A Short Guide to HP Reveal

Suitable for classroom and other educational uses.

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This is an active document relying on additions and amendments from users, so let us know if any section needs clarification, amendment, correction or new addition. Email mhobbs@bournemouth.ac.uk.

Latest version is posted on http://augmentedhe.org

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1   Overview

HP Reveal is an Augmented Reality application, formally called Aurasma and you will still see articles and materials referring to the old name. Essentially it is the same application, with a few modifications, but most examples and instructions for Aurasma will still work for HP Reveal.

You can use HP Reveal to augment objects such as posters, handouts, brochures, books signs and even equipment. Using a smart phone or other mobile device you can combine the real world view with an overlay that plays sound, images or video to augment the scene as seen through the viewfinder of the device. Your trigger image acts like a web link to the associated media and needs to be sufficiently unique and unchanging. This will allow you to play the media, which is called an 'aura' locally on your device. You can publish your aura for public view, which uploads the content to the HP data servers, as individual creations or by grouping together through a named 'channel'.

The advantage of using HP Reveal is that it is simple, free and designed for users to create their own content. The disadvantage is that the amount of data you can use is limited and, as with many creative processes, the outcome rather depends on the abilities of the users.

You will need a smart phone or tablet on which you can download and install new apps.

HP Reveal works on Apple or Android devices, but at the time of writing will not work with windows devices.

You can find this booklet, help sheets and workshop activities as well as case studies and examples on our Wordpress Blog:

http://augmentedhe.org

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2   Download and Install

For Apple / IoS go to the AppStore or for Android get it from Google Play - search for 'HP Reveal'. The download and install process should not take long.

Once installed run the app to check that it is working – if at anytime it gets stuck, or stops working, then it is a good idea to try use your device to stop the application (*for Android select settings -> application manager, find HP Reveal and 'Force Stop'*). Alternatively you can delete it, download it and reinstall it again.

The first time use introductory screens give you a brief overview and ask you to create an account. However, you can skip these and there is no need to log in or create an account until you want to create your own material.

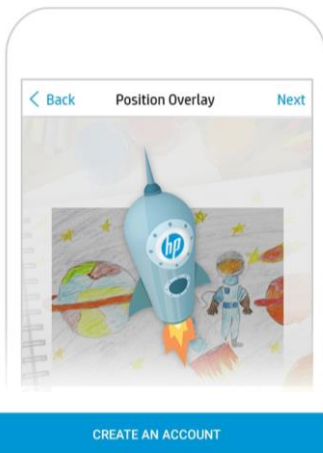## 2.1   Introductory Screens

Change the way you see the world

Use HP Reveal to bring everyday things to life!
Discover hidden experiences, create, and share
your own augmented reality.

CREATE AN ACCOUNT

Already have an account? Log In

Discover AR

Follow channels to discover, scan, and
share augmented reality experiences.

Reveal

Q Discover Auras

CREATE AN ACCOUNT

Already have an account? Log In

Make something special

Create your own AR on everyday things:
photos, posters, birthday cards, and more!

< Back   Position Overlay   Next

CREATE AN ACCOUNT
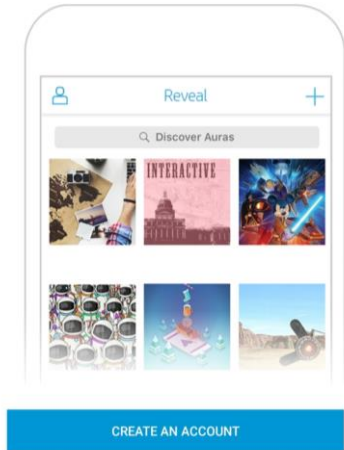
Already have an account? Log In

Spread the Love

Share your favorite AR exprience with friends and
change the way they see the world!

CREATE AN ACCOUNT

Already have an account? Log In

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3   HP Reveal Screens

3.1   Discover Screen

When your first start the app (after the introductory screens) you will see the 'Discover Auras' screen. If you have an account these will show icons of the auras that you have created or are following. If you have not logged into an account this screen will show the generic public auras.

 From the 'Discover' screen you can do four things:
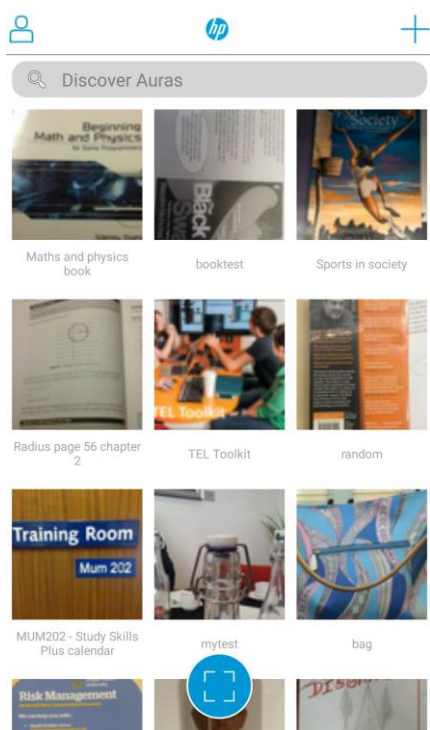
Tap on the blue square icon at the bottom of the screen to trigger the 'viewfinder' page.

Tap on the + icon on the top right to start creating an aura (NB only do this when you are ready to complete the aura)

In the 'Discover Auras' dialog box you can type in the name of an aura, or channel you wish to follow.

Tap on the profile icon to check your profile details.

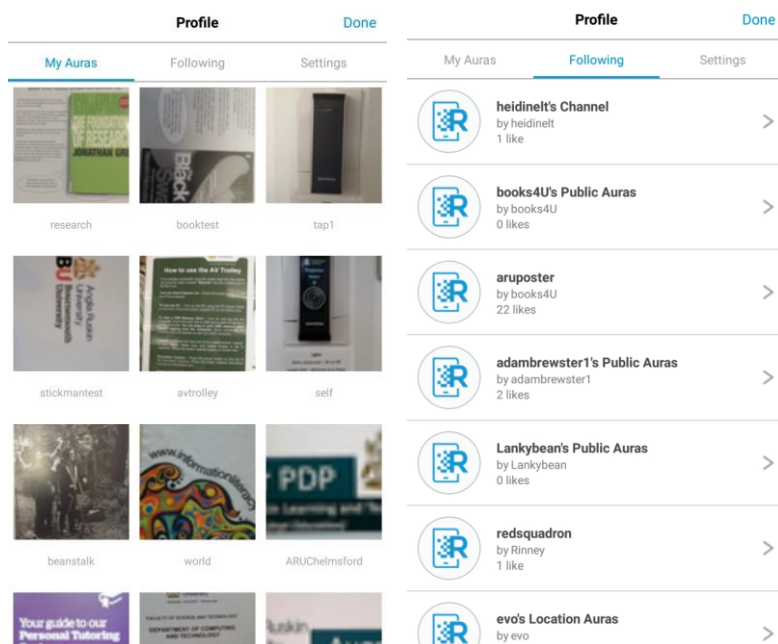Anglia Ruskin University

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From the profile icon on the discovery screen you will see three tabs.

My Auras shows the auras that you have created on your device.

Following shows the list of channels you are currently following

Settings shows details of your account and the ability to log in and log out.

3.2   Viewfinder Screen

This starts with a set of pulsating dots that indicate the viewfinder is awaiting a trigger image as input.

Point your device at a trigger image, when the target is recognised the dots will change to pulsing circles while the media is being downloaded. You will need to keep the target in the viewfinder while the media is downloading and playing.

The question mark in the top right corner gives access to the online help guide, which explains how to use the application and create an aura.

The search symbol will take you back to the 'Discover Auras' screen.

The lightning bolt illuminates a target with your flash.

Trigger images need to be viewed within the indicated rectangle, holding the device parallel to the image, minimising, reflections and holding still. This may take a few moments.

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4   Finding Content

Content can be found by searching from the discovery screen for the name of a single aura, or a group of auras collected into a named channel. By default you **follow** the public channel which often contains commercial content. These commercial channels are also referred to as 'campaigns'.

You can search for **auras** and **channels** from the **discovery** screen, and get access by selecting the item and using the **follow** button.
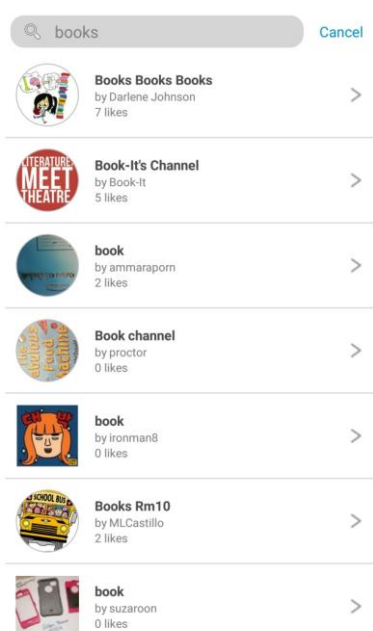
Once selected a **channel** or **aura** can be shared using the share icon.

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5 Quick Start

Sharing an aura provides a direct link via a URL which is sent by email. If you send this to yourself you can then include the link in your own documentation or send on to others.

If someone follows the link, they will be asked if they want to run the HP Reveal app, and if this is not installed they will be asked to download and install the app. If your users have devices with QR readers installed they can scan a QR code and will be taken directly to the HP Reveal viewfinder screen, ready to be triggered by the appropriate image.

5.1 Epping Forest Trigger

Here is QR code that links to the **books4U** user and the **aruposter** channel, which can give you quick access to HP Reveal: http://auras.ma/s/T8FGa
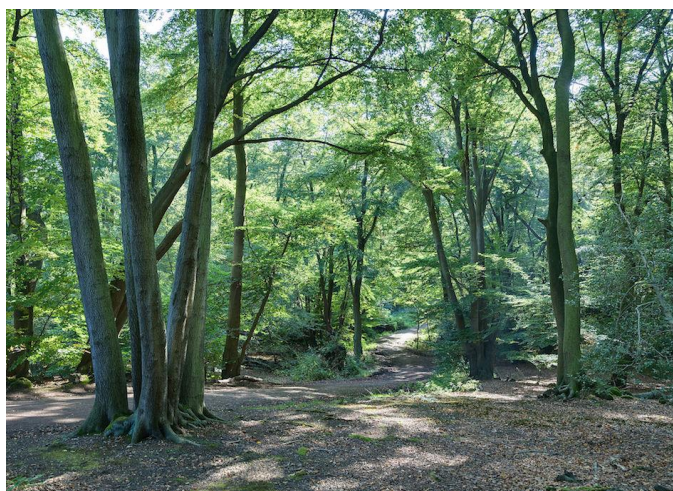
6   Creating your Aura

The process of creating your aura is as follows:

> Create media-> import media to 'overlay' -> capture trigger image -> position overlay -> name & publish

You can use the built-in media content, which makes aura creation very quick and easy, but with variable results It is a good idea to go through the process of creating a test aura before your own media, but make sure it is something you won't want to re-use later as it can be hard to delete or change an aura once it has been created.

Remember to respect copyright when selecting target images and other media. In this case 'fair use' allows us to use a part of a work for research, educational purposes and critical review. More information on copyright can be found at:
https://www.copyrightservice.co.uk/ukcs/docs/edupack.pdf

6.1   Create Media

You can use existing video, audio and images or one of the simple animations provided by HP in their default library as your **overlay**. This overlay is superimposed onto the trigger image to produce a combined image that you will see when looking through your camera viewfinder.

If you are creating your own video:

Script and practice a short (i.e. 10 – 30 sec) video clip.   E.g. '*Why I like Homer's Odyssey …*'

Use the video camera on the device that is running HP Reveal and set the resolution for your video to the lowest setting to save space as there is a 20Mb limit.

You may need to post edit the video to reduce the size.

6.2   Choose/Create Overlay

From the top of the discover screen tap on the '**+**' to start creating your aura. You need to be logged into an account before you can proceed. You are presented with a library of some simple animation that can be used as overlays. If you want to use your own material you need to select the **Device** tab at the top of the screen.

From here you can take a photo or video directly, or use existing material on your phone. You can record media directly using the **camera** option, which will allow you to use your device to capture a video clip and process it for use as an overlay. This is a good technique if you want spontaneous and natural sounding clips with a minimum of complexity.
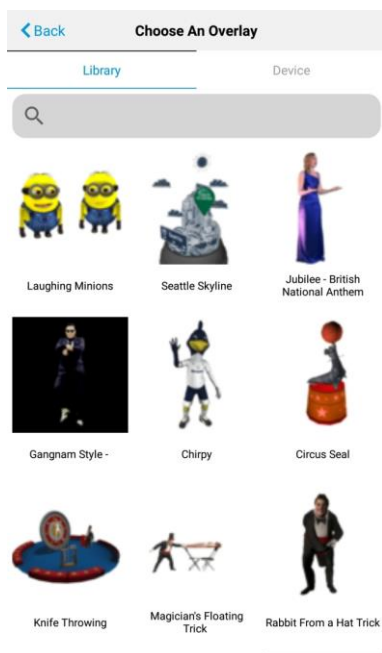
For pre-recorded material choose the 'photo album' to load your video clip from the memory of the device.

From your photo album or gallery select the video you want to use. *If it is too large you will not be able to create your overlay so you may need to edit your video to reduce the resolution and size.*

You should name the overlay then tap 'Finish. Your overlay is now in the library ready for use.

6.3 Capture Trigger Image

You can now point your camera at an image / scene you wish to use as a trigger.

It is a good idea to take an ordinary photo of the trigger image so that you always have a reference that can be used in case something happens to the actual scene (e.g. building alterations, re-decorating)

The coloured scale at the top shows when you have a good image (green) or one without sufficient contrast (red).

6.4 Position Overlay

Your overlay will now play (in a loop) superimposed on your trigger image.

You can change the position by dragging with your finger, or the size by pinching between two fingers, rotation and aspect ratio.

6.5 Name & Publish

You can now name your Aura and finish. You can test out your aura on the trigger.
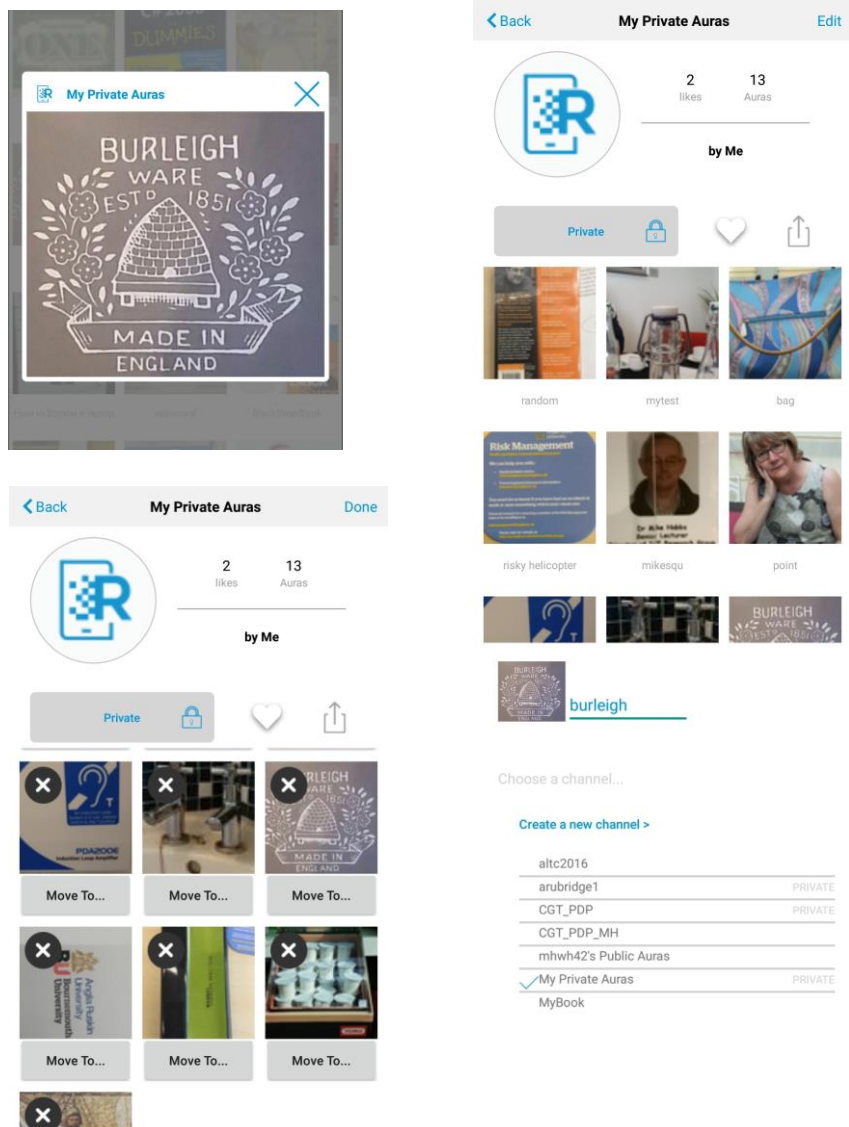
By default your aura is added to the **private** channel of your device, but you can create a new channel or add the aura to an existing channel.

If you have saved your creation as a private aura, you can select the aura from by the **discovery** screen. The channel is displayed on the top of the aura (in this case *My Private Auras*) and by taping on this you can move to

the channel screen. The edit menu will allow you to select and move one or more auras to an existing or new channel you can create.

6.6   Publishing a private aura

6.7   Finished Aura

Here is the finished aura, with a trigger image. The aura is called Burleigh and the channel is called RevealAR20 and the direct link is:

http://auras.ma/s/svBNL

7   HP Reveal Studio

This is a desktop application that can organise and create auras with more features than is possible directly from your mobile device. *(register at* https://studio.hpreveal.com. This provides more editing features and allows up to 100Mb overlays. It is currently free to try for a limited period but the current application is due to be phased out from April 2019.

8   Case Study: Book Poster
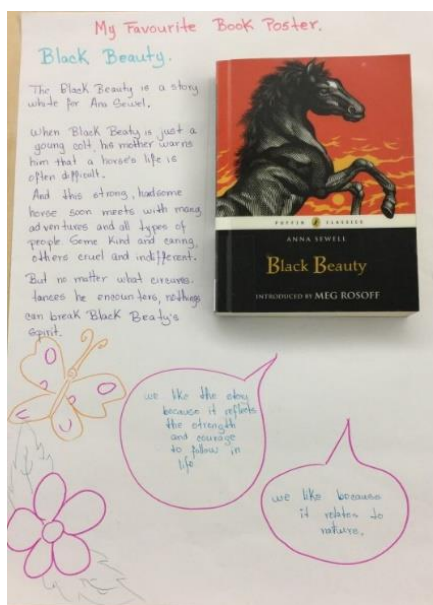
For this example you will need to provide pens, large A3 or A2 sheets of paper, printed images and magazine clippings, glue etc.

You will also need a selection of books for the students to look at, choose, reflect on, so that they can design their poster and script their video clip.

Working in groups of three, students should select a book that they like and prepare a poster that outlines why they like that particular book. Alternatively students can also reflect on subject content, highlighting a particular aspect of their studies.

- Design poster and script a short explanatory video around 10s and not larger than 10Mb.
- Shoot the video using a smart phone
- Take picture of book or other key element of the poster
- Use HP Reveal app to create an aura, position the media over the trigger image, save and publish to a common channel used by the class.
- Each group presents their poster to the class.

This exercise can be completed within a couple of hours. It improves the following areas: group work, design, problem solving, presentation, media and technical skills.