ScribbleDemo using Pointer Events

Overview

This demo implements a simple web drawing app showing how to use HTML5 Pointer Events (HPE). With HPE, you can create an app that is compatible on many popular browsers that detect pen ink, mouse, and touch data using a single unified API. As of this writing, HPE is supported on most, but not all popular browsers. For those browsers that do not support HPE, one solution is to use the older CSS pointer events API, which is also demonstrated in the app.

When you load the sample code, ScribbleDemo.html, into a browser, you will get a drawing canvas, some simple controls, and a field to look at HPE data. The main focus of ScribbleDemo.html is, of course, to scribble with pen ink. Wacom tablets, when properly configured, provide pen ink that includes properties that are used to modify the drawing strokes.

HPE device properties include:

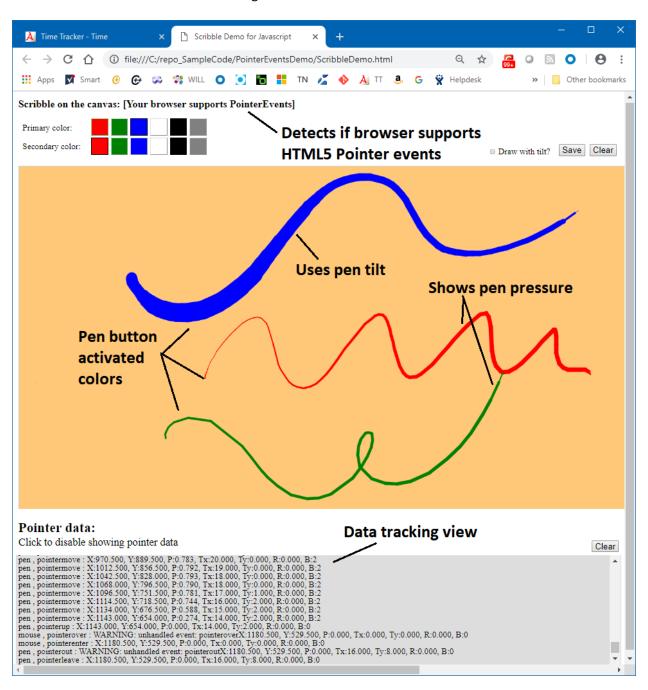
Property	Pen	Mouse	Touch
X,Y location (pixels)	✓	✓	✓
Pressure (unitless)	✓	-	-
X,Y tilt (degrees)	✓	-	-
Rotation (degrees)	✓	-	-
Pen tip/barrel button presses	✓	-	-
Down event	✓	✓	✓
Up event	✓	✓	✓
Move event	✓	✓	✓
Hover event	✓	✓	-
Enter event	✓	✓	-
Leave event	✓	✓	-
Cancel event	✓	✓	-
Over event	✓	✓	-
Out event	✓	✓	-
gotpointercapture	✓	✓	✓
lostpointercapture	✓	✓	✓
PointerID	-	-	✓

How to Use the ScribbleDemo.HTML with Wacom Tablets

Using ScribbleDemo.HTML is very simple. Just follow these steps:

- Install a Wacom tablet compatible driver
- Plug in your Wacom tablet (or attach with Bluetooth)
- Double click on the ScribbleDemo.HTML file
- Use the Wacom tablet pen to start drawing on the page's canvas area

Here is a screenshot of the demo running on Chrome:



HPE-Supported Browsers

HPE is supported on these platforms and latest versions of these browsers:

- Windows: IE, Edge, Firefox, and Chrome. <<TBD opera?>>
- OS X: Chrome <<TBD confirm>>
- Android: Chrome

CSS pointer events is supported on these platforms and latest versions of these browsers:

- Windows: IE, Edge, Firefox, Chrome, Safari
- iOS: Safari
- OS X: Chrome <<TBD confirm>>
- Android: Chrome

HPE-Supported Wacom Tablets

ScribbleDemo.html is supported by the following Wacom tablets:

- Wacom MobileStudio Pro
- Cintiq product family
- Intuos product family

References

- https://mobiforge.com/design-development/html5-pointer-events-api-combining-touch-mouse-and-pen
- https://www.w3.org/TR/pointerevents/
- https://caniuse.com/#feat=pointer-events
- https://caniuse.com/#search=pointer%20events
- https://webplatform.github.io/docs/concepts/Pointer_Events/
- https://www.wacom.com/en-us
- https://developer-docs.wacom.com/display/DevDocs/Wacom+Device+Kit