DIMPAproject
Digital Innovative Media Publishing for All

EXPLANATORY SHEETS: AUGMENTED REALITY WITH ASSEMBLR

<u>Reminder</u>: These roadmaps will allow a better understanding of the workflow of digital interactive contents production through practical recommendations and testimonies of professionals.
In that way, we intend to support learners and teachers in their learnings but also after the training, in their practical working life.

1. About the technology

The technology used	Augmented Reality
Final objective and result	Build AR educational content using Assemblr We are going to use a 3D model from Sketchfab to create an AR learning experience.
Description of the tool	Assemblr is a platform to easily develop 3d and AR contents. It is possible to develop contents with a tablet or a mobile phone through the Assemblr app, or on the computer with Assemblr Studio. Assemblr has a library of 3d and AR contents developed by their team and the community.
Medium used (computer, tablet, phone)	This model can be developed through a mobile app or a laptop, but you'll need to use a mobile or a tablet with a camera and internet connection to see the results.
Where will it be accessible (app, platform, website…)	In Assemblr App and Assemblr edu app.
How long did it take to develop this tool?	About 40min Preparation (download the apps, create the account, etc.): 10 min Adding assets (searching videos, 3d object, etc.): 15 min Customize texts, images and videos can take about 15 min, but you can spend much more time on details

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2. Used software

Name of the software	Assemblr
Name of the company	Assemblr
Copyright status (cc, proprietary system, etc)	Assemblr is a proprietary system. There are several pricing options and a free plan. Sketchfab is a website to share 3d contents with different licences.

In case you have used additional resources for the content of your tool, please describe them below:

None

3. Cost

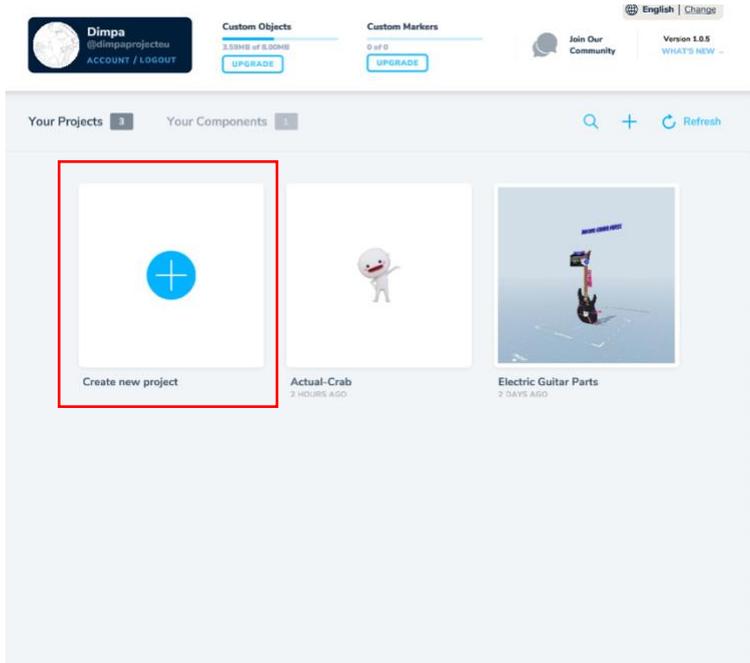| Cost of the creation of this tool	0€ Using the free plan there is a limitation of 8mb of Total size for custom 3D object uploads.
General pricing plan	Assemblr proposes free, basic, medium and premium packages, based on the size of the custom 3d uploads.

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4. Steps of production

Please describe each step of the production of the tool
Design phase

Why did you create this tool?	The objective of this model is to show a musical instrument, its specifications and size and take a closer look at it without having a real one.
What functionalities does it have?	One of the main uses of AR is to show virtual objects in three dimensions and observe them with different angles. Assemblr allows to add 3d text as well as images and video along with the 3d objects.
What will be its purpose? (pedagogical, communication, games, etc.)	Pedagogical.

5. Creation phase

Please name and describe below the different steps of the creation of the tool (min 5)

Preparation	- Using a computer, download Assemblr studio Also it is possible to develop a project from Apple systems (we recommend iOS 13 or above) or Android Currently it is possible to upload already customised 3d objects from Assemblr studio (laptop version) but into the app there are many 3d objects included too. - Create an account: Click on register and enter your information.
Create a project	On your new profile click on **create new project**. Next you can add a title for the project, this also can be changed later.

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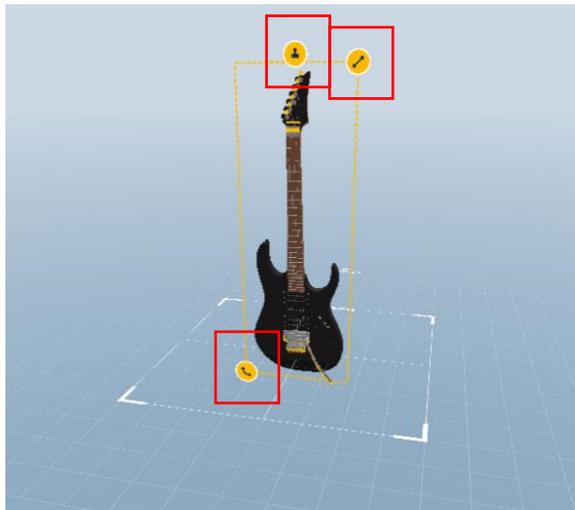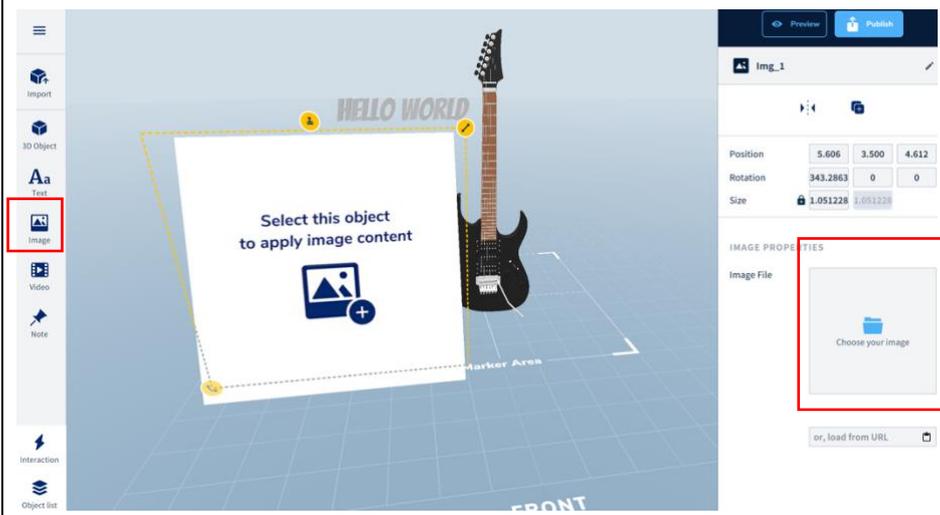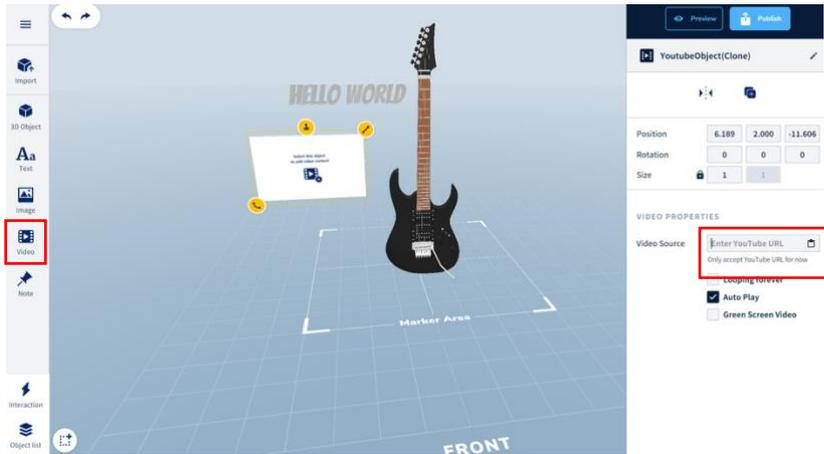|	
Add a 3d object	Click on the **+** icon at the low right corner and choose 3d object. You can use 3d objects included with the app.
Optional: Custom 3D model	Assemblr supports custom 3d models in .fbx, as we mention above, with the free plan we can upload files up to 8mb. For this example we downloaded a 3d Model of an electric guitar made by *Voldepreuss*. To add a custom 3d model just click on import and choose the .fbx file
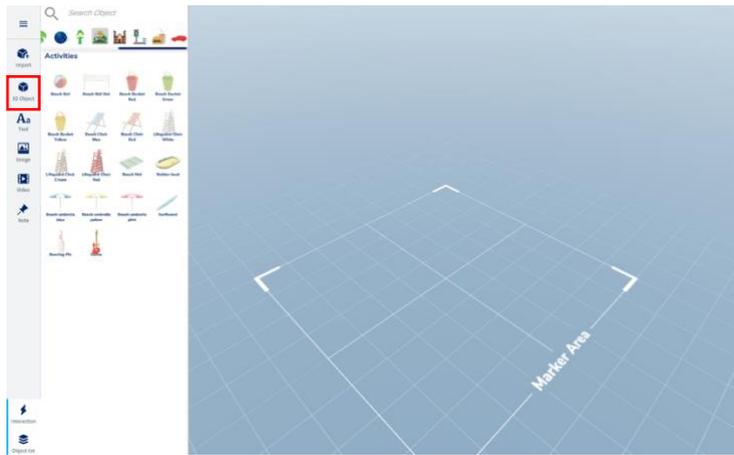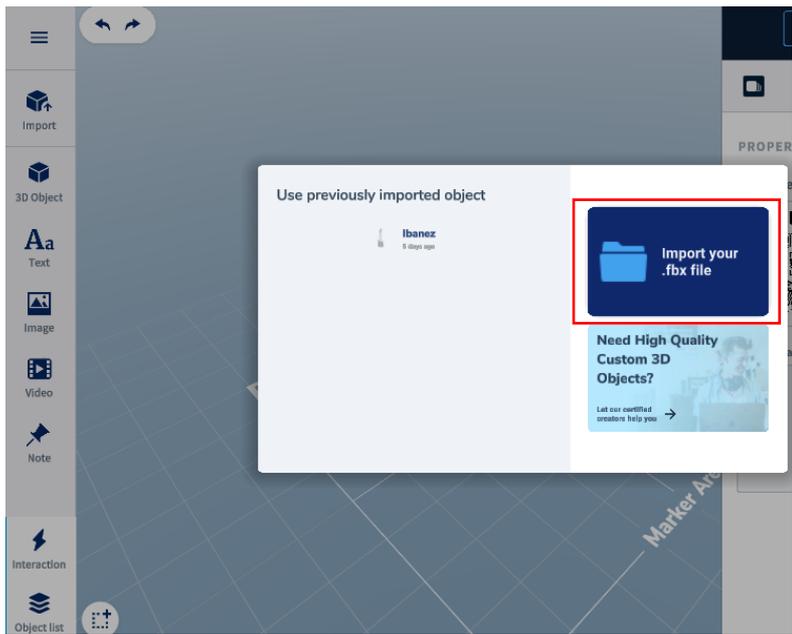
Click and drag outside the object to change the view.

Tap anywhere to place the object and use the arrows to move, scale or rotate the object.

Add text	To add some text, click on the icon and choose the place where it is going to be located. At the right side you can change the text, font, color, position and rotation of the text, you can also move the text with the yellow arrows.
Add an image	To add an image just click on the image icon and position it, choose the image at the right side, from a file or with an url.

Add a Video	To add a video just click on the video icon and paste the URL.
Preview	Before publishing make sure everything is placed where it is supposed to be, click on preview and move around to make sure that everything is in the right place. Is recommendable to make a preview also with the mobile or tablet, to test the placement in AR context.

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Publish	Click on "Publish", add a description and click on "Publish Now". Copy the link to share with others, you can see the model in a smartphone or tablet using Assemblr App and this link: https://app.**assemblrworld**.com/?action=creation&data=-MBJM-iXEAV0FIH_ZFq2
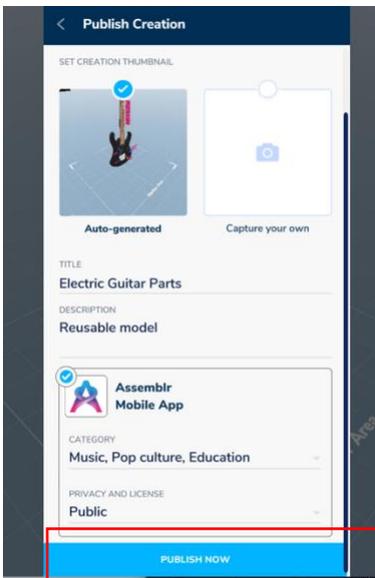
6. Inclusive approach

What action did you implement to make this tool inclusive to as many users as possible?

> This model can be done with different tools: computer, or tablets: apple or android, and is compatible between these platforms.

7. Good / bad practices

Would you recommend this software to the users?	Yes.
Please explain	Assemblr is full of ready-made pedagogical contents and a big community for educators, it is easy to use, and to participate.

What recommendation would you give to people creating such tool or creating content on this technology?

> You should take advantage of all the tools that Assebmlr has available for the education sector. To make better AR content, you will need to spend time familiarizing yourself with the interface and making sure everything is well placed.
>
> Assemblr EDU has the possibility to create virtual classrooms and it is a growing community for education.
>
> Keep in mind that the contents only can be seen using Assemblr ppps