

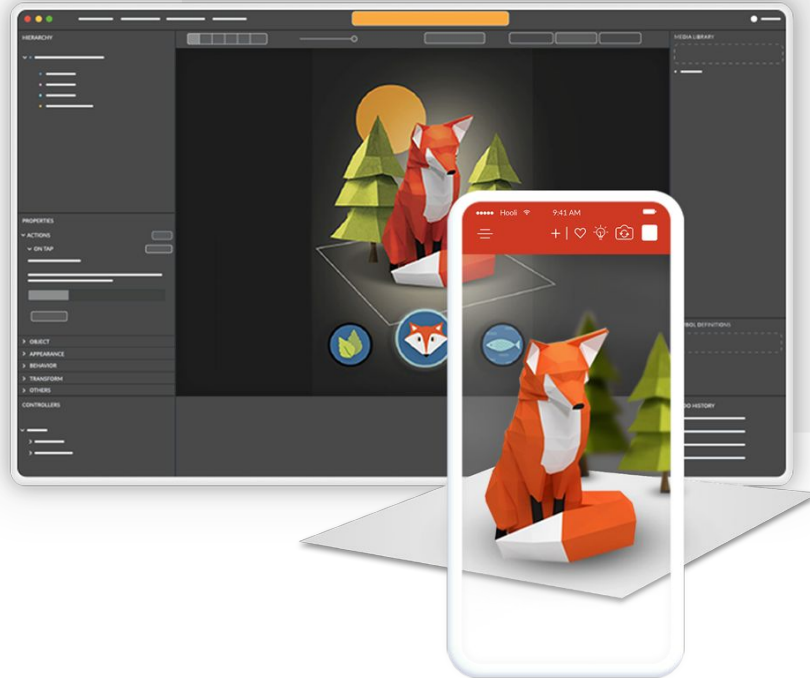


The complete AR toolkit for agencies and brands

| Some awesome folks already using ZapWorks Studio

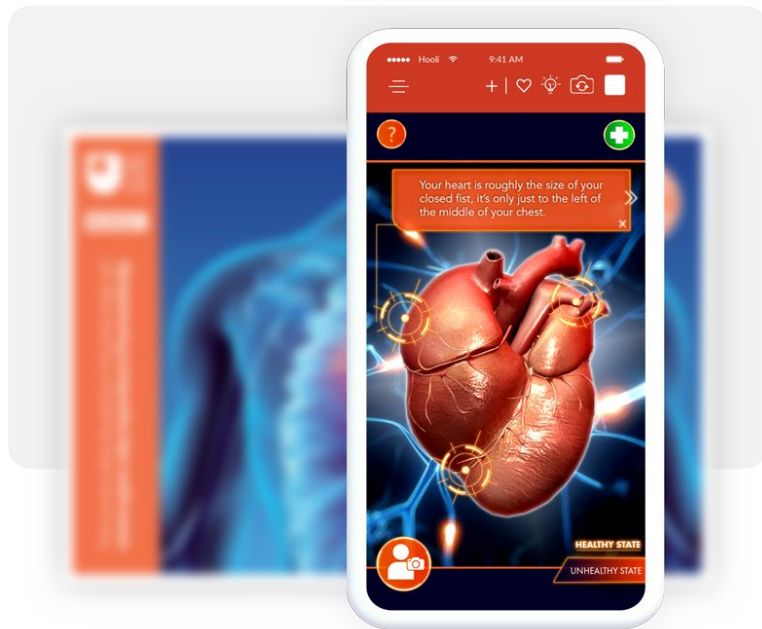


| ZapWorks Studio



Thousands of creatives already use ZapWorks Studio to build AR experiences that engage audiences, entertain consumers and inspire students in every corner of the world. Check out some of the exciting features on offer from Studio.

| Studio Features: Tracking images & World Tracking



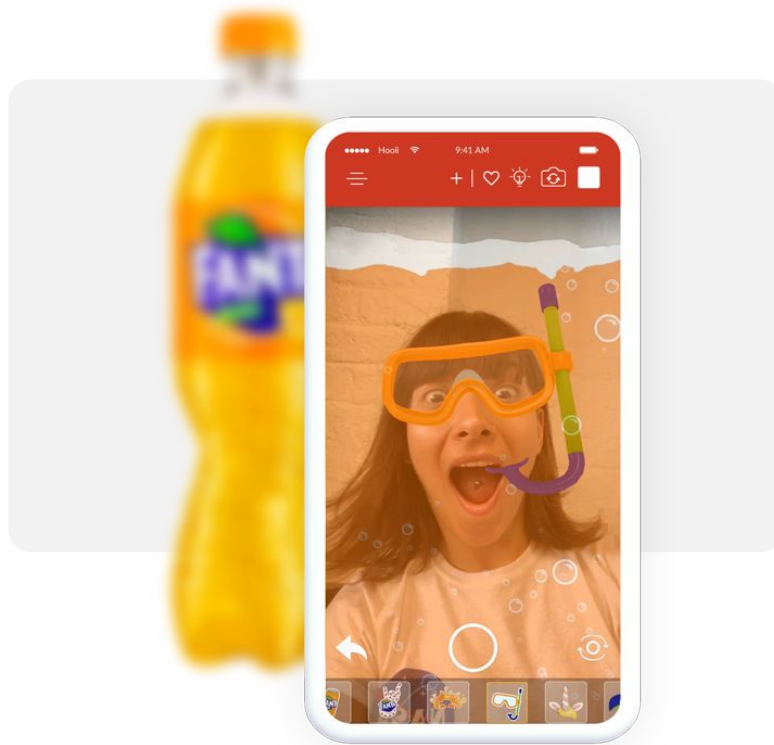
The majority of Zappar-powered experiences leverage tracking images. Zappar have built a number of computer vision algorithms that offer best-in-class tracking.

In late 2018, Zappar are going to release support for ARkit and ARCore, which will allow users to build world tracked experiences using ZapWorks Studio for the first time.

I Studio Features: Face-tracking

Both the Zappar app and Shazam app support face-tracking experiences, although this feature is currently only available in beta to selected partners.

In Autumn 2018, we will be releasing a major update to ZapWorks Studio, which will unveil a UI that will allow designers and developers to build experiences using faces as targets.



| Studio Features: 3D models



ZapWorks Studio supports the import of both static and animated 3D models in a number of standard file formats. Animated 3D models should be imported in the FBX file format.

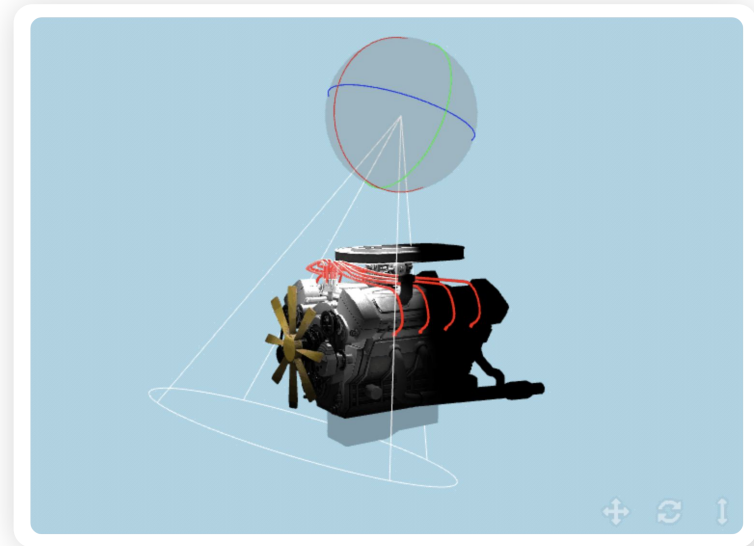
As ZapWorks experiences are delivered on mobile devices, there are certain limitations on file size which help to optimise performance. Check out the docs for more information on 3D models.

I Studio Features: Lighting

ZapWorks Studio supports dynamic lighting, which help to make your experiences and 3D models look even more impressive.

There are 4 types of lights in Studio:

- Directional Light
- Point Light
- Spot Light
- Environment Light



| Studio Features: 360 Video and Images



ZapWorks Studio supports using a device's gyroscope (and other sensors) for building experiences that can be explored by rotating the phone.

This allows you to import 360 videos and images into your ZapWorks experience.

Many experiences built using ZapWorks leverage both gyro and tracking images to create even more rich content.

| Studio Features: Alpha Video



ZapWorks supports alpha video, which are videos that features areas of transparency.

Alpha video, particularly when streamed on the fly, is a great way to communicate a large amount of information whilst keeping the file size down and preserving CPU.

I Studio Features: Animation

ZapWorks Studio allows you to create animation sequences using the concept of controllers, states and timelines.

States and controllers allow you to switch between different property values of your objects. For instance, if you have a light in the scene, you can use states to have an on / off button.

Timelines give you even greater control, and can be used for complex animation sequences.



I Studio Features: Interactivity (Scripting)

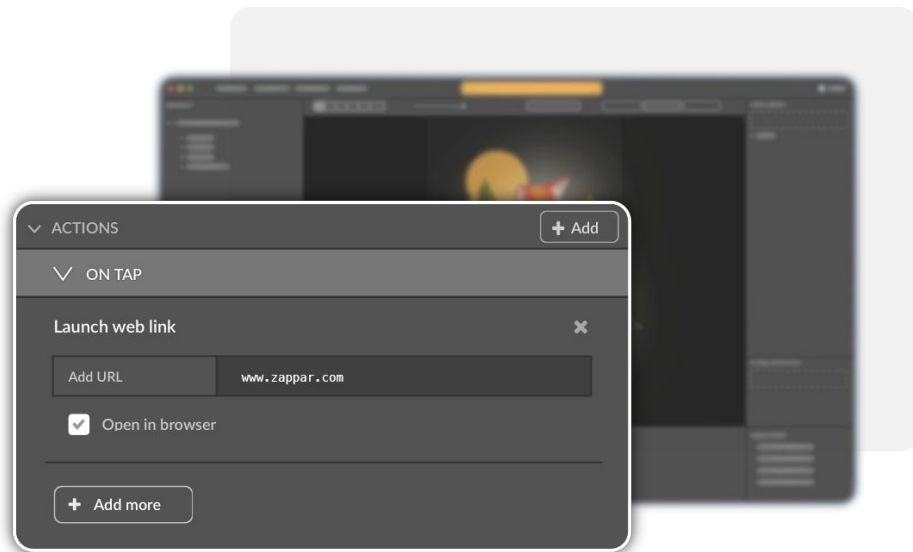
```
displayCode | zappar  
1 var display_shown = symbol.controllers.display.elements.shown;  
2 var display_hidden = symbol.controllers.display.elements.hidden;  
3  
4 symbol.nodes.root.on("show", parent_show);  
5 function parent_show() {  
6   // Make sure we start from fully hidden  
7   display_hidden.reset();  
8   // Move to the shown state  
9   display_shown.activate();  
10  //use the UI color to set the color of our button backgrounds  
11  var col = z.device.themeColor();  
12  symbol.nodes.bgGroup.color(col);  
13 }  
14  
15 symbol.nodes.root.on("hide", parent_hide);  
16 function parent_hide() {  
17   // Once we're fully hidden we should emit the "hidden" signal  
18   display_hidden.one("complete", function() {  
19     symbol.emit("hidden");  
20   });  
21   display_hidden.activate();  
22 }  
23  
24 // set a color for the built-in UI  
25 z.device.themeColor(symbol.nodes.device.themeColor());
```

ZapWorks Studio makes it possible for developers to build even more complex interactivity into their experiences, using JavaScript.

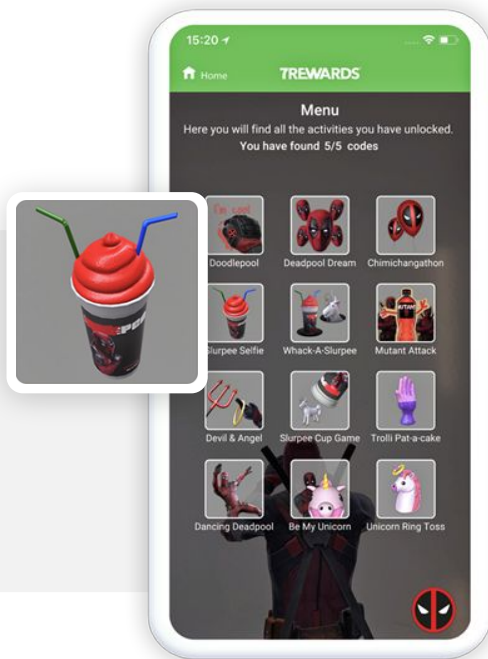
Scripting makes it possible to create AR experiences that would otherwise be impossible, such as building mini-games, and having content change based on user input.

I Studio Features: Interactivity (Actions)

It is possible for non-developers to create experiences in Studio, using the recently released 'Actions' feature. Actions allows users to trigger functions based on events, but without ever having to open up a script node!



I Studio Features: UI elements



AR creators can add UI elements to their experience to help the end-user navigate between different functionalities.

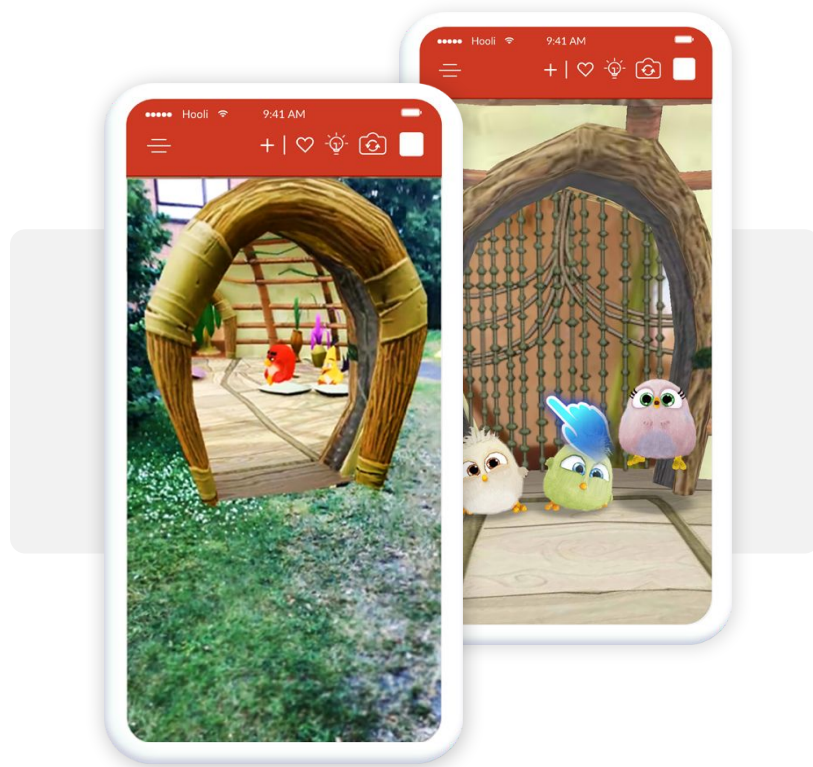
Many experiences will combine a mixture of screen-relative UI (GUI) as well as content that is tracked to a target.

This type of UI gives an experience that will be familiar to end-users, and gives the creator greater opportunity to add additional functionalities such as photo features and gyro experiences.

I Studio Features: Masking and Portals

Masking is a technique that makes parts of a scene as if they were behind an object.

It can be used to create environments that extend behind, and are framed by, a target image. This is especially great for creating windows into another world.



| Studio Features: Photo Features

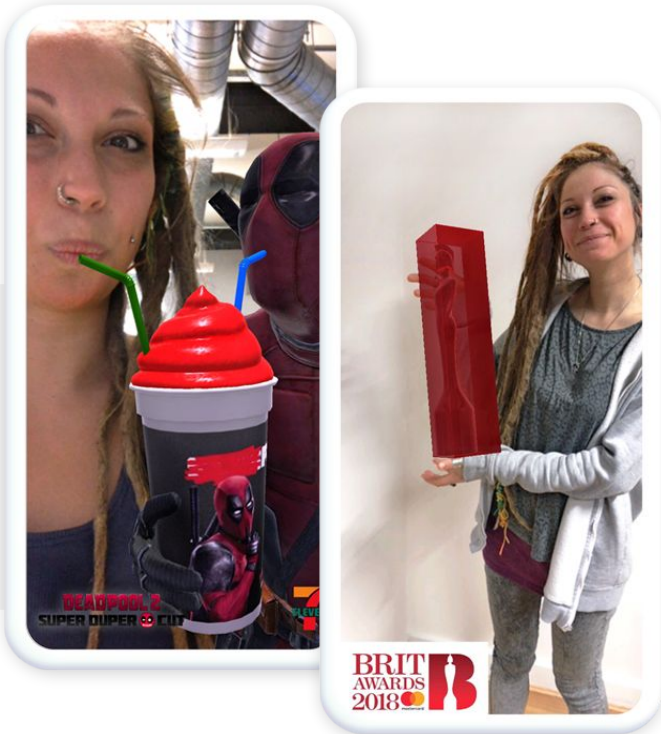


Photo features are a really great piece of functionality that can be used within an experience to let the end user take a photo with either a 2D or 3D object.

Once the user has taken the photo, you can encourage them to share the experience on their social media channels, giving your brand even more exposure.

I Studio Features: Raycasters and Trigger Regions

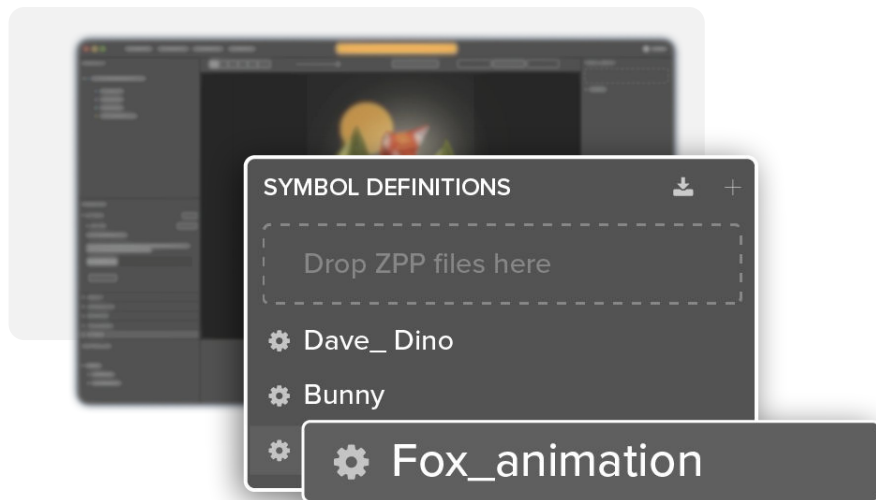
ZapWorks Studio allows the user to define events based on the interaction of two or more objects.

Raycasters are used to check for interaction with an object that intersects with the Raycasters node position along the z-axis.

A trigger region is a defined area that can check if an object has entered it. This can then be used as an event to trigger functionality.



| Studio Features: Subsymbols



Subsymbols are reusable components that can be used to define functionality that is to be used more than once.

A subsymbol can be used to separate and abstract functionality away from the main root symbol.

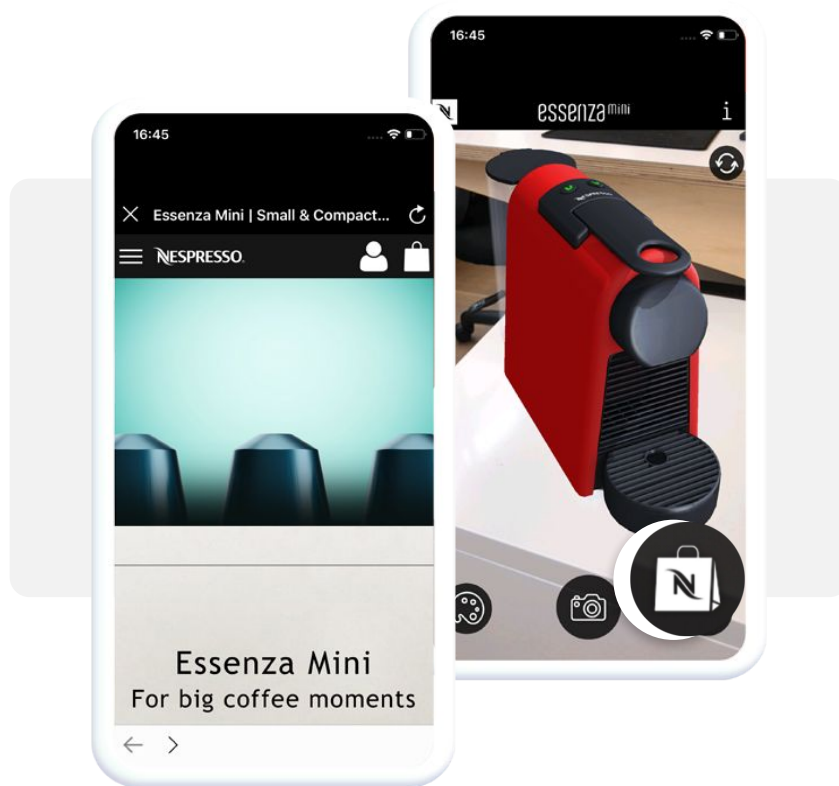
ZapWorks Studio offers templated subsymbols that can be generated within your experience, these include: 360 video player, 3D photo feature, circular bezier curve, and many more.

I Studio Features: Linking to websites

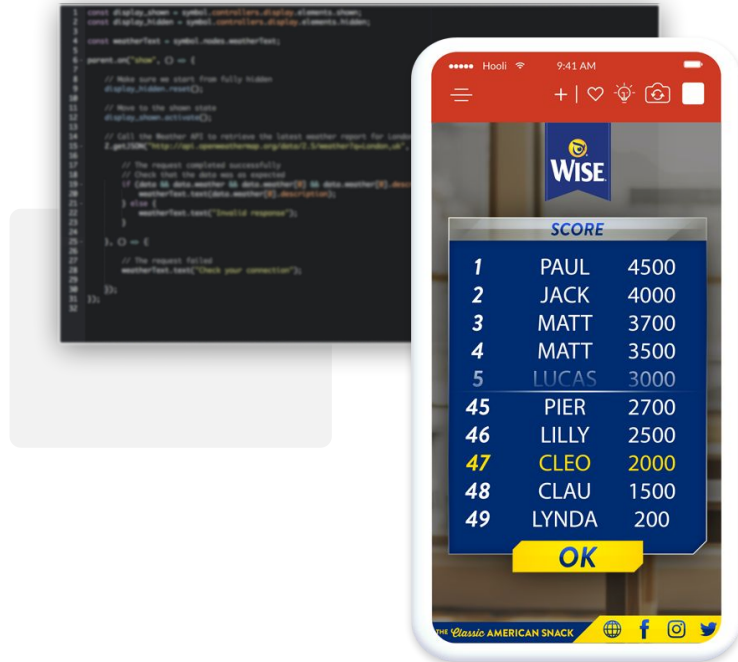
Many experiences built using ZapWorks will end by taking the user off to a website or social media page.

This can be a great way to 'end' an experience and ties back into what the objective of the campaign is.

A common use case might be taking the user to the product page of an item that they have just been visualising in 3D.

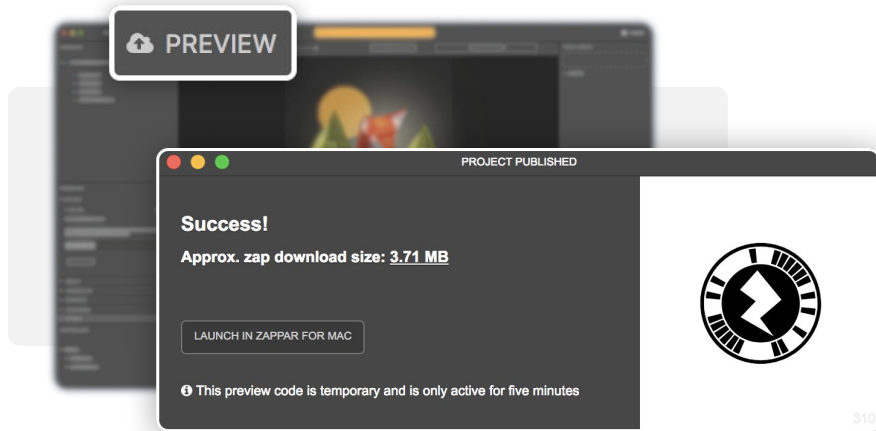


I Studio Features: Storing Persistent Data (Scoreboards)



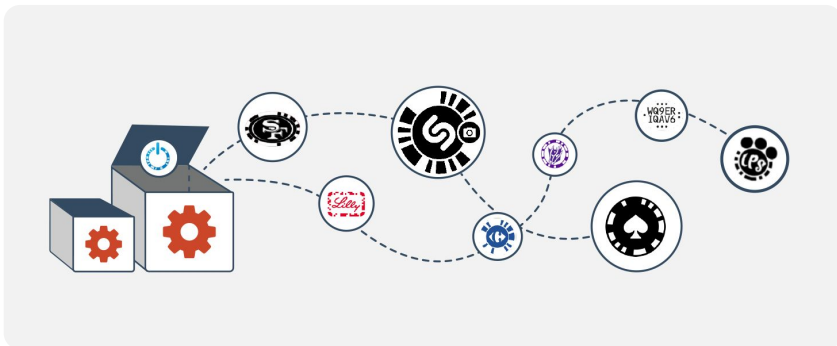
ZapWorks Studio allows you to store data on the cache on the users phone. This can be simple things such as a name, age, gender which you can bring up later, or create functionality common in games such as a scoreboard.

| Studio Features: Rapid Prototyping



ZapWorks experiences do not require a publish to the app store in order to be iterated on. This offers developers the ability to rapidly prototype their work, and update them on the fly after they have gone live.

I Custom apps and codes



Zappar offer the option to customise both the scanning app and the zapcode, to match your or your client's branding.

If you have an existing app and would like to add an AR component to it, then you can embed our scanning tech for an annual fee. Get in touch to ask about being given a test embed component.

If you have a brand asset that you think might work well instead of the lightning bolt in the standard zapcode, we can also customise this. You can see some examples of custom codes [here](#).

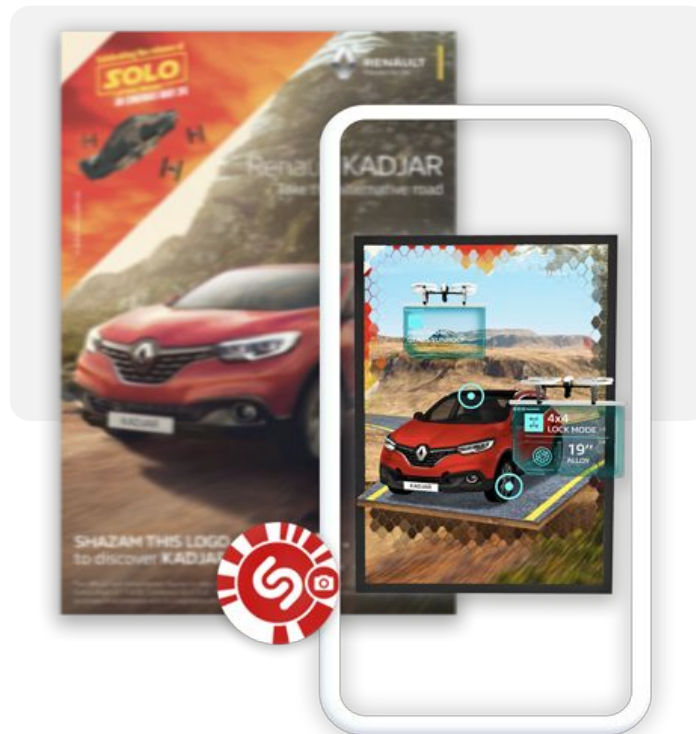
Prices for the standard scanning SDK start at £5,000 per year and a branded scanning app with a custom code costing £25,000 per year.

I Activating through the Shazam app

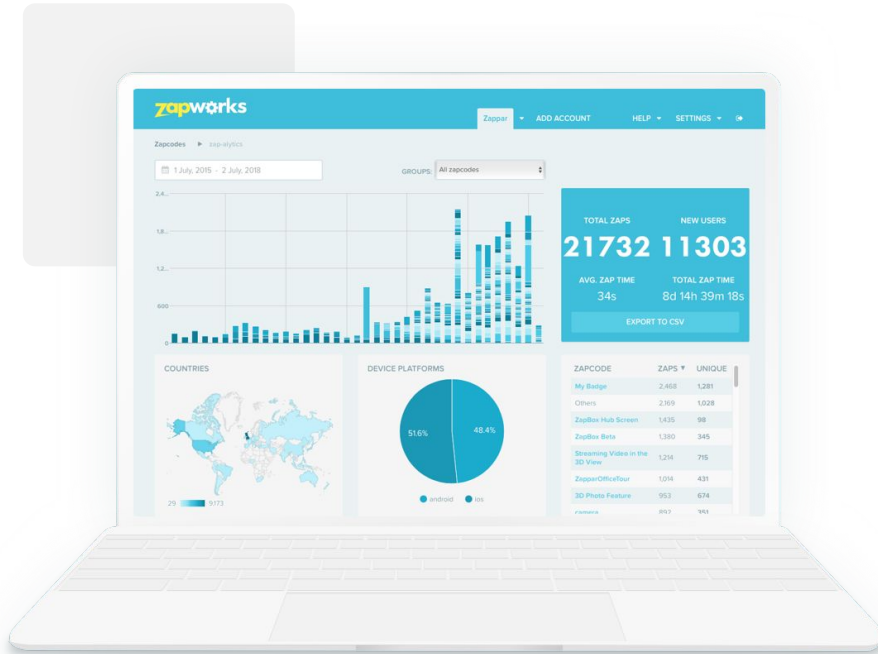
Zappar has a strong partnership with Shazam, with Zappar providing the technology behind the AR component of the Shazam app, and ZapWorks Studio providing the creative tool.

For an additional media fee, agencies and brands can choose to activate their experiences using Shazam, which has over 1bn downloads and 100m MAU across the world. Working with Shazam is a great way to help your experience be enjoyed by a high volume of users.

If you have a project that you are interested in activating using Shazam, please ask a member of the Zappar team to provide you with an introduction.



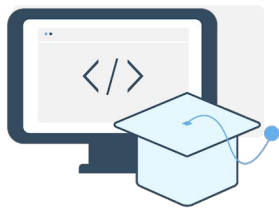
| Zap-alytics



All ZapWorks experience come with analytics automatically tracked, giving your team access to performance metrics such as: number of scans, dwell time, time of day, geography, and device platform.

Studio also allows you to define custom events within your experience, which allows you to measure specific functionality in zap-alytics that you deem to be most important.

| Learning resources and community



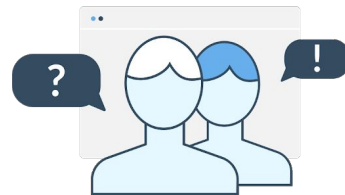
Projects & Tutorials

Work through our library of step-by-step tutorials to help you get familiar with Studio before branching out onto your own projects!



Documentation

Our documentation is packed full of awesome video tutorials, best practice for using Studio, scripting references and sample 3D models



Community

Take part in our forum by sharing your expertise and learn from other users how you can take your projects to the next level!

Thank you!

To download Zapworks Studio go to zap.works/studio.