# VR VIEW FOR WEB

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#### Introduction

- You can embed 360° photos and videos into a website using VR View. This can be done via a JavaScript API that creates and controls the contents of an iframe or by explicitly declaring the iframe itself.
- Iframe is an inline frame is used to embed another document within the current HTML document. It is supported by all web browsers.
- It is similar to <u>desktop Quicktime VR panorama</u> (released in 1994, developed by Apple, for images) experiences that some may have seen a few years back. However, the VR Views from Google today are done using JavaScript rather than a third-party plugin, and can be enhanced through a true VR view using Google Cardboard.

### Getting started

VR View class from Google needs to be imported:

```
<script src="//storage.googleapis.com/vrview/2.0/build/vrview.min.js"></script>
```

 Next, placeholder (div) for iframe element containing settings and source of multimedia content (picture or video)

```
<iframe src="//storage.googleapis.com/vrview/2.0/embed?video=link/to/video.mp4&is_stereo=true">
</iframe>
```

You can use iframe or following approach for registering an event which loads the media:

```
window.addEventListener('load', onVrViewLoad)
function onVrViewLoad() {
  var vrView = new VRView.Player('#vrview', {
    video: 'link/to/video.mp4',
    is_stereo: true
  });
}
```

#### **Problems**

- From previous slide, using the VR View JavaScript API offers additional features not available when explicitly declaring an iframe. Additionally, there are some security concerns about iframe usage.
- This technology has a certain requirements for image as well as for video:
  - Supported image formats are png, gif and jpeg (recommended for improved compression) and for video it should be mp4s encoded with h264
  - Dimensions of image should be power of two (1024, 2048, ...) and video should have aspect ratio 2:1 (mono) or 1:1 (stereo)

# Compatibility

- Chrome on Android, iOS, Windows, Mac OS X and Linux.
- Safari on iOS and Mac OS X.
- Firefox on Windows, Mac OS X and Linux.
- IE 11 and Edge on Windows.

# Code example

https://codelabs.developers.google.com/codelabs/vr\_view\_101/index.html?index=..%2F..%2Findex#0

### Questions?

- https://developers.google.com/vr/concepts/vrview-web
- https://www.sitepoint.com/embedding-virtual-reality-across-the-web-with-vr-views/
- https://vr.google.com/cardboard/ Google Cardboard for VR