

# Design Document

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- Gemäldegalerie AR Interface
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## GENERAL OVERVIEW

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Our proposal is to build upon the interface of the current Gemäldegalerie AR interface with features that further personalize the experience for the viewer. We are aiming to widen the target audience of the existing system by addressing the wide range of reasons to attend a museum, and to create lasting memories from the experience. This would start at the level of mediating the information about a piece, by allowing the user to tailor POI to their interests via an introductory quiz on the iPad. We are also intervening on the level of reproduction of art, by introducing a feature that would have users “save” images and details of their favorite paintings for later viewing in a digital gallery. This would allow them to play curator on their experience, while creating their own digital souvenir to carry their favorite art with them into the world.

We want to leverage the interactive aspects of AR to give a more personalized experience than would be available in a brochure or group tour, providing users the information they are most interested in. We are also working with the potential difficulties of iPad-mediated AR; Since the visitors will already have one additional screen between them and the work, we want to maximize its usage to avoid conflict with wanting to take photos or notes on a secondary device.

We would like to build upon the existing system of information-finding through POIs, but give the user more control over the content they are seeing by categorizing and coding the icons. They are still taking the initiative to find information, but with more idea of what to expect, what they are choosing. Additionally, the interaction of saving a work allows for personal reflection on their experience, both examining their own feeling about a work during, and their collective sense of taste as shown by their collection later.

The saved picture web-integration would be fairly unique among art museums, in combination with the AR features, although it is inspired by a similar mechanic at the Cooper Hewitt Design Museum in NYC. It is a new way of thinking about the

relationship of a person to the work, as an in-between of the existing metrics of souvenirs and cell-phone pictures.

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## DESIGN OVERVIEW

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### Context

The project will be representing the interior of the Gemäldegalerie, as the user will be able to interact with the artworks present at the gallery as well as the space surrounding them. The reason behind not limiting the world we are representing to the immediate space surrounding each artwork, but rather having the AR system encompass the expanse of the gallery, is due to the need to facilitate the easy navigation within the gallery- making it easier to find artworks and information of interest to the user. Going off of the original prototype, we aim to include historical and geographical facts about each artwork, as well as more detailed accounts about artists, medium, context and more. We will attempt to accommodate all of these elements through a system of element-specific icons; whereby each icon will reflect and be associated with a specific fact - a different icon will be used for a historical fact, geographical fact, fact about the artist, etc. These icons will function as objects that appear on certain points of interest on the artwork, which the user can click on depending on which type of information they are interested in.

### Core Interaction

Due to the fact that we are aiming to personalize the user's experience more, categorizing the information (through the use of icons and a preference survey at the beginning of the AR experience) will allow the user to filter their experience and receive data relevant to them, rather than a very wide range of historical facts and dates. The core of the interaction entails that the user walks along the gallery and uses the AR system to view the artworks they are most interested in, and following that there will be the clicking and listening elements involved as well. In essence, the user is interacting with pieces that appeal to them in any way - either aesthetically, or from a historical or political aspect, and will be able to select their favorite artworks. This makes the user's interaction more meaningful as they will have formed connections to certain artworks in the gallery due to their interest in certain elements, rather than being desensitized to a large number of artworks due to an overload of facts and information. The role that the device plays in the aforementioned interaction is central, but it should not draw the user's attention away from the artwork, but enhance it and make it more personal and

memorable. Due to the user's ability to filter the information they want to receive before beginning the tour, they will not be constantly looking at the screen, reading up about the history or the artist. However, they will be able to click on the icon which discusses the relevance of the geographical location to the meaning of the piece and then put the device down to observe the piece. The user will be able to either view, read or listen to an audio of the information available; in order to cater to a wide range of abilities.

## **Flow**

After opening the application, the user will encounter what can be described as a preference survey or a filtering list; asking them to select the type of information relevant to the artwork they'd like to receive during the tour (whether that's historical, geographical, aesthetic, etc.). Following the survey, the user will be introduced to what each icon represents in terms of information. They then will be able to navigate the gallery through a map which appears informing them of where they can find specific pieces or time periods. Following that, the user is expected to use their device to navigate the gallery; pointing it at pieces that spark their interest and clicking on the icons to learn more about the artwork. There will be an option that will be present on the top left corner of each artwork, allowing the user to "favorite" or save certain POIs, so that they can refer to specific information pages after their visit. The first screen will be a welcome page to the gallery, the second one will include a checklist or the preference survey where the user will choose information they want to see during their visit. After that, the user will see a similar screen everytime they point their device at an artwork - one where they have icons at certain POIs that they can click on as well as an audio option at the bottom of the screen and a "favorite" option at top of the screen.

## **Interface**

The interface of the project is going to be simple, in order to prevent the user from experiencing a sensory overload. The audience will be able to interact with the project through using their devices to look at the artwork and then what follows is a series of clicking and either viewing or listening to information. The center of the screen should predominantly be occupied by the artwork so the audience isn't distracted from the main attraction, and the information available should only take up half of the screen when POIs are clicked.

## **Media Assets**

The assets that will be included in the project are minimalistic drawings and symbols to point at certain elements in the artworks, titles to identify artworks and relevant photos,

buttons, text, shapes (like the star for favoriting an artwork), audio recordings of written information, and icons. The audio recordings are meant to be inclusive of different physical capabilities, and perhaps captions as well. We aim to have the highest resolution possible and have the size of the screen and aspect ratio depending on the size of the screen the user has. We will be experimenting with including low volume classical music playing in the background, to enhance the user experience, but might not include it if it proves to be a sensory overload towards the user.

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## EXPERIENCE OVERVIEW

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Building upon the existing AR system, the user's experience would start when they receive an iPad at the beginning of their visit. It is important that these are meant for individuals, not one shared for an entire group, to allow for individualized experiences. There will be an on-boarding process, where, in addition to learning the basic mechanic of accessing and favoriting POIs, they would provide the information about their interests at the museum. They would indicate their age, to indicate whether they should be given a kid-specific experience or not. They would also indicate what they were interested in getting out of their experience, and learning about the artwork, with categories based on the POIs, e.g. artist bios, medium/process, or historical context. Each category would have a distinct visual look, with its own icon.

Once they were done with the onboarding experience, they would be free to move self-directed through the gallery. When they stop in front of an artwork, they would hold up the iPad and see, overlayed, the icons for POIs for their chosen topics. An experience that we hope to encourage is the peer-to-peer sharing of information in groups. Giving each person tailored information on the same artwork creates an opportunity to share that knowledge with others. As they tap through to read them, each POI, and the artwork itself, would have a "favorite" button, saving it to their own gallery tab. The gallery tab, showing their favorites, and the filters tab, allowing them to change their preferences, would be available to the user at all times.

The end of the experience would involve, when the iPad is returned, sending the user a link to a reference page for their favorites. Having this page to take forward would serve as a way to stay engaged with their visit, after they leave the physical museum. Showing them a self-selected gallery of work and topics that they are already interested in would be a souvenir of their experience, while guiding their transition into exploring the digital resources that the museum has to offer.

## CONCLUSION

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In essence, our project will aim to improve and build upon the existing Gemäldegalerie AR interface; making it more accessible and personalizable to users. Similar strategies of personalizing the museum and gallery experience have been adopted by institutions around the world, and we aim to introduce features that compete with and exceed pre existing systems. Through integrating appealing graphics, filtering options for the visitors to enjoy only what interests them, as well as a state of the art AR system which accommodates different physical and mental capabilities to be as inclusive as possible. The digital or virtual gallery experience in our current era, is becoming just as if not more important than the “real” gallery. Establishing a strong presence in a virtual playground, will help solidify our presence in the overall artworld, and encourage users to visit both our virtual and physical sites.