

ARtigital App

Technical Design Document

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Sponsor:

Vancouver
Artgallery

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1 Overview

ARtigital is a Web Application that was created as a complementary experience for Vancouver Art Gallery, to engage their clients before, during and after the visits.

To learn more about the project, please refer to the [ARtigital Project Documentation](#)

1.1 Problem Statement

How might we develop a Digital Publication for the Vancouver Art Gallery to attract & engage audiences before, during and after visits to their exhibitions?

1.2 Project Deliverable

The main deliverable of the project is a minimum viable product of the digital solution that will complement the Ai in Visual Culture exhibition. The prototype will showcase the core functions of a digital catalogue, lay out an organized representation of the exhibition and supplementary content, and illustrate all features that can engage and attract new audiences.

1.3 Key Features & Benefits

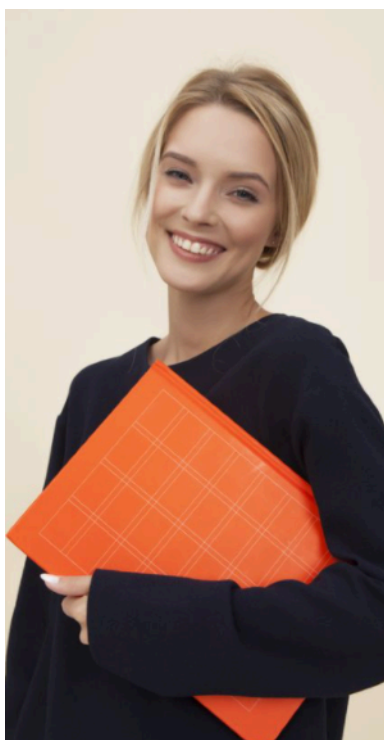
Features	Benefits
<ol style="list-style-type: none">1. Multi-Language Audio Guides;2. Virtual Tours;3. Digitized Catalogue;4. Social Sharing;5. Discovering Artworks.	<ol style="list-style-type: none">1. Participate in the Virtual Tour;2. Access 3 Different Languages;3. Explore the Exhibition through your Phone.

2. Audience

2.1 Current Audience

Vancouver Art Gallery's audience includes:

1. **Annual membership holders & donors.** Primarily, women above 40 years old and of higher wealth;
2. **Knowledgeable audience** in the fields of art & culture;
3. **International and Domestic Tourists.** Primarily, from Asian countries and Canada;
4. **Residents** of British Columbia that visit that gallery 2-3 times a year.



Scarlet Schmidt

Creative

Friendly

Social

Age: 25 (Single)

Occupation: University Research Student / Scholar

Location: Vancouver, BC

Social Platforms



Main Channel
(Mobile)

Bio

- An immigrant from Germany, Scarlet works hard to fit it to Canadian Culture
- Frequently struggles to find in depth content about art to inspire her when completing research papers
- She frequently seeks out exhibitions to visit and shares her thoughts online

Frustrations

- Details about exhibits not accessible online
- No Shareability

Goals

- Share Experiences Online
- In-depth contents for scholar research paper

Current Audience: Young Adults - 19 - 40 years old

2.2 Target Audience

VAG aims to attract 2 types of audiences:

1. **Residents of British Columbia**, whose first language is **Chinese**.
2. **Young Adults**, ranging from pupils to university students (14 to 25 years old).



Lily Wang

Charismatic

Sophisticated

Social

Age: 42 (Married)

Occupation: Affluent Philanthropist

Location: Vancouver West, BC

Social Platforms



Main Channel
(Mobile)

Bio

- An immigrant from China, Lily is heavily active in the cities various volunteer work
- An active mother, she enjoys art galleries, auctions and working with charities
- English is her second language but she prefers to communicate in Chinese

Frustrations

- Exhibit Content is often in English only
- She is busy and doesn't have time to translate & read

Goals

- Share Experiences Online
- Understand the details of her invested Artworks

Target Audience: Chinese Speakers aged 19-50, living in British Columbia

3. Competitive Landscape

Based on the information collected by contacting the North American Galleries, the art industry is currently dominated by physical merchandise and in-person visits with a lack of digital experiences. With the whole world shifting to remote work and online experiences, the galleries with no online presence failed to stay flexible and were forced to rapidly expand their online presence by the external economic factors.

*"As close as you can get to **"real time" content delivery** then I think the more engagement you'd get."*
(c) Art Expert

*"During this time of closure we launched a **new website that allowed us more flexibility** when it came to showcasing our artists available works and made contacting us a lot easier."*
(c) Canadian Art Gallery

*"We focus on creating **companion experiences** that bring additional value to customers and promote online exploration."*
(c) American Art Gallery

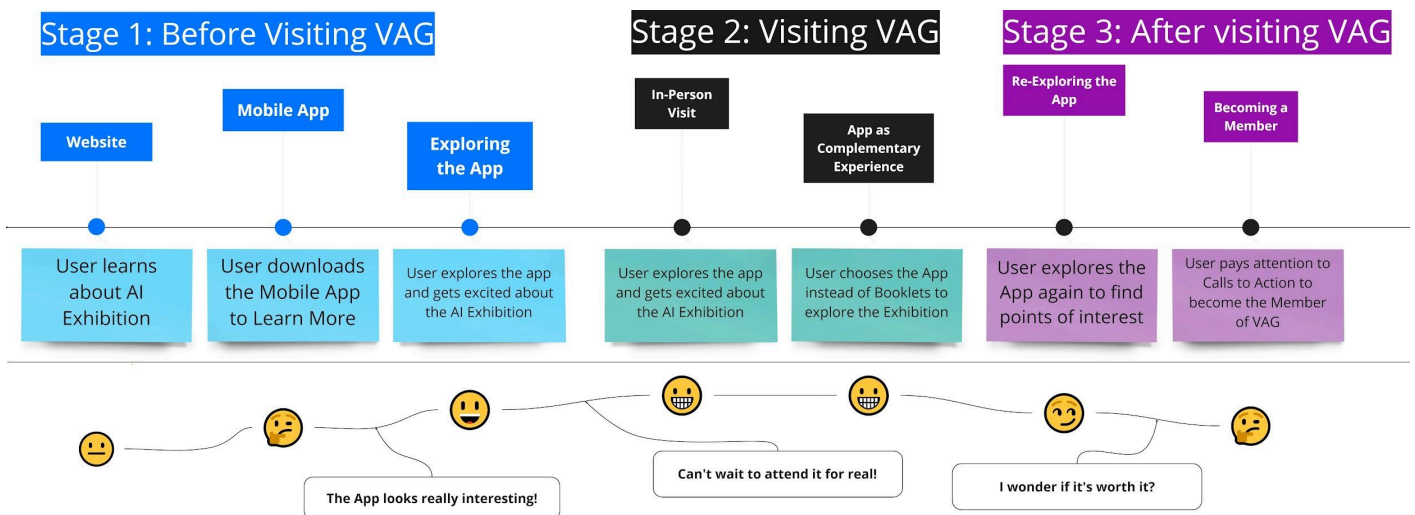
4. User Experience Design

4.1 Get Started

The app can be easily accessed by following this link: projects.thecdm.ca/artigital
 All of the flowcharts below can be accessed here: miro.com/app/board/o9J_lcncUZI=/

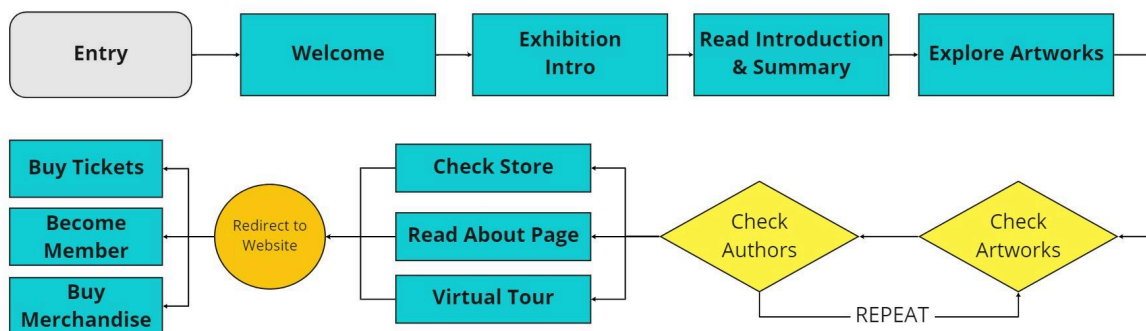
4.2 User Journey

The typical user journey consists of visiting the VAG website, learning about the upcoming exhibition, downloading the ARtigital App to learn more, exploring the app, getting to know the exhibit, converting the users to gallery visitors, allowing them to have a complementary experience through their phones during the actual visit, re-exploring the gallery after the visit and purchasing gallery membership.



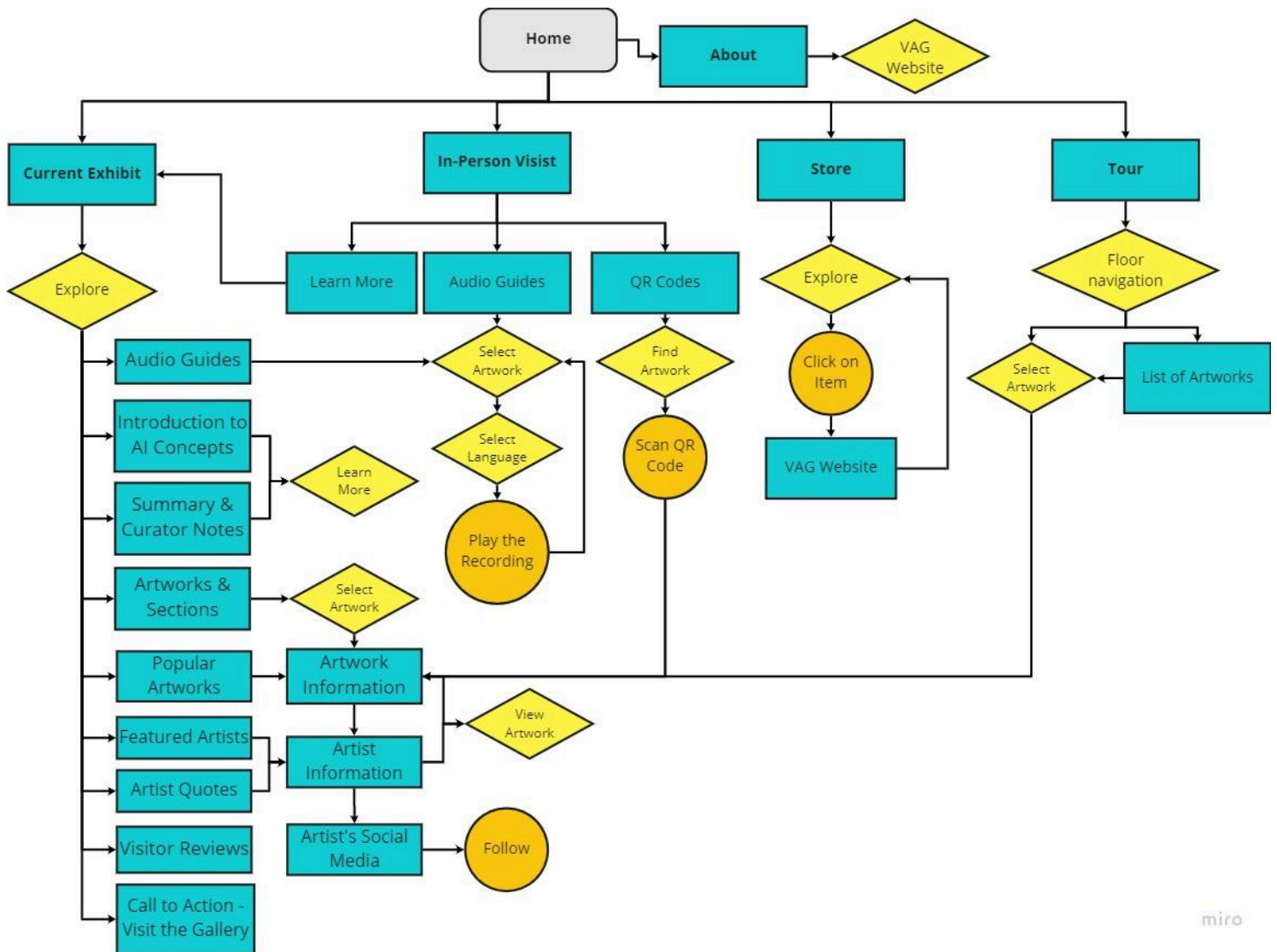
4.3 User Flow & Interaction

Based on the user behaviors during user tests, the expected user flow consists of getting to know the exhibit, discovering artworks and authors, checking the store, virtual tours or about sections, and visiting VAG website to purchase tickets, merchandise or membership.



4.4 Task Hierarchy

The task hierarchy below provides a full overview on all available features and end points in the ARtigital App. The main purpose is to lead the users to explore the gallery either through artworks or virtual tour, create an interest in visiting the gallery and redirecting them to VAG website, where they can purchase tickets, membership and merchandise.



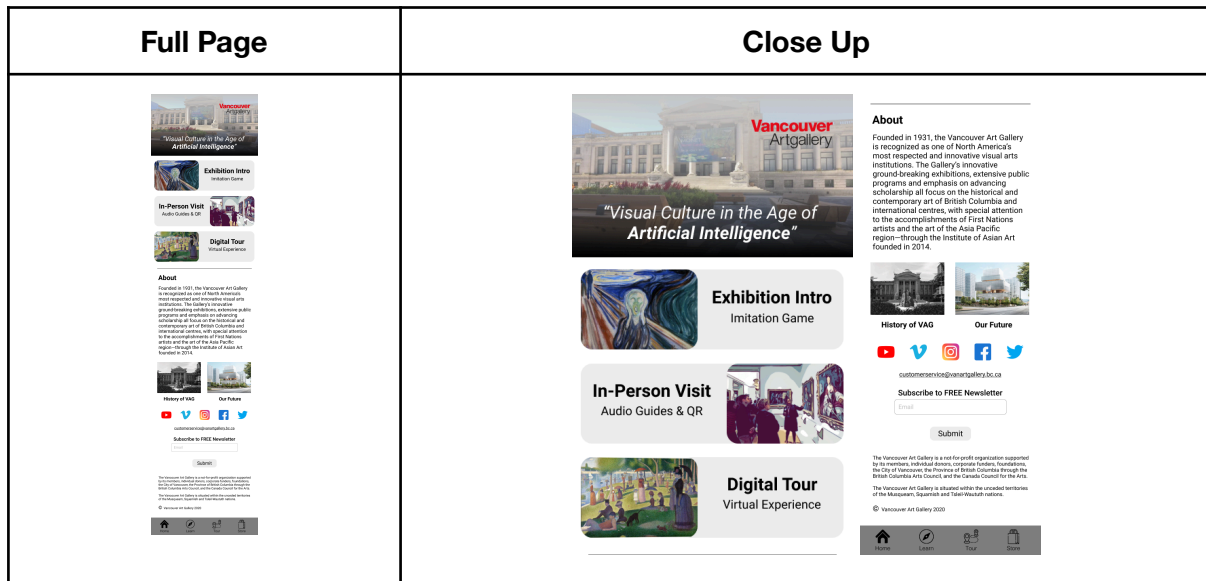
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5 User Interface Design

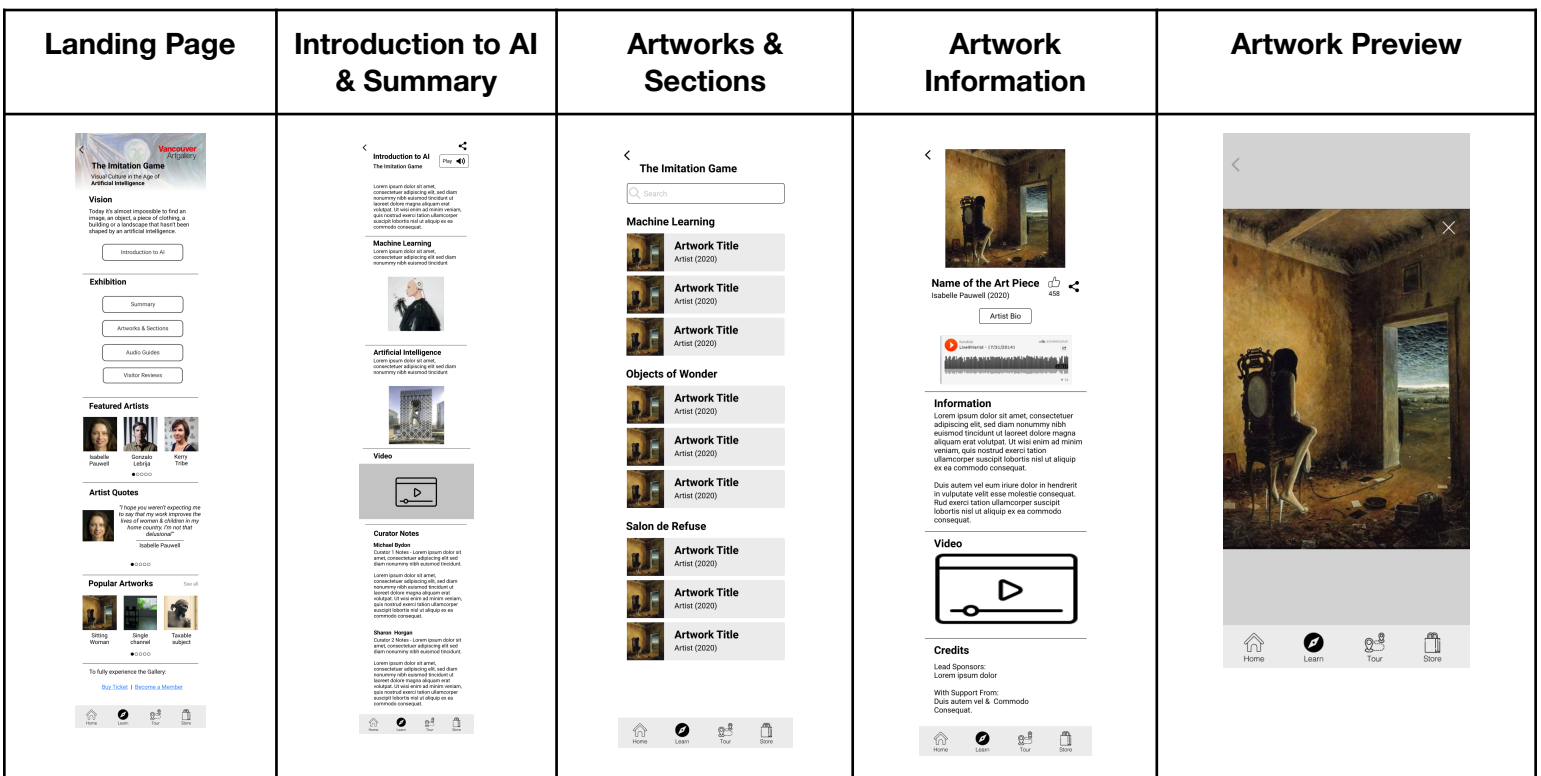
For more information about development, iteration and changes, please refer to: [Appendix N - Design Document Appendix: Development, Prototyping & Testing](#)

5.1 Features

5.1.1 Home



5.1.2 Learn


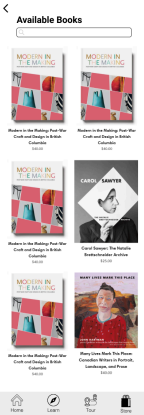



Author Profile	For Visitors	Audio Guides	QR Codes	Visitor Reviews
	<p>Welcome to the Gallery! For In-Person Visitors</p> <p>QR Codes Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam</p> <p>Audio Guides Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p> <p>Learn More Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>	<p>Audio Guides</p> <p>Machine Learning 1,451</p> <ul style="list-style-type: none"> English 45 mins Michael Oberst French 45 mins Michael Oberst Chinese 45 mins Joana Varga <p>Objects of Wonder 1,510</p> <ul style="list-style-type: none"> English 45 mins Michael Oberst English 45 mins Izabella Baza Chinese 45 mins Joana Varga 	<p>QR Code Scan</p> <p>SCAN</p>	<p>Visitor Reviews</p> <p>The Imitation Game Visual Culture in the Age of Artificial Intelligence</p> <p>Visitor Reviews</p> <p>"Great Experience, I will definitely go again!" Museum Visitor - 10/23/2020</p> <p>Add Review</p>

5.1.3 Tour

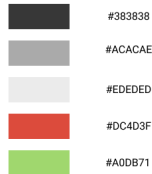
Floor Selection	Floor View	List of Artworks	Artwork Selection	Artwork Information [Learn More]
	<p>Floor 3</p> <p>List of Artworks</p> <p>Recommended Order</p>	<p>Floor 3</p> <p>List of Artworks</p> <p>Section 1 Objects of Wonder</p> <ul style="list-style-type: none"> Horse The Thinker Sitting Woman <p>Section 2 Special Projects</p> <ul style="list-style-type: none"> Machine Learning AI Robotic CDM projects Awesome Projects <p>Section 3 Salon Des Refusé</p> <p>Recommended Order</p>	<p>Artwork Title Artist (2020)</p> <p>Theme: Machine Learning</p> <p>This work shows this and that in that way doing this and that.</p> <p>Learn More</p> <p>Recommended Order</p>	<p>Name of the Art Piece Isabelle Paswell (2020)</p> <p>Information</p> <p>Video</p> <p>Credits</p> <p>Lead Sponsors: Lorem ipsum dolor With Support From: Duis autem vel eum irure dolor in hendrerit in vulputate velit esse molestie consequat. Ruid exera talion ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.</p>

5.1.4 Store

Gallery Store	Available Books	Redirect to VAG Website
		 <p>https://shop.vanartgallery.bc.ca/collections/canadian-art/products/modern-in-the-making</p>

5.2 UI Library

Color Palette



Typography

Title Text - Helvetica - Bold - 26
 Body Text - Helvetica - 18

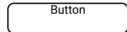
Artwork Title - Helvetica - 40
 Artwork Artist - Helvetica - 24

Menu Bar

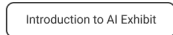


Buttons

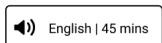
General Button



Exhibition Info Button



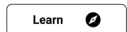
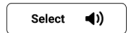
Audio Guide Button



Summary Audio Button



For Visitors Buttons



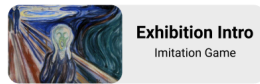
Divider



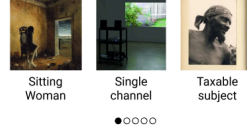
Icons



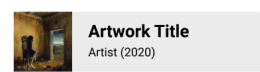
Home Page Cards



Exhibition Slider



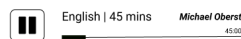
Exhibition Artwork Card



Audio Guide Artwork Slider



Audio Guide Player



Artist Bio Header



"I hope you weren't expecting me to say that my work improves the lives of women & children in my home country. I'm not that delusional"

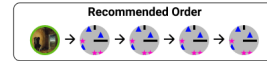
Floor Artwork Thumbnail



Floor Artwork Preview



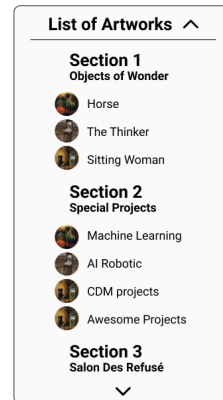
Recommended Order Card



List of Artworks Side Tab (Closed)



List of Artworks Side Tab (Opened)



Artwork Details Popup



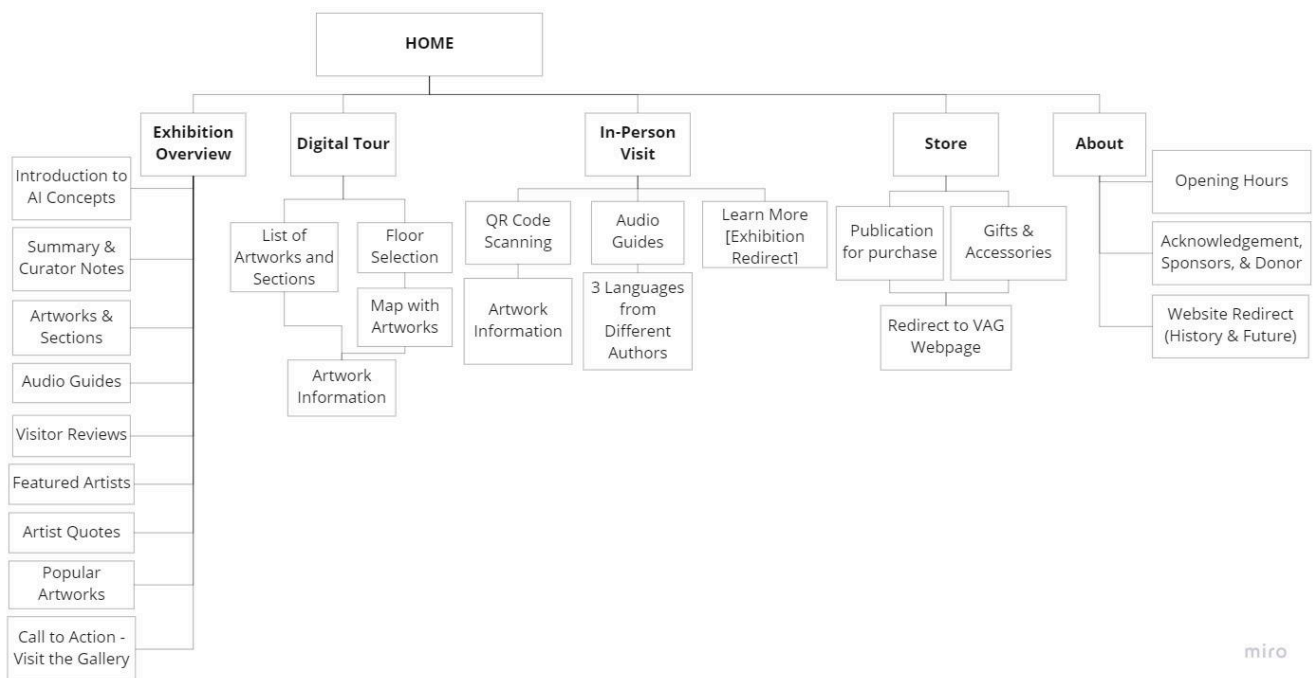
Visitor Review Checkbox



6. Feature Map

ARtigital App has 4 core menus:

- **Home** - an overview of the features with “About” section and choice for Physical & Online visits;
- **Learn** - a detailed information about the current exhibit;
- **Tour** - a virtual environment, where the gallery can be experienced through top-down view;
- **Store** - digitized catalogue of the items from the gallery store directly related to the running exhibition.



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7. Prototype

7.1 Figma

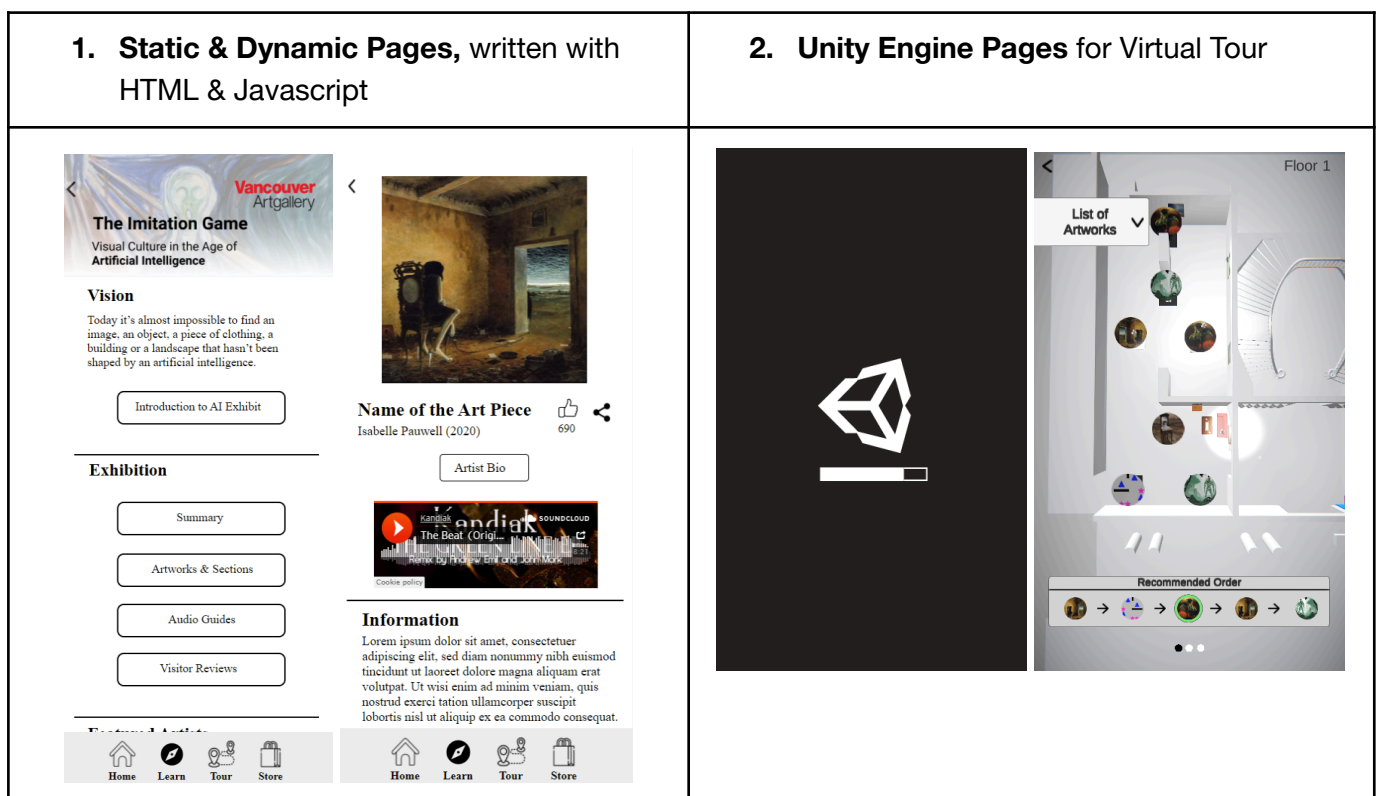
The low fidelity prototype was developed on Figma. To learn more, please take a look at:

- [Main Figma Workspace](#), which contains all sketches, iterations and rejected boards;
- [Finalized Figma Workspace](#), which only contains Final Low-Fidelity Prototype.

7.2 WebApp

For the information regarding the architecture, data analysis and hosting of the ARtigital Web Application, please refer to the [ARtigital System Design Document](#). The prototype can be accessed via following link: <http://projects.thecdm.ca/artigital>

The ARtigital WebApp has 2 types of pages:



8. User Testing

8.1 User Test #1 (October 22nd):

Methodology: the first user test was conducted with the students of the Centre for Digital Media. It focused on showcasing the product and its features, and collecting responses on what can be added, improved or removed.

Results: our team collected 29 responses in the form of general commentary, focused on the ease-of-use and engagement of our product, from students that fit the current audience of the VAG:

Feedback	Result
Most of the respondents indicated that the page with Digital Badges doesn't benefit the core experience.	Digital Badges were removed and substituted with Library, which later became Store.
More than half of the respondents indicated that the home page should bring added value, rather than visually representing the navigation bar.	Call to action items were added to the home screen and informational sections were added.
Most of the respondents indicated that the virtual reality experience is "cool," but they likely won't use it in the real-life.	Virtual reality was removed and substituted with a simpler experience, focused on knowledge.

8.2 User Test #2 (November 2nd-6th)

Methodology: the second user test was conducted with 1 stakeholder, 3 faculty members & 3 students. Each test lasted for 30 minutes and was split into two stages:

1. The users were asked to imagine themselves as the residents of Vancouver, interested to learn more about the gallery and explore the app without guidance;
2. Then, the users were asked targeted questions about each feature.

Feedback	Result
6 out of 7 testers stated that they prefer top-down view for Virtual Tour.	The option to view the gallery at an angle was removed.
7 out of 7 indicated that they won't view the publications with current design.	The publications were remodeled to look less like books with visual focus.

The stakeholder stated that the Exhibition page should only focus on the current exhibition and the sections need to be restructured to tell a story.	Upcoming & Past exhibitions were removed. The current exhibition page became the landing page and became more visually engaging. The order and content of buttons were changed.
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8.3 User Test #3 (November 15th-19th)

Methodology: The second test was conducted with 3 stakeholders, 2 faculty members & 5 students. Similarly to User Test 2, each test lasted for 30 minutes and was split into two stages.

Feedback	Result
7 out of 10 stated that the size of the fonts are too small and there is too much text in the app.	The font was increased and the descriptions were split into sections and better divided with videos and visual imagery.
10 out of 10 were confused by the sorting mechanism in the All Artworks page.	The sorting was removed and All Artworks page was split into themes.
All 3 stakeholders expressed interest in creating more content specifically dedicated to AI themes.	A new button was added in the beginning of the page that is intended as a deep-dive to the content of the exhibition.

9. Software

3D Modelling: Blender & zBrush

Wireframing & Prototyping: Figma

Web Application: Javascript & HTML

Virtual Gallery (Tour): Unity Engine

Presentation: beautiful.ai & Canva

10. Recommendations

Our team identified possible challenges that will likely be faced by VAG after developing the app and would like to offer solutions to the following:

- **Discoverability of the app:** due to the fact that VAG already had an app in the past, which is not currently available in the App Store, they will need to come up with relevant marketing strategies to promote it along the exhibition and rebuild the consumer trust in their digital products.

- **Subscription model in connection to membership levels:** to learn more about our propositions, please refer to: [Appendix G1 - Team ARTigital Monetization Model for VAG Digital Publication](#) & [Appendix G2 - Monetization Model Sample for Vancouver Art Gallery Digital Publication](#);

Appendix (redacted to the ones used in this document)

1. [Appendix C - Content Social Shareability](#)
2. [Appendix G1 - Team ARTigital Monetization Model for VAG Digital Publication](#)
3. [Appendix G2 - Monetization Model Sample for Vancouver Art Gallery Digital Publication](#)
4. [Appendix N - Design Document Appendix: Development, Prototyping & Testing](#)