Web Content Guidelines for PlayStation®Vita

Version 3.00

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1 About This Document

This document provides information for creating Web content for the Internet Browser implemented on the PlayStation®Vita system software. The required client specifications, technical information, and guidelines are described. It is recommended for licensees to use the information in this document when creating applicable content.

However, it is possible for Internet Browser client specifications to be changed for fixing bugs and improving quality. The content of this document is not guaranteed to be valid for future versions of the system software. In this document, the applicable version number ("2.00 or later") is noted whenever differences exist depending on the version of the system software.

2 Basic Functionality

This chapter describes the basic functionality of the Internet Browser.

Standard Web Specifications

The Internet Browser supports the following standard Web specifications.

- HTML 4.01
- XHTML 1.1
- CSS 2.1 and partial CSS3
- JavaScript™ Version 1.7 (based on ECMA-262 3rd edition)
- DOM Level 2

Security

The Internet Browser complies with the following standard Web specifications.

- SSL v3.0
- TLS

Input Devices

The screen (touchscreen), the rear touch pad and buttons on PlayStation®Vita are mainly used for the Internet Browser operation.

Cursor

A cursor is displayed when the square button is pressed while the Internet Browser is running. The cursor can be freely moved with the left stick. Moreover, a click event will be generated when the cross button is pressed while the cursor is being operated. To hide the cursor, press the square button again.

Directional Buttons

When a directional button is pressed while the cursor is being displayed, the keyboard event corresponding to that directional button will be generated. As the default operation of the Internet Browser, the cursor will move to the closest element in the direction of the pressed directional button. It is also possible to deter default operation upon keyboard event generation with the script.

Vector Graphics

The canvas and svg elements are used to render vector graphics.

The following is an example.

```
<canvas id="mycanvas" width="600" height="400"></canvas>

<svg>
    <rect x="0" y="0" width="100" height="100" fill="blue">
</svg>
```

The canvas element for the Internet Browser only supports 2D contexts.

Media Playback

To play a video, use the video element.

```
<video src="myvideo.mp4"></video>
```

Formats that can be played back are as follows.

- MP4 (MPEG-4) (System software 2.10 or later)
- HTTP Live Streaming (Internet-Draft) Protocol Version 03 (System software 2.50 or later)
  http://tools.ietf.org/html/draft-pantos-http-live-streaming-05

(The above reference destination has been confirmed as of October 2, 2013. Note that pages may have been subsequently moved or its contents modified.)

File types that can be played back are as follows.

- H.264/MPEG-4 AVC Baseline/Main/High Profile Level3.1 maximum 720p
- AAC

Audio playback using the audio element is not supported.

(System software 2.10 or later)

3 User Agent

If you want to separate processing according to whether or not the Web browser supports certain functionalities, use object detection. It is not recommended to detect Web browser functionality with the user agent.

Only use the user agent when object detection cannot detect functionalities or when contents must be strictly categorized by the Web browser.

The user agent string provided by the Internet Browser on PlayStation®Vita and PlayStation®Vita TV is as follows.

```
Mozilla/5.0 (PlayStation Vita 3.00) AppleWebKit/536.26 (KHTML, like Gecko) VTE/3.00
```

- `PlayStation Vita x.xx`
  This represents the platform name and the version of the system software.
- `AppleWebKit/xxx.xx`
  This represents the build number of the WebKit engine.
- `VTE/X.XX`
  This character string is added for PlayStation®Vita TV.
  X.XX represents the version of the system software.

Notes

Depending on the version of the system software, the following string may be added to the user agent.

```
Silk/3.2
```

The above string may differ by version; do not reference the above as part of the user agent.

4 Viewport

By setting viewport, the optimum display size can always be realized on varying display devices.

The initial value for viewport is set at width = 1024 pixels on the Internet Browser. To set another value as the viewport width, see below.

Setting the Viewport Width at 600 Pixels

```
<meta name="viewport" content="width=600">
```

Matching the Viewport Width to a Device's Display Width

By setting as follows, the viewport width can be set to the display width of the device. For the Internet Browser on PlayStation®Vita, this corresponds to 896 pixels.

```
<meta name="viewport" content="width=device-width">
```

Making the Initial Scale 200% and Disabling Zoom by Pinch Operation

```
<meta name="viewport" content="initial-scale=2.0, user-scalable=no">
```

(System software 2.00 or later)

5 Events

This chapter explains the JavaScript™ events supported by the Internet Browser.

(System software 2.00 or later)

Mouse Events

The following mouse events are supported.

- mouseover
- mousedown
- mousemove
- mouseup
- mouseout
- click

Mouse events are emulated by touch operation on the Internet Browser. Thus, the timing at which these events occur may slightly differ from the events that occur when using an actual mouse.

Multi-touch Events

The following multi-touch events are supported. A maximum of 5 points can be simultaneously processed as touch events.

- touchstart
- touchmove
- touchend
- touchcancel

Other Events

The following events are supported.

- load
- unload
- abort
- focus
- change
- blur
- submit
- reset

Unsupported Events

The following events are not supported.

- pagehide
- pageshow
- orientationchange
- gesturestart
- gesturechange
- gestureend

6 Debugging

Checking Consumed Memory Size

Compared to Web browsers on personal computers, the memory size that can be used by the Internet Browser on PlayStation®Vita should be carefully noted.

A maximum memory size of 256 MB can be used by the Internet Browser on PlayStation®Vita. When multiple Browser windows are opened, the total memory size being used must fall within this upper limit. However, when a game or an application equivalent to a game (Video, for example) is running, the total memory size that can be used is limited to 88 MB.

Details of memory being used by the Internet Browser can be checked by opening the following URL.

```
about:memory
```

Memory consumed by the Internet Browser includes memory size equivalent to the size of a read file, the rendering memory size required to display the file onscreen, the memory size required to store texts, etc.

Web Inspector

The Web inspector cannot be used.