

# AR Website Development Tool Research & Analysis

This report is to answer the sub-question “What technologies should be used to develop the AR website?”

The purpose is to choose the most suitable tool for the project by analysing the advantages and disadvantages of different development tools.

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# Commercial SDKs / Platforms

8<sup>th</sup> Wall: <https://www.8thwall.com/>

## Features:

1. AR Engine
  - World effects
  - Lightship VPS (Visual Positioning System) for web ([https://nianticlabs.com/news/lightship-vps-web/?hl=en#:~:text=Lightship%20VPS%20\(visual%20positioning%20system,centimeter%2Dlevel%20accuracy%20and%20precision\)](https://nianticlabs.com/news/lightship-vps-web/?hl=en#:~:text=Lightship%20VPS%20(visual%20positioning%20system,centimeter%2Dlevel%20accuracy%20and%20precision)))
  - Image targets
  - Face effects
  - Modular framework
2. Cloud Editor + Built-in hosting

## Price:

**8thWall** Why WebAR Product Customer Work Find a Partner Learn Pricing [Start free trial](#) [Log In](#)

**Find the right plan to start developing**  
Get access to the 8th Wall platform to develop AR and VR experiences that work in a web browser—no app download required.

For individuals & small teams		For agencies & organizations	
<b>Starter</b> Develop and publish your own web apps to 8thwall.com. <b>\$9.99</b> / month after free trial* <a href="#">Start a 14-day free trial</a>	<b>Plus</b> Develop and publish your own web apps to 8thwall.com with access to direct project URLs and custom domains. <b>\$49</b> / month after free trial* <a href="#">Start a 14-day free trial</a>	<b>Pro</b> Develop campaigns, perform work-for-hire and purchase commercial licenses on behalf of brands. <b>\$99</b> / month after free trial* <a href="#">Start a 14-day free trial</a>	<b>Enterprise</b> Integrate 8th Wall into your technology stack and marketing funnel with access to platform APIs and licenses. <b>Custom Pricing</b> <a href="#">Contact Sales</a>
<ul style="list-style-type: none"><li>✓ 3 team members</li><li>✓ Unlimited WebAR and WebVR projects</li><li>✓ World Effects, Lightship VPS, Image Targets and Face Effects</li><li>✓ 100+ templates and modules</li><li>✓ Cloud Editor and free global hosting</li><li>✓ Launch projects from 8thwall.com</li><li>✓ Monetize with 8th Wall Payments</li><li>✓ Slack community support</li></ul>	<ul style="list-style-type: none"><li>✓ Everything <b>Starter</b> has, plus:</li><li>✓ 6 team members</li><li>✓ Launch projects from direct URLs</li><li>✓ Connect custom domains</li><li>✓ Embeddable AR</li><li>✓ Progressive Web Apps (PWAs)</li><li>✓ Email support</li></ul>	<ul style="list-style-type: none"><li>✓ Everything <b>Plus</b> has, plus:</li><li>✓ Unlimited seats</li><li>✓ Self hosting with local development</li><li>✓ Password-protected staging URLs</li><li>✓ Purchase commercial licenses for clients</li><li>✓ Partner program eligibility</li><li>✓ Project permissions for external collaboration</li></ul>	<ul style="list-style-type: none"><li>✓ Everything <b>Pro</b> has, plus:</li><li>✓ Custom contracts and invoicing</li><li>✓ Commercial licenses included in contract</li><li>✓ Volume pricing</li><li>✓ Remove default splash screen</li><li>✓ Access to exclusive platform APIs</li><li>✓ Priority technical support</li></ul>

XR+: <https://xr.plus/>

## Features:

- Full cloud platform so nothing to download for users.
- Collaborative studio for one to multiple users and accounts.
- No coding needed to create in a few minutes basic to very advanced XR experiences.
- webAR & webVR means nothing to download for end users.
- Multimedia Assets can be texts, images, audios, videos, static and animated 3D models.
- Trackers & Anchors can be done on images, objects, horizontal and vertical surfaces, faces, hands, feet.
- Triggers can generate multiple actions like animating 3D models, playing videos, visiting a website, taking a selfie, sharing on social networks...
- Promotion tools allow to reach audiences through offline channels with QR codes, and online channels with a copy / paste embed code (like Youtube videos).
- Players customize interactions and brand awareness.
- Geolocation can be done on maps to let users access only if they are in a specific area (like Pokemon Go).
- Advanced analytics to measure and optimize in real time engagement, time spent...

## Price:

If you are a non-profit organization, a training institution or an artist, please contact us to find out about our solutions adapted to your needs.

Contact us

Monthly Yearly

€ \$

### BASIC

Bundle of 5 projects  
XR.+ branding

Free

Try now

### ADVANCED

Bundle of 5 projects  
White label

67 € per month

799 € per year  
33% saved

Buy now

### EXPERT

Bundle of 100 projects  
White label

334 € per month

3.999 € per year  
33% saved

Buy now

Blippar: <https://support.blippar.com/hc/en-us/articles/4406622267283-Introduction>

#### Features:

- A-Frame, PlayCanvas and Babylon.js support
- Unity WebAR SDK package support. Publish Unity-built projects, along with interactivity, 3D models, animations, and particle effects to web AR with this integration
- No Blippar Branding
- Complete Freedom for Local Development
- SDK is customizable
- Supports Marker/Image Tracking
- Free trial version provides 100 free views.
- Create Unlimited AR Projects using our SDK License
- 100% control on License Management
- Complete Documentation
- 24\*7 Support Multiple Channel user-support

#### Price:

Pre purchased views	Price per view
100 VIEWS	FREE
1000 VIEWS	\$0.01
500,000 VIEWS	\$0.005
1,500,000 VIEWS	\$0.003

ZapWorks: <https://zap.works/>

Features:

## Create best-in-class content for the mobile web



Face tracking



Image tracking



World tracking



Alpha video



Video support



Dynamic lighting



Instant publish

...and many more!

Price:

## ZapWorks plans and add-ons pricing

Save up to 30%

Monthly ☒ Yearly

**Starter**

Discover the power of ZapWorks

€ **58** / mo

Billed yearly, save €252

Start 14 day free trial

**Pro**

Step up your AR strategy

€ **435** / mo

Billed yearly, save €900

Start 14 day free trial

**Enterprise**

Perfect for industry leaders

**Custom pricing**

Talk to sales

Additional plans for education and hobby available. [See plans.](#)

## Open-Source Libraries

**AR.js:** <https://ar-js-org.github.io/AR.js-Docs/>

AR.js is a lightweight library for Augmented Reality on the Web, which includes features like Image Tracking, Location based AR and Marker tracking.

This project has been created by **@jeromeetienne** and it is now maintained by **@nicolocarpignoli** and the **AR.js Org Community**.

**MindAR.js:** <https://hiukim.github.io/mind-ar-js-doc/>

MindAR is an opensource web augmented reality library. It supports Image Tracking and Face Tracking.

MindAR started with AFRAME integration, so majority of these documentations are written for AFRAME integration.

## Comparison and Analysis

With the development of XR technology and the growing interest in it, there are now a large number of development SDKs (software development kit) / platforms on the market. Different tools have different focuses, such as software development, web development, no-code development platform and so on. However, these tools are expensive and can vary in price depending on different requirements. There are also limitations on the functionality of the final product if third party development tools are used.

AR.JS and MindAR.JS are opensource JavaScript libraries and they are perfect for AR website development. These libraries are easy to use and integration AFRAME and Three.JS so there is a lot of flexibility.

In this case, both AR.JS and MindAR.JS are suitable for this project.