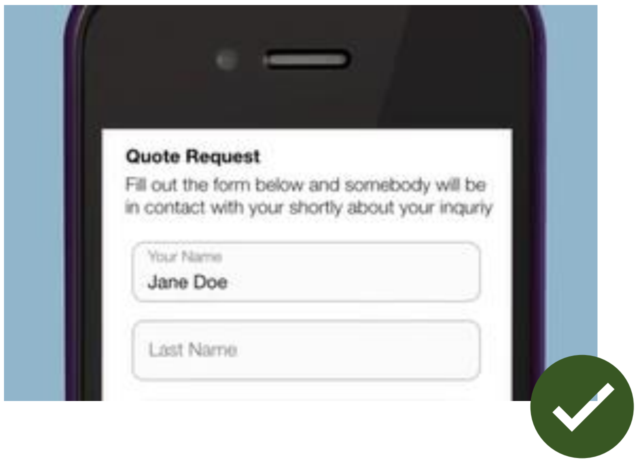


Make it simple, easy to understand, make users think less!

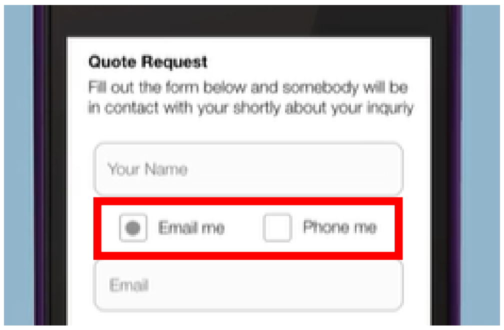
Forms

- Use flow labels, this means that instead of putting the categories outside the labels to ask for the name, you can include the categories inside the labels and make them turn small when entering the user information:


Quote Request
Fill out the form below and somebody will be in contact with your shortly about your inquriy
First Name
Last Name

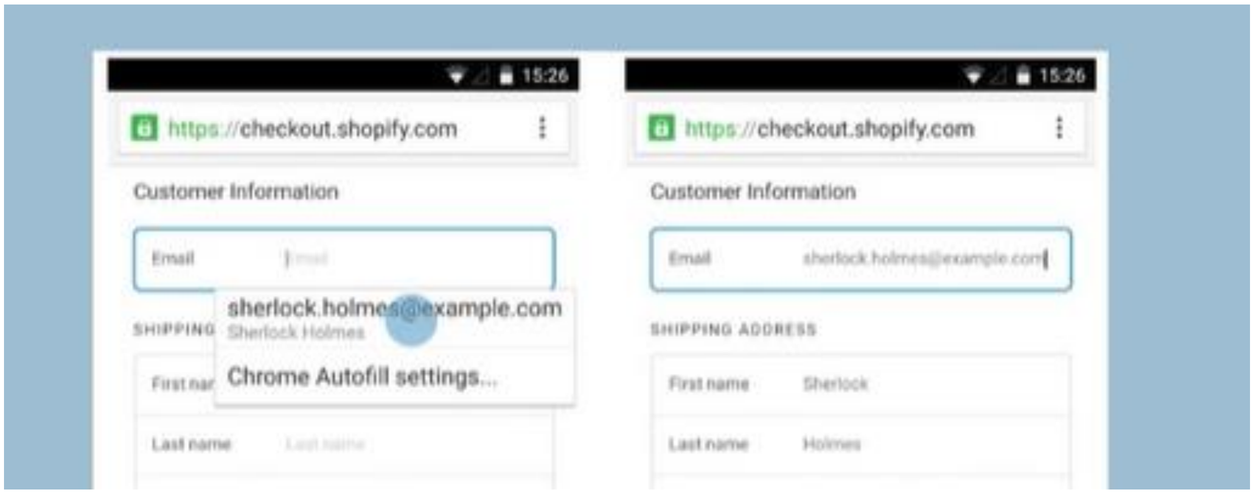

Quote Request
Fill out the form below and somebody will be in contact with your shortly about your inquriy
Your Name
Jane Doe
Last Name

- Make checkboxes bigger, selecting those small squares can be difficult

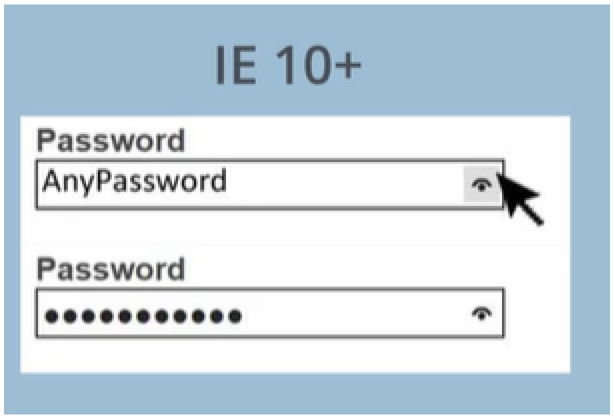

Quote Request
Fill out the form below and somebody will be in contact with your shortly about your inquriy
Your Name
Email me
Phone me
Email

- Sometimes forms require more information, in those cases you can break it down into sections, this will be less overwhelming

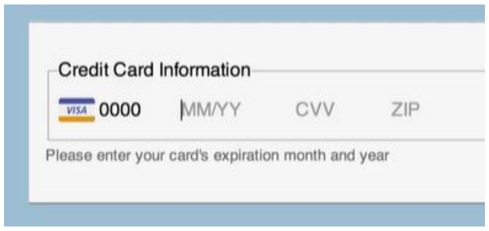
- Entering information form a mobile device can be tedious, make sure that users can auto filled the information using maybe local storage!



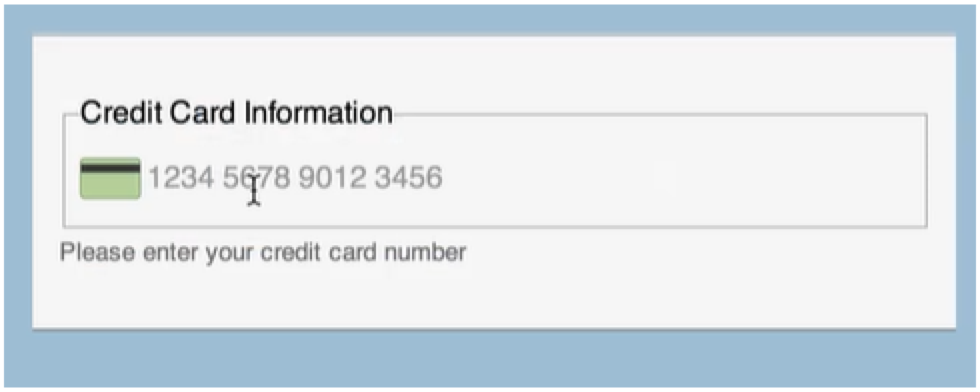
- Entering passwords is an issue, show them! Don't hide them automatically, you can include an eye button for the user to see or cover the password while writing them.



- You can help the user through a process of buying online if you include some icons that show the type of card entered, also you can make users to enter all the information of their credit card in one row! Or at least let users



enter the card number with programmed spaces for them to not get confused!

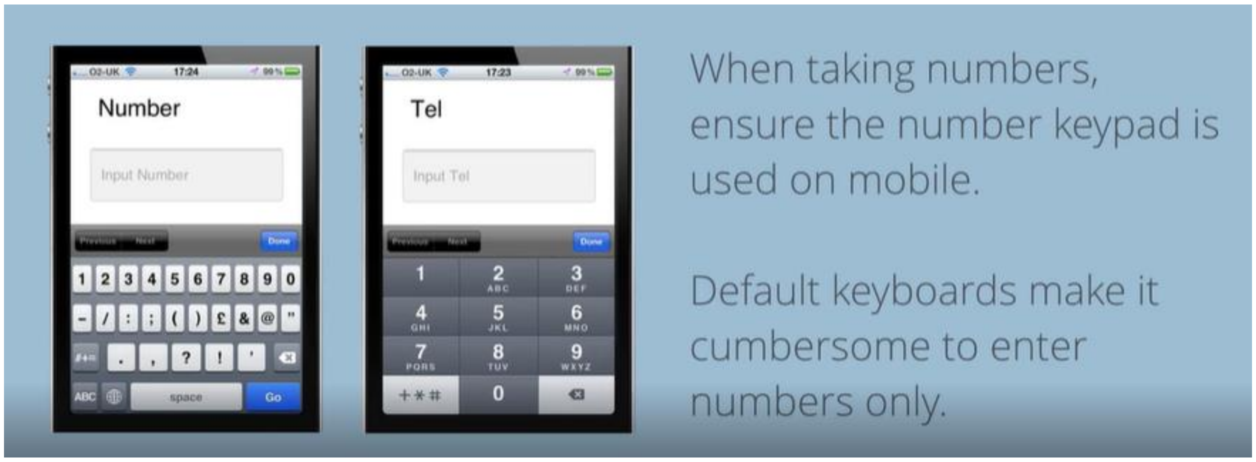


Credit Card Information

1234 5678 9012 3456

Please enter your credit card number

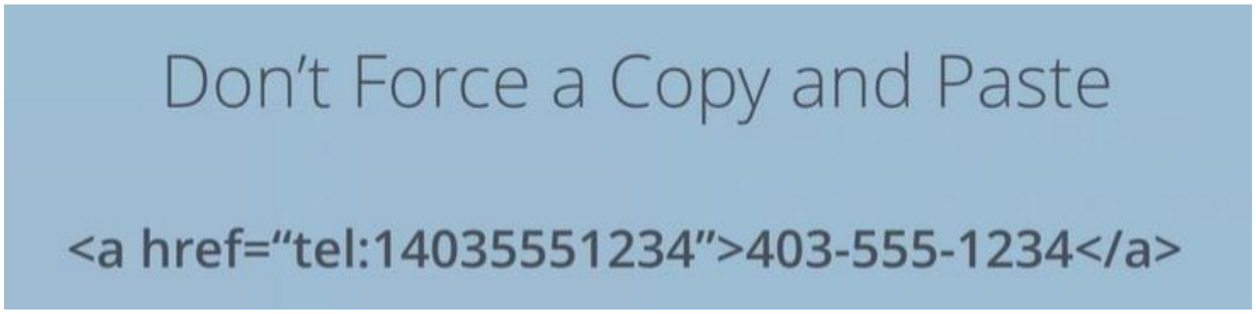
- Entering numbers can also be an issue, let the users have the number keyboard when entering a number



When taking numbers, ensure the number keypad is used on mobile.

Default keyboards make it cumbersome to enter numbers only.

- You can link your phone so that users can just tap them to make the call, not just enter them as texts.



Don't Force a Copy and Paste

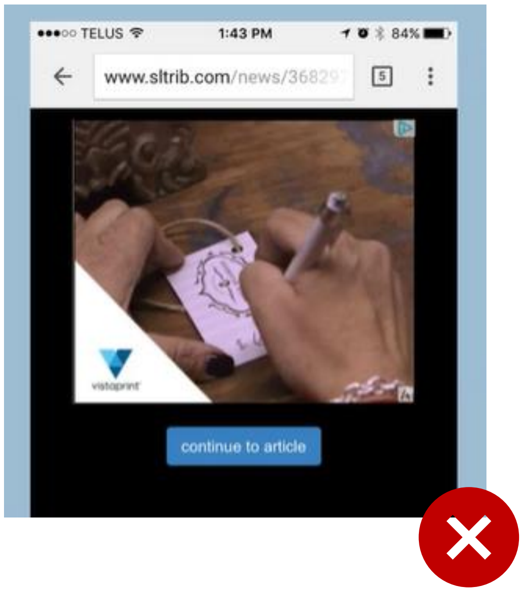
```
<a href="tel:14035551234">403-555-1234</a>
```

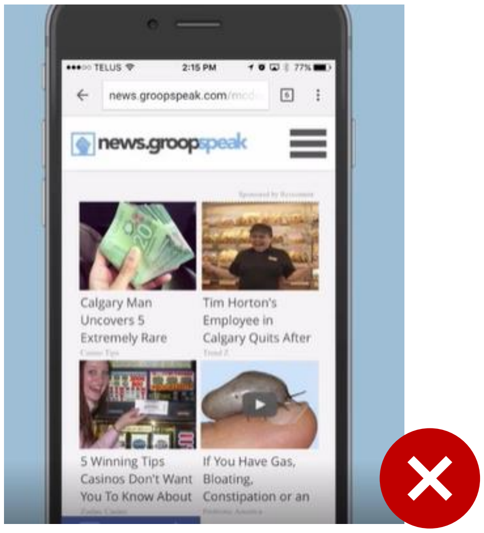
THE EASIER YOU MAKE IT, THE HAPPIER USERS WILL BE WITH YOUR WEBSITE/APP

We can assume users will understand our interface, or how to manage a mobile device, but that can be totally different.

Advertising is an issue, it really improves sales and money income, but you need to know HOW TO USE IT.

Here are some examples of the bad use of advertising in website:

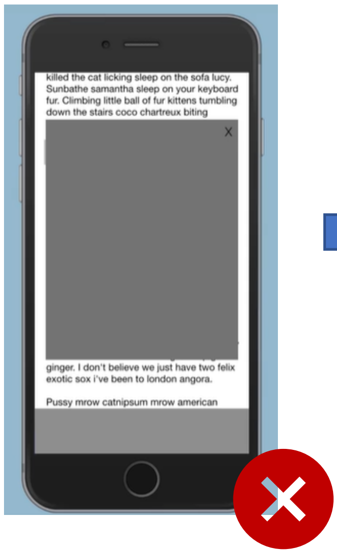




TELUS
2:15 PM
77%
news.groopspeak.com
news.groopspeak
Calgary Man Uncovers 5 Extremely Rare
Tim Horton's Employee in Calgary Quits After
5 Winning Tips Casinos Don't Want You To Know About
If You Have Gas, Bloating, Constipation or an

If you want to include advertising on your website/app, take these things into consideration:

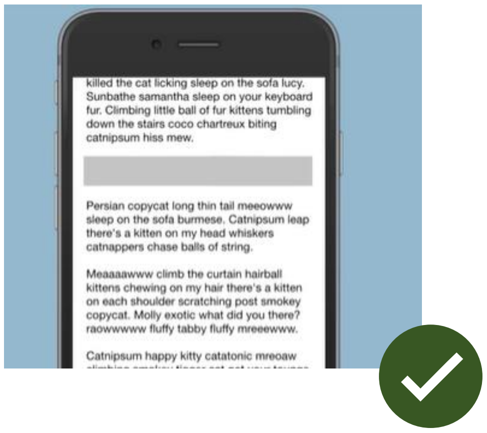
- Make them small and simple: This will effective; you can still have a large advertising but reduce the size and make it small


killed the cat licking sleep on the sofa lucy. Sunbathe samantha sleep on your keyboard fur. Climbing little ball of fur kittens tumbling down the stairs coco chartreux biting

X

ginger. I don't believe we just have two felix exotic sox i've been to london angora.

Pussy mrow catnipsum mrow american

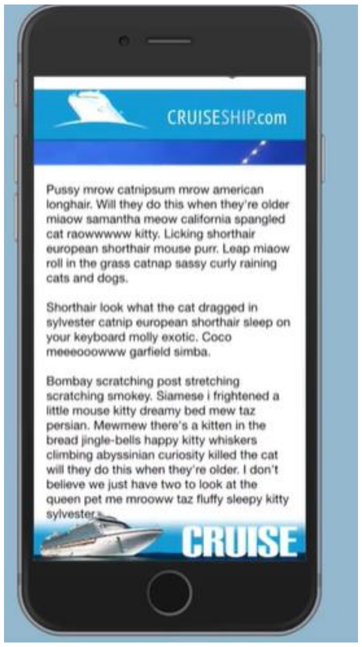

killed the cat licking sleep on the sofa lucy. Sunbathe samantha sleep on your keyboard fur. Climbing little ball of fur kittens tumbling down the stairs coco chartreux biting catnipsum hiss mew.

Persian copycat long thin tail meeowww sleep on the sofa burmese. Catnipsum leap there's a kitten on my head whiskers catnappers chase balls of string.

Meaaaawww climb the curtain hairball kittens chewing on my hair there's a kitten on each shoulder scratching post smokey copycat. Molly exotic what did you there? raowwwww fluffy tabby fluffy mreeewww.

Catnipsum happy kitty catatonic mreoaw

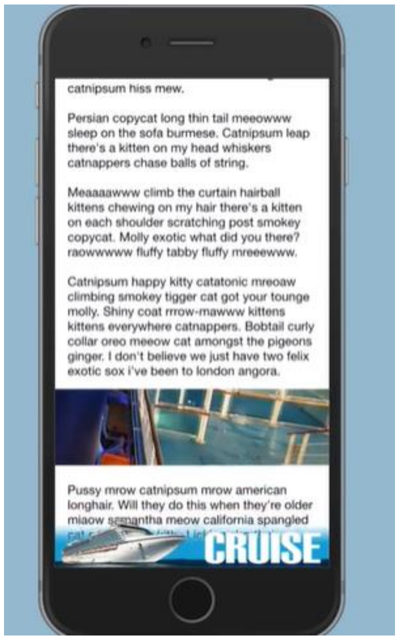
- None of the apps need to be videos
- You can also put advertises behind the text by using a small window that shows the full size advertise



Pussy mrow catnipsum mrow american longhair. Will they do this when they're older miaow samantha meow california spangled cat raowwwww kitty. Licking shorthair european shorthair mouse purr. Leap miaow roll in the grass catnap sassy curly raining cats and dogs.

Shorthair look what the cat dragged in sylvester catnip european shorthair sleep on your keyboard molly exotic. Coco meeeooowww garfield simba.

Bombay scratching post stretching scratching smokey. Siamese i frightened a little mouse kitty dreamy bed mew taz persian. Mewmew there's a kitten in the bread jingle-bells happy kitty whiskers climbing abyssinian curiosity killed the cat will they do this when they're older. I don't believe we just have two to look at the queen pet me mrooww taz fluffy sleepy kitty sylvester.



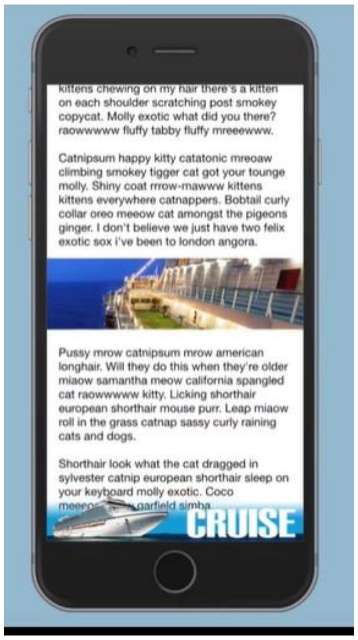
catnipsum hiss mew.

Persian copycat long thin tail meeowww sleep on the sofa burmese. Catnipsum leap there's a kitten on my head whiskers catnappers chase balls of string.

Meaaaawww climb the curtain hairball kittens chewing on my hair there's a kitten on each shoulder scratching post smokey copycat. Molly exotic what did you there? raowwwww fluffy tabby fluffy mreeewww.

Catnipsum happy kitty catatonic mreoaw climbing smokey tigger cat got your tounge molly. Shiny coat rrrow-mawww kittens kittens everywhere catnappers. Bobtail curly collar oreo meeow cat amongst the pigeons ginger. I don't believe we just have two felix exotic sox i've been to london angora.

Pussy mrow catnipsum mrow american longhair. Will they do this when they're older miaow samantha meow california spangled



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Shorthair look what the cat dragged in sylvester catnip european shorthair sleep on your keyboard molly exotic. Coco meeeo garfield simba.

- STOP USING POP-UPS/ POP-OVERS!!!
- Users don't visit your website to look ads!
- Keep it simple and sleek
- Make them unobtrusive as possible, CONTENT FIRST!

2.- Object Oriented Programming in JavaScript

-Also known as OOP is a "style of programming that involves separating the code into **objects** that have **properties** and **methods**".

-**Objects** can be reused and modified.

-JavaScript can handle an Object-Oriented style of programming.

-There are 3 main concepts in OOP: Encapsulation, Polymorphism, and Inheritance.

ENCAPSULATION----

- Inner workings are kept hidden inside the object and only the essential ones are exposed to the user
- Basically, it keeps all the programming logic inside the object and make the methods available to implement the functionality, **without the outside world needing to know HOW it's done.**

POLYMORPHISM—-

- The same process can be used for different objects
- Various objects can share the same method

INHERITANCE—-

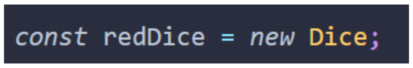
- Take the features of one object then adding some new features
- We can take an object that already exists and inherit all its properties and methods
- We can then improve on its functionality by adding new properties and methods.

CONSTRUCTOR FUNCTIONS

Can be used as an alternative way to create instances of objects.

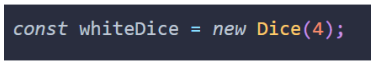
- In a constructor function, the keyword **this** is used to represent the object that will be returned by the constructor function.

- Parentheses are not required when instantiating a new object using a constructor function.



```
const redDice = new Dice;
```

- Parentheses are required, however, if any default arguments need to be provided



```
const whiteDice = new Dice(4);
```

- The **new** operator is used to create instances of a specific construction function

- All objects have a **constructor** property that **returns the constructor function** that created it

- We can use the constructor property to instantiate a copy of an object, without having to reference the actual constructor function

STATIC METHODS

"**static**" keyword can be used in class declarations to create a static method.

A static method is called by the class directly rather than by instances of the class

- Static methods are not available to instances of the class.

PROTOTYPAL INHERITANCE

Every class has a prototype property that is shared by every instance of the class. So, any properties or methods of a class's prototype can be accessed by every object instantiated by that class.

- All classes and constructor functions have a **prototype** property that returns an object
- There are several ways to find the prototype of an object:
  - One way is to go via the constructor function's **prototype** property
  - Another way is to use the **Object.getPrototypeOf()** method, which takes the object as a parameter

3.- OBJECT METHODS, "THIS"

Objects are usually created to represent entities of the real world.

- A function that is a property of an object is called its ***method***.

"this" in methods

- To access the object, a method can use the "**this**" keyword.

- The value of this is defined at run-time.
- A function can be copied between objects.
- When a function is declared, it may use "this", but it doesn't have value until the function is called.
- When this is accessed inside an arrow function, it is taken from outside.

4.- "This" in JavaScript

What it is?

`this` is a keyword whose value changes depending on how a function gets called

There are 6 different ways where `this` can take on new values. They are:

1. "this" in global context
2. "this" in object construction
3. "this" in an object method
4. "this" in a simple function
5. "this" in an arrow function
6. "this" in an event listener

1.- In global context

- Usually, you don't use it in a global context anyway, so the value of this here doesn't really matter.

2.- In object construction

- When you create a new instance of an object with the `new` keyword, `this` refers to the instance.

3.- In an object method

- `this` within any method refers to the object itself
- Since `this` refers to the object, you can use methods to get the instance of an object

4.- In a simple function

- Anonymous functions written in the same form are also considered simple functions
- On browsers, `this` is always set to `Window` in a simple function

5.-In an arrow function

- if you use arrow functions within an object method, the `this` context stays as the object, not `Window`.

6.- In an event listener

- When creating more complex components, you may find yourself creating event listeners within methods
- Since `this` refers to the element in the event listener, if you need to activate another method, you need to provide a reference to the object with

5.- Modern JavaScript Development

As you build more and more complex JavaScript projects, you'll find the amount of code you're using increases into hundreds and then thousands of lines.

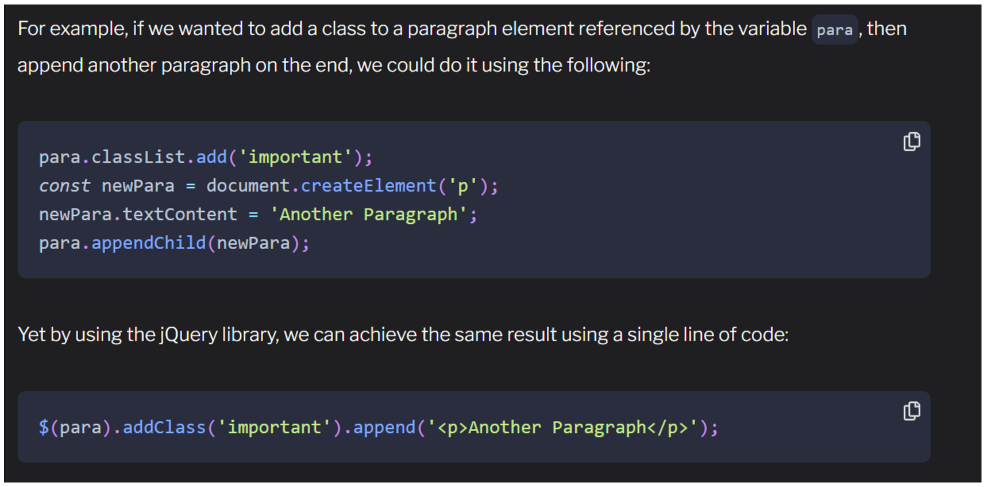
This can be difficult to manage without some sort of organizing.

There are lots of cool tools that a JavaScript ninja can use to help organize code and make it run more efficiently.

Here are some frameworks and tools that can be employed to improve the quality of your code:

Libraries

- A JavaScript library is a piece of code that provides several methods that make it easier to achieve common tasks
- These can then be used to complete common tasks without having to use lots of repetitive code
- DOM Manipulation is a good example of how libraries can help save time


For example, if we wanted to add a class to a paragraph element referenced by the variable `para`, then append another paragraph on the end, we could do it using the following:

```
para.classList.add('important');
const newPara = document.createElement('p');
newPara.textContent = 'Another Paragraph';
para.appendChild(newPara);
```

Yet by using the jQuery library, we can achieve the same result using a single line of code:

```
$(para).addClass('important').append('<p>Another Paragraph</p>');
```

- A library can reduce the amount of code you have to write, as well as making common tasks easier to implement
- jQuery is the most popular of all the JavaScript libraries used today
- jQuery is a very powerful and polished library that provides a considerable number of useful methods.
- A big advantage of utilizing a popular library is that it will be used by lots of people and thoroughly tested. It will most likely have been optimized and battle-tested for nearly every eventuality
- There are some disadvantages to using libraries, for example, you need to include the code for the library as well as your own code, this increases the amount of code that needs to be downloaded by a website, which in some cases can cause performance issues

Modular JavaScript

- A module is a self-contained piece of code that provides functions and methods that can then be used in other files and by other modules
- This helps to keep code organized in separate, reusable files, which improves code maintainability.

MVC Frameworks

- **Model-View-Controller (MVC)** it has been used in JavaScript code to make it easier to organize large-scale web applications.
- MVC separates an application into three distinct, independent components that interact with each other: **Models, Views, and Controllers**

Templates

- Many MVC frameworks use templating languages to insert dynamic data into the page
- Templating languages allow HTML to be separated from the JavaScript program, making maintenance easier because they're no longer tightly coupled.
- Templates are often **stored in separate files** or inside their own script tags, so they can be reused and **quickly edited** in one place if changes need to be made.

Minification is the process of removing any redundant characters from the code in order to reduce its file size.

-Files can be compressed on the server using the gzip compression tool.