

Project Name:

CYOUbism

Members:

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Submission Links:

Website: <https://s2250677.edinburgh.domains/DWDWebsite1/>

Video: https://media.ed.ac.uk/media/CYOUbism%20Alpha%20Submission/1_mlhnvxqs



DESIGN MOTIVATIONS

According to an article published by the MoMA, “**Cubism was the most influential art movement of the 20th century**” ([link](#)).

However, in comparison to other 20th century art movements like surrealism and post-impressionism, Cubism had much less of an impact in general pop culture. And while everyone knows Pablo Picasso, what about the thousands of other Cubist artists?

Currently, almost no websites exist solely for the purpose of teaching about and sharing appreciation for Cubism. And the ones that *do* are very information-heavy. Also, the pandemic necessitates virtual galleries for the appreciation of art, as many physical galleries are inaccessible now.

This website thus aims to fill that void, and bring the art to the people anytime and anywhere! It brings attention to the styles and history of this underappreciated art form in a fun, interactive way, breaking the barrier between the user and the screen. It also aims to build an online community for people to share some Cubist creations of their own, in hopes that the users will come to see the beauty in this style.



METHODOLOGY

We used a few different tools in the brainstorming process, including SharePoint, Miro, and Sketch. We had research folders and moodboards dedicated to compiling ideas, as well as wireframes on Miro and Sketch outlining some of the site's pages, color palette, and other elements.

We tried to draw inspiration from existing pages on the internet, especially in how museums layed out information. However, most museum pages had a very sterile look to them, and didn't have the same bright style we wanted. So we ended up looking for other forms of inspiration instead— independent galleries, cosmetic sites, previous DWD websites, etc.

Finally, all code is backed up on *Github*.



METHODOLOGY

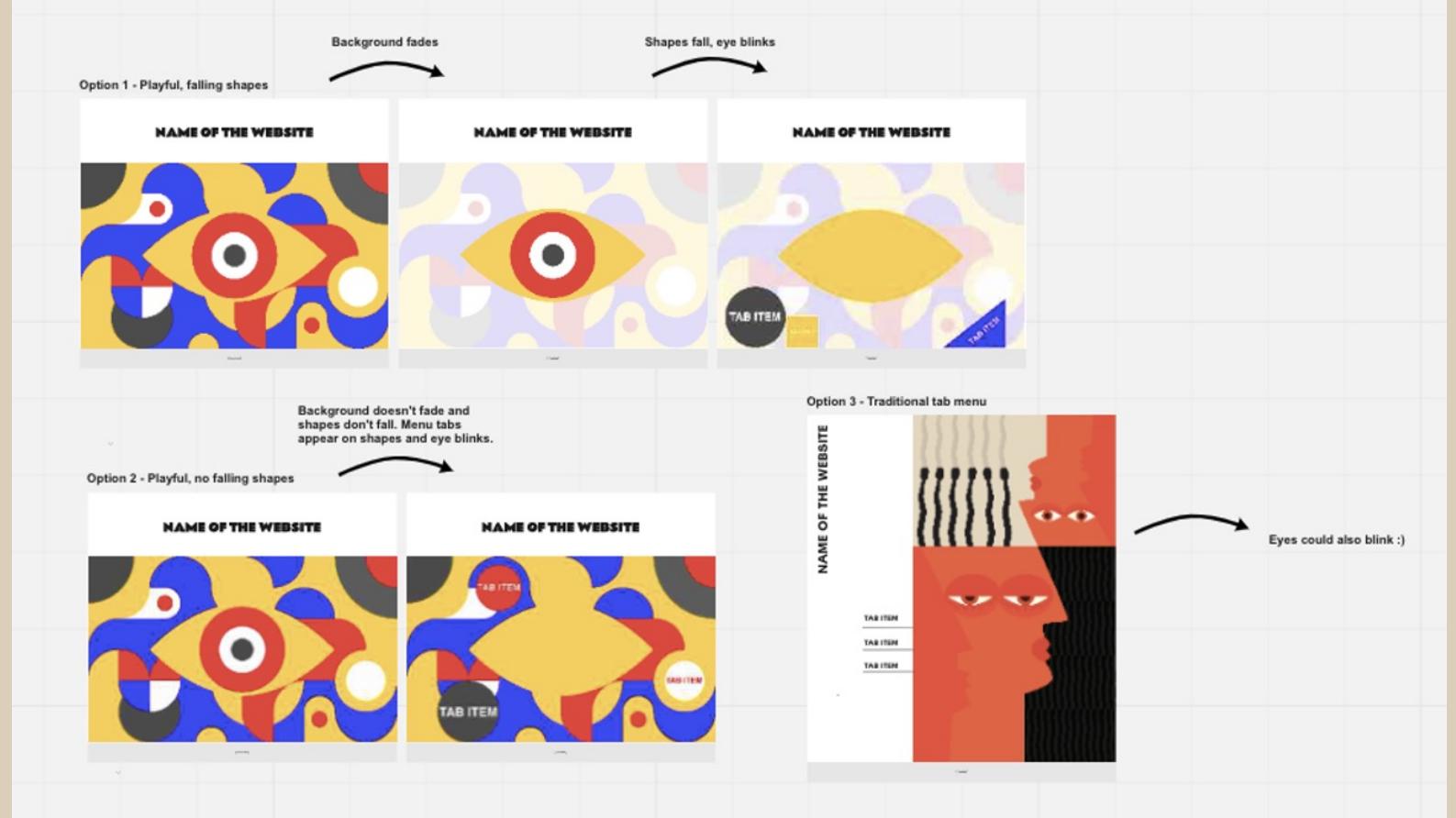


Figure 1: First mockup + brainstorming ideas



METHODOLOGY

<p>Museum Sites</p> <p>https://britishmuseum.withgoogle.com/</p> <p>https://artuk.org/</p> <p>https://www.tate.org.uk/art/art-terms/c/cubism</p> <p>https://www.moma.org/learn/moma_learning/themes/cubism/</p> <p>https://www.guggenheim.org/artwork/movement/cubism</p> <p>https://www.artsy.net/gene/cubism</p>	<p>Other Sites</p> <p>https://www.malikafavre.com/</p> <p>https://patchwork.stylehatch.co/</p> <p>https://modernart.net/artists/forrest-bess/cv</p> <p>https://www.modernarthire.com/artists</p> <p>https://s2047075.edinburgh.domains/mall/</p> <p>https://s1897235.edinburgh.domains/beta/</p>
<p>Cubism-Specific Sites</p> <p>https://cubismsite.com/category/cubist-artists/</p>	<p>Style Transfer</p> <p>https://fast-style-transfer.spltech.co.uk/</p> <p>https://killscreen.com/Previously/articles/web-app-picassoifies-your-pictures-abstract-cubist-art/</p>

Figure 2: Sites we looked at for inspiration



METHODOLOGY

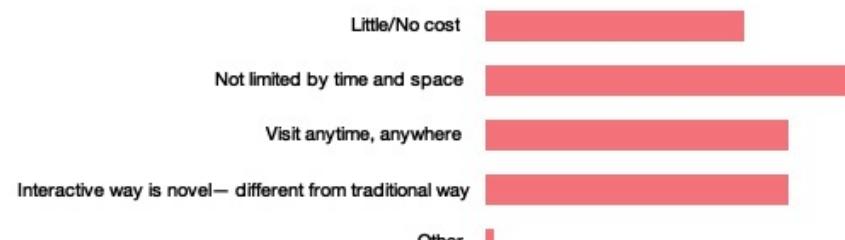
Andy

About him
Andy is an art student at the University of London. He was born into the middle class in England, and his parents were both elites in the art industry. When he was very young, his parents cultivated his interest in art, often taking him to different places to see exhibitions and learn painting. He also showed a keen interest in art from an early age. And in college, he chose an art-related major. Due to his busy schedule, he likes to go to exhibitions and take pictures with his friends on weekends.

Pain Points
Andy likes to go to exhibition halls and museums to see exhibitions on weekends. However, due to the impact of the covid-19 virus, these exhibitions have been closed. This made him very painful, and many interesting exhibitions could not be observed.

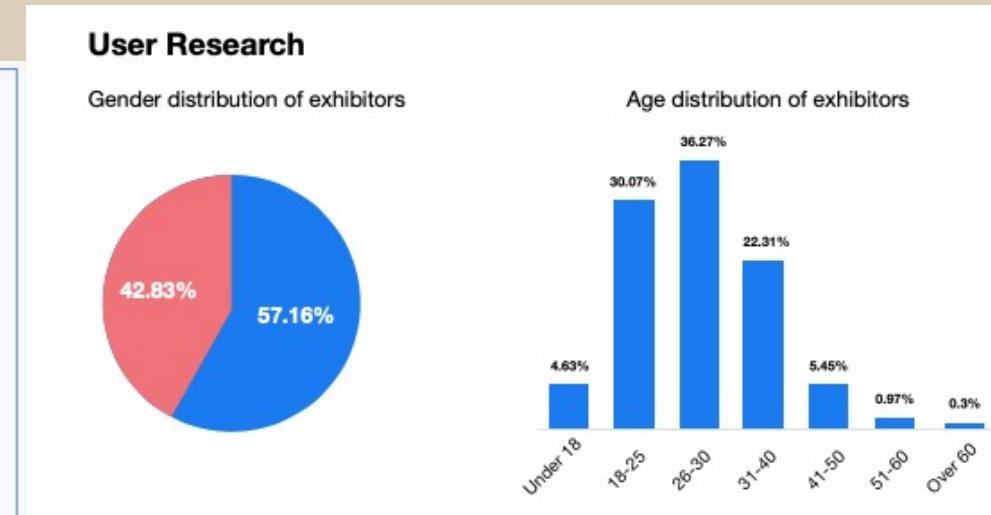
Motivations

- Interactive
- Theme
- Experience

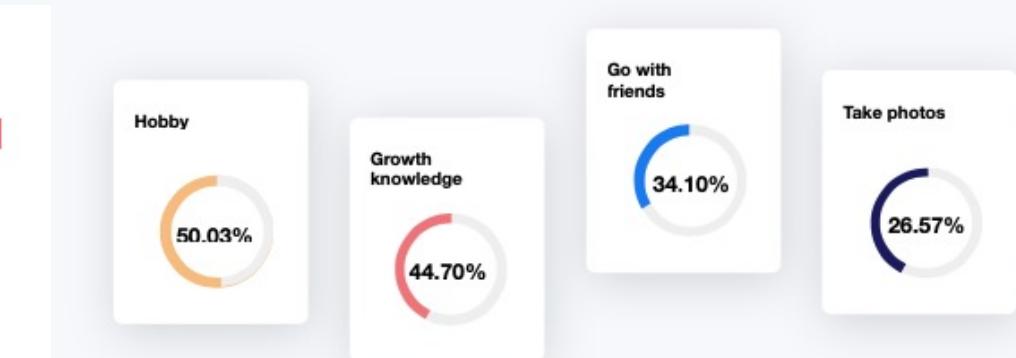


The Reasons Why Online Exhibitions Attract Others

Figure 3: User Research Process and Personas



What is the purpose of your visit to the art exhibition?



I sampled the questionnaire data, effectively collected 103 sample data, and extracted data of different dimensions: user gender, age group, and the main purpose of viewing the exhibition for analysis. It is convenient for me to target users.

A large, stylized profile of a human head in shades of orange and red. The head is oriented towards the right. Instead of a single pair of eyes, it features multiple pairs of eyes, some looking forward and others looking inward, creating a complex, multi-layered visual effect. The background behind the head is a light beige.

EXECUTION

All aspects of our design and execution were reliant on two things:

1. **We wanted our website to adhere to the Cubist style, so we adopted a sleek, modern look with bright colors and lots of 2D geometric shapes.**
2. **As our intended users are art lovers, curious students, and aspiring artists, we designed this site to be as usable and enjoyable as possible for all.**

Instead of simply info-dumping onto the screen, we wanted our site to be more interactive. To that effect, we included two user-focused activities: an AI-generated Style Transfer tool, and a drag-and-drop Canvas tool. The former imports an existing *Tensorflow* model into the site, and the latter uses a custom HTML5 Konva canvas. Both are implemented with help methods to increase transparency and guide the user. We think that these features allows the user to engage with the styles and concepts of Cubism with a personalized touch, while still being immersive and fun.

In addition, we also have a section showcasing Cubist artwork and history with a gallery and short slideshow, but we did not want this to be the main focus of the site, as our main goal was to let people have hands-on engagement.



EXECUTION

Currently, we have one database which stores artwork created by the user in the Canvas tool. The database has three fields, including the artist's name, the title of the piece, and the dataURL of the canvas image. This data is submitted via a form, and these creations will (eventually) be displayed on the site.

The UX design/research and personas were done by Kate. The front page, animations, graphics, and logo were designed and adapted by Paulo. The code skeleton, style-transfer tool, database management, and canvas tool were designed by Ciara.

Server: localhost:3306 » Database: sedin110_GalleryData » Table: UserUploads

Browse Structure SQL Search Insert Export Import Operations Triggers

Showing rows 0 - 3 (4 total, Query took 0.0005 seconds.)

SELECT * FROM `UserUploads`

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

+ Options	ID	ArtName	Name	ArtURL
<input type="checkbox"/> Edit Copy Delete	5	Tree in Autumn	Ciara	data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAf...
<input type="checkbox"/> Edit Copy Delete	6	Self Portrait	Peggy Nora	data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAf...
<input type="checkbox"/> Edit Copy Delete	7	Hen and Her Chick	Jane	data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAf...
<input type="checkbox"/> Edit Copy Delete	8	Triangle Takeover	Scalene	data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAf...

Check all With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)



EXECUTION

Enter an image and see it transformed into a cubist style!

Choose an Image to apply styles to:

Choose the style image:

See the style transfer!

Choose File PS-2019-in...85febd.jpg

Lady

Apply Style Transfer

More Info

A screenshot of a web-based application for style transfer. It features a central text area: "Enter an image and see it transformed into a cubist style!". Below this are three sections: "Choose an Image to apply styles to:" with a thumbnail of a woman in a black dress; "Choose the style image:" with a thumbnail of a painting; and "See the style transfer!" with a thumbnail of the same woman in a cubist style. At the bottom are buttons for "Choose File", "Lady", "Apply Style Transfer", and "More Info".

Figure 4:
Style Transfer in action

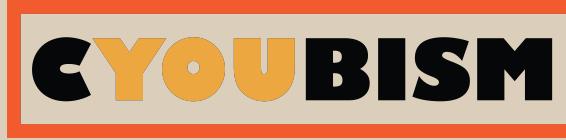
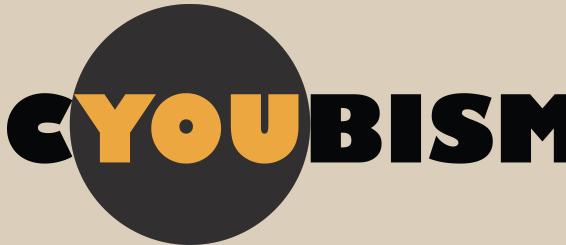
Make your own cubist portrait!

A screenshot of a web-based canvas tool. On the left, there is a cartoon character looking at several framed pictures hanging on a wall, including a painting by Picasso and a sailboat scene. On the right, there is a large canvas with various geometric shapes (triangles, squares, circles) in different colors (red, green, yellow, blue, purple). A small figure is standing next to the canvas. Buttons at the bottom right include "Save as image" and "Share to site".

Figure 5:
Canvas Tool in action



EXECUTION

- 1 
- 2 
- 3 
- 4 

Figures 1-3: Development of logo ideas for the website

Figure 4: Logo chosen for the Alpha version of the website





EXECUTION

Color palette:



Hex: #EF4726
R 239 G 71 B 38



Hex: #F15B2A
R 241 G 91 B 42



Hex: #302E2F
R 48 G 46 B 47



Hex: #DBCEBA
R 219 G 206 B 186

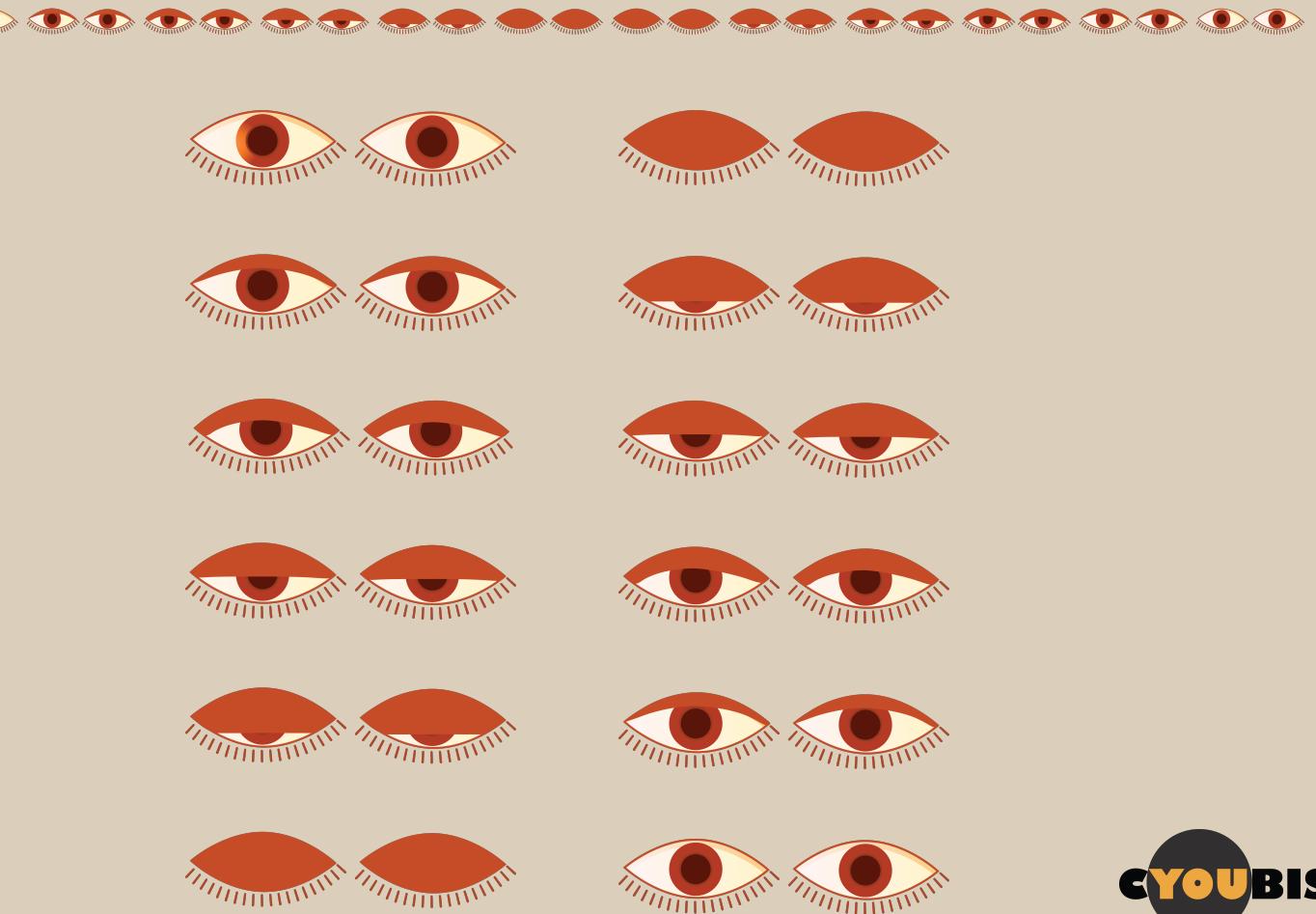


Hex: #EBA740
R 235 G 147 B 64

A large, stylized profile of a human head in shades of orange and red. The head features multiple pairs of eyes along its top edge, looking in various directions. The background behind the head is a light beige.

EXECUTION

Eye Animation Frame Development





SPECIAL CONSIDERATIONS

- Please use **Chrome** or **Safari** to get the best experience with our site. The style-transfer tool is not compatible with Firefox.
- Please have your browser at **full size** (not full screen). Our website is not good at resizing content.
- If the Style Transfer Tool isn't working after 4 minutes, try clearing your browser cache, reloading the page, or using a different browser.



BETA DEVELOPMENTS

1. Refine existing designs, especially Style Transfer page and Community Page
2. Additional features and design ideas
 - a. Login information? So users can view their past creations easily
 - b. Sort gallery by features (Color? Artist nationality?) for easy navigation
 - c. Add indication that style transfer is running (loading bar?) to increase visibility of system status
3. Efficiency (potentially)
 - a. Our style transfer model loads very slowly. We can look into making this faster
4. Scalability (potentially)
 - a. Our website does not currently respond well to different browser sizes and mobile sites



AKNOWLEDGEMENTS

- Konva code examples, and documentation ([link](#))
- Interactive Slideshow ([link](#))
- Fast Style Transfer (for AI Style Transfer model) ([link](#))
 - For converting Tensorflow to Tensorflow.js ([link](#))
- ArtUK
 - https://artuk.org/discover/artworks/hafen-la-ciotat-191538/view_as/grid/search/keyword:cubism--licence:1cc/page/1
 - https://artuk.org/discover/artworks/still-life-205532/view_as/grid/search/keyword:cubism--licence:1cc/page/1
 - https://artuk.org/discover/artworks/the-gardener-vallier-le-jardinier-vallier-117722/view_as/grid/search/licence:1cc--actor:cezanne-paul-18391906/page/1
- Met Museum
 - <https://www.metmuseum.org/art/collection/search/488486>
 - <https://www.metmuseum.org/art/collection/search/485555?showOnly=openAccess&ft=cubism&offSet=0&rpp=40&pos=8>
- Wikimedia
 - https://commons.wikimedia.org/wiki/File:Philip_Absolon,_Cassie_Thinking_About_Cubism.jpg
 - https://commons.wikimedia.org/wiki/File:Portrait_of_a_German_Officer,_Marsden_Hartley.jpg
 - https://commons.wikimedia.org/wiki/File:Louis_Marcoussis_Composition_cubiste_au_portrait_1926.jpg
 - https://commons.wikimedia.org/wiki/File:%27Tapestries_of_Desire%27_150x130_cm,_Oil_on_Belgian_linen_by_Hennie_Niemann_jnr_2019..jpg
 - https://commons.wikimedia.org/wiki/File:Roger-de-La-Fresnaye_-_Sitting_Man.jpg
 - https://commons.wikimedia.org/wiki/File:Juan_Gris_-_Portrait_of_Pablo_Picasso_-_Google_Art_Project.jpg
 - https://commons.wikimedia.org/wiki/File:Louis_Marcoussis_Composition_cubiste_au_portrait_1926.jpg
- iStock Photo
 - Board: <https://www.istockphoto.com/collaboration/boards/7-mk1T0GrEOts0TxAhTDA>
- Help button ([link](#))
- Popup form ([link](#))
- Homepage animation ([link](#))
- Isotope/Masonry code examples and documentation ([link](#))
- Designers of the FFF-Simple Example— couldn't have done it without you!