Advanced Techniques for Web-based Comics

@RachelNabors.com
a spectrum of storytelling
a spectrum of storytelling
A Whole New Universe
Digital Comics and Motion Book Experience Come to eBay with Madefire Partnership
a spectrum of storytelling
[S] ACT 6 INTERMISSION 3

[If game doesn't play, try another browser. Chrome or Firefox Recommended.]

[WALKTHROUGH | MAP]

> [A6I3] ==>

Start Over | Go Back | Save Game | Auto-Save | Load Game | Delete Game Data

Contacts | Privacy Policy
© 2018 Homestuck and VIZ Media
We don’t need Flash.
Once upon a time, in an age long forgotten because it was somewhat boring and contrived, there was this picturesque hamlet full of God-fearing wholesome people.
Telling Stories with Web Technologies
Web Audio API
Now we have to create an instance of buffer and call the `loadAll` method, to load all of the sounds into the buffer. We also have the `getSoundById` method to grab the exact sound we need, so we pass the sound to the `Sound` and call `play()` . The `id` can be stored as a data attribute on the button that you click to play the sound.

Here's a project that uses all of that: the buffer, the recorded notes, etc:

You can use that example for for reference, but for your own exercise, here's a playground I've created. It has all the necessary HTML and CSS and the URLs to the sounds, so you don't have to worry.
CSS Animations and Transitions
Web Animations API
Scroll Snap
This demo supports both versions of the spec, and so will work on Safari 11, Chrome 69, Firefox 39, and Edge 12+. It could even be made to work in IE 10+ if flexbox was not used.

Try playing around with the demo on Codepen, and see how the different features...
Meet The New Events

The new Pointer Event API is an evolved version of the Mouse Event interface we've all been using so far. It extends the functionality of the old API and adds support for multi-touch gestures, precise pen input, and overall smoother touchscreen interaction.

- `pointerdown` - Pointer becomes active
- `pointerup` - Pointer stops being active
- `pointerover, pointerenter` - Pointer enters element boundaries
- `pointerout, pointerleave` - Pointer leaves element boundaries
- `pointermove` - Pointer moves while inside the element's boundaries
- `pointercancel` - Pointer has stopped generating events, e.g. input device deactivated
- `gotpointercapture` - Pointer has entered pointer capture state, e.g. dragging a movable element
- `lostpointercapture` - Pointer capture state has ended

Most of the Pointer Events have direct alternatives among the old mouse events. Once the new API gets full browser support we can directly substitute with the more modern alternatives:

```javascript
const button = document.querySelector("button");

// Instead of mouseover
button.addEventListener('mouseover', doSomething);

// We can use pointerover
button.addEventListener('pointerover', doSomething);
```

Interacting with a mouse should be the same in both cases. Using fingers or a stylus, however, will be easier to program with the new API.
Filters
As a result, you're now able to apply filters to images before using them in backgrounds. You can think of it as a polyfill for `background-filter` (or `background-opacity`, `background-blur`, whatever), but it's much more powerful.

The good news is that this function, even with no mention from Apple, is also supported in Safari 9.

See live result on JSBin 🎉 (only Safari 9)

Few things you should be aware of:

- the function is defined in the [Filter Effects specification](https://developer.mozilla.org/en-US/docs/Web/CSS/filter-effect)
- there's a bug with `background-size`
- it can be animated
- as of now, this function is prefixed in Safari: `-webkit-filter()`
- there's a CanIUse page for support

It's also worth mentioning that both `background-filter` and `filter()` can be animated easily with CSS transitions.
Light and Detailed images with SVG and Bitmaps
They can be used as a background behind the line work image.

Please compare the file size and appearance differences. In some circumstances, this technique might be useful.

This is what the two separate images look like before stacking them:
Crisp lines at smaller sizes

Original: 142kb
Layered: 93kb...
  lines: 50kb
  colors: 43kb
1 extra http request = 49kb savings
Flash-like Interaction with Canvas
NEUROTIC NEURONS:
AN INTERACTIVE EXPLANATION

Neurons only skims the surface of psychology/neuroscience, so if you want a deeper dive, do check out this Crash Course video on Observable Neurons or see Wikipedia articles on Habituation, Learning, and Conditioning.
Pain Points/Opportunities
Flash: losing the Web since 2010
apple.com/hotnews/thoughts-on-flash
Lack of Tooling for Creators
Jurassic World Regenesis is a non-profit proof of concept, designed to showcase innovation in online storytelling. The idea came from two elements coming together: Google Web Designer (Beta) and an unofficial JP story. It's a collaboration of JP fans working to provide a unique example of online entertainment and a dedication to the filmmakers & fans alike.

- Best experienced on Google Chrome desktop. Not mobile friendly at this time.

Click to begin
Bring ideas to life across screens

Create engaging, interactive HTML5-based designs and motion graphics that can run on any device.

Download Web Designer

Mac 10.10 or later, Win 7 or later, Linux 64-bit (Debian/Ubuntu/Fedora/opensUSE)
Adobe Edge Animate
Opensource Tooling

Opportunity
a spectrum of storytelling
What is Ren'Py?

Ren'Py is a visual novel engine – used by thousands of creators from around the world – that helps you use words, images, and sounds to tell interactive stories that run on computers and mobile devices. These can be both visual novels and life simulation games. The easy to learn script language allows anyone to efficiently write large visual novels, while its Python scripting is enough for complex simulation games.

Ren'Py is open source and free for commercial use.

Why Ren'Py?

Where does it run?

- Android 2.3+
- Chrome OS
- Linux x86/x86_64
- Windows XP+
- Mac OS X 10.8+
- iOS 7+

Where do I get it?

The latest version of Ren'Py is 7.1.0 "On the road again.", released on September 10, 2018.

Who is it sponsored by?

- MCAter Dev
- Meagan Trott
- philat
- J. C. Holder
- ... and 265 more sponsors.  

Become a Sponsor!
Explore games made with Ren'Py on itch.io. Upload your games made with Ren'Py to itch.io to have them show up here.
JavaScript Frameworks

Opportunity
Interactive Storytelling Frameworks for the Web?
...and for native!

- React Native
- Vue CLI
- NativeScript
The Web is the Ultimate Format
What the Web Means for Storytelling

- APIs for sound, motion, and interaction fully replace Flash.
- Opensource JavaScript Frameworks provide a maintainable format.
- The stability of the Web platform means its content will be readable for generations.
Explore the comic book

Below, click through an online version of the comic book to help Hala make choices to keep her safe from harm.

This is the story of Hala.

We will help decide how Hala handles different situations that come up while she's going to work.

We are going to talk about each step she takes and discuss the different options she has to deal with in each situation.
a spectrum of storytelling

Room for expansion!