



Project Proposal

Psychology Research Methods, Fall 2021

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Problem Statement



Help individual visitors (aged between 18-34 years) without relevant art background to be more engaged in their visiting experience at the High Museum of Art during the COVID-19 pandemic

Introduction and Background

Background

Located in the city of Atlanta, the High Museum of Art is one of the leading art museums in the Southeastern United States. It holds an exceptional collection of artworks from different regions and cultures that allows the

institution to speak to a wide range of visitors. Such a rich collection, however, does not free the High from concerns of accessibility. The dissatisfaction with the museum experience has sparked several discussions on the internet and in academia. Aside from that, during the group's field trip to the High museum, we noticed several problems that potentially hinder visitors from enjoying their museum experience.

"Why aren't people going to museums" and "what you dislike about museums" are ongoing discussions that bother museum professionals and visitors. Some common answers include: some people do not feel relaxed and welcomed visiting a museum due to their own background as well as the attitude of museum staff, some meet difficulties finding places to eat and rest in a museum, some feel bored because they do not understand the artworks. These discussions boil down to one issue: the museum is not a place that some people feel comfortable and confident visiting due to the physical and socio-cultural setting of the place.

During the group's field trip to the High Museum of Art, we tried to understand and situate this issue within the context of the High. We made several observations:

- The prompts provide negligible information about the significance of the art piece and simply mentions the name and artist (sometimes the artists view of the artwork)
- There is little context about why some pieces of art are placed together. The information is minimal and easy to miss
- People were attracted more towards the exhibits where there the work of art was by artists of their own culture
- Accompanied visitors would explain and share thoughts on artworks with each other

This shows that visitors, especially those who don't have a companion to share and learn from when viewing an artwork, might have a hard time understanding the artworks exhibited during their museum visit. The wall labels and other explanatory texts did not do a good job explaining some of the artworks, and many visitors rely on their companions to exchange information about the artworks. Those who choose to view alone thus face more engagement issues in their visiting experience.

Aside from the observations mentioned above, the High museum's policy during the COVID-19 pandemic also hinders visitors from enjoying their museum visits. They no longer provide any hardware that visitors can rent to listen to audio guides. They canceled the paper guide so visitors can only scan a QR code for a digital museum map. Services such as guided tours become very limited during the pandemic. During our field trip, we did not see any guided tours in the museum. This further prevents visitors, especially those who are viewing alone, from getting information and opportunities to socialize that they need.

Some academic journals provide insights into visitor's lack of engagement. As Stéphane Debenedetti pointed out in her article *Investigating the Role of Companions in the Art Museum Experience*, art museums are not just for cultural activities but for leisure activities as well. In other words, people visit museums to both learn and socialize. It is thus important to consider both aspects while designing to boost museum engagement. "How can we help visitors to get the information and experience that they want? How can we possibly connect

visitors together to form a mutual learning and socializing environment?" are questions that we wish to address.

Existing System in the High Museums

During the pandemic, the museum offers limited tools to help with visitor engagement including:

- Audio guides from the special exhibition
- Descriptive and introductory text of artworks throughout the museum
- Exhibition catalogues that people can borrow in the exhibition space

In addition, the museum guarantees internet connection throughout the museum. Free wifi is provided, so visitors can always search online regarding the information that they wish to gain during their visit.

Existing System in Other Institutions

Some measurements that other museums took during and before the pandemic include:

- Offering guided tours
- Offering pamphlets for certain exhibitions to introduce the content
- Building up interactive systems that allow visitors to interact with artworks in various ways




By developing our solution, the group hopes to encourage visitors from varied backgrounds to more confidently and relaxingly explore the museum as they wished. We want to make the High Museum of Art a more welcoming and accessible place for all visitors through our design.

Target Users and Stakeholders



The High Museum of Art is one of the nations leading art museums and showcases over 17k pieces of diverse and contemporary exhibitions and artwork. This attracts art-loving audiences from diverse backgrounds, education levels, and age ranges.

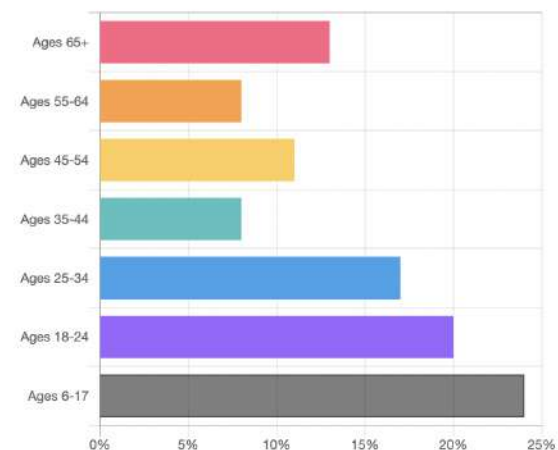
Type of Visitors

 Name	 Description	 Behavior
<u>Individual Visitors</u>	1. Visitors without companions 2. Visitors with companions but separated to experience the museum individually at their own pace	1. Individual visitors without companions that prefer to experience the gallery alone for self-actualization 2. Individual visitors without companions that prefer to socialize during their visit 3. Individual visitors with companions that establish social barriers to experience the gallery at their own pace
<u>Group Visitors</u>	Visitors experiencing the museum companions such as family, friends, partners	Group visitors that consider the viewing activity to be a shared experience

Age groups

According to the High Museum of Art Visitor Data Report (2015-2020), about 37% of their visitors are between the ages of 18 and 34 years.

Age of High Museum Visitors (FY20)



For this project, we focus on **individual visitors aged between 18 and 34 years, without relevant art background, visiting the High Museum of Art during COVID** as our target users.

Visitors in our target user group view the art museum experience as an opportunity for self-actualization, recreation, learning, and social involvement. As viewers without relevant art backgrounds, visitors would prefer to learn and interpret the artworks in an engaging way. Beyond that, they also enjoy interacting with the artworks through photography and socialization.

Stakeholders

Our stakeholders are the High museum's investors,



board members, business team, partners, and staff.

Context of Use

Our knowledge and expectation of the context come from in-museum observation. Currently, the visitors can interact with the museum artifacts by reading brief descriptions of the artworks or scanning a QR code and listening to audio guides on selected artifacts. However, the descriptions contain limited information and the audio guides can be long and monotonous. We believe that art can be more informative and interactive for such visitors with appropriate interventions.

Problem Space

The objective of this project is to make the viewing experience more engaging for individual visitors. The engagement may be introduced by helping visitors to get their desired information and offering them opportunities to connect with a larger visitor group that offers them opportunities to socialize. We attempt to come up with a solution that addresses these concerns all together.

Through our design, we want to introduce an improved museum experience. Learning in a museum is not just reading the wall labels, but chatting and learning from other people in the museum. In addition, we recognize that museums are not just spaces to learn knowledge, but also to relax and socialize. The impact of a museum visit may well extend beyond its physical environment. Experience in the museum may become topics that visitors can share with friends, thereby helping them to socialize even after their physical trips. The knowledge that they learned will have a lifelong benefit. These together prove that the museum experience is more than a physical trip to observe and learn about artworks, but also an opportunity to interact with artworks and other visitors through multiple forms. Our design may thus have a long-term positive impact on users, demonstrating the significance of our topic.

Aside from the benefits on an individual level mentioned above, our design also has a large social impact. Inviting viewers to interact with artworks could potentially increase the public's interest in cultural studies, and by doing so promote the level of education related to this field. It is also worth pointing out that our approach towards the museum experience is innovative in terms of how we combine the cultural and social aspects of museum visits and our acknowledgment of a community of visitors.

Potential Intervention, Solution, or Contribution

Due to the nature of this Research Method class, the primary focus of our project is on research activities. Since we are not working with any specific external clients, the final deliverables of our project will mainly be a research-based design solution. The solution may be implemented by the museum at the end of the project, as we will try to reach out to stakeholders in the museum during phase R2, but the format of our final solution has not been finalized at this phase.

Our goal is to identify hidden problems and explore solutions for the target user group to better visit the High Museum of Art during the Covid-19 pandemic. In order to develop strategies that are feasible and cost-effective for the museum, we need to investigate more on target users, stakeholders, and similar facilities. Research activities that we plan to conduct include but are not limited to: extensive literature reviews, user researches, and user testings. Research deliverables may include: storyboards, personas, an interactive prototype, and usability testing reports.

Based on researches and discussions from phase R1, our design solution may take the form of wireframes and prototypes of a mobile app or website, or could possibly involve installations or modifications in the physical settings of the museum. The solution may also integrate accessible designs for target users with physical impairments. Technologies such as Augmented Reality could potentially be implemented as part of the solution as well.

Our solution intends to address the following:

- **Emotionally Engaging Interaction:** We plan to provide solutions for target visitors to understand and engage in their interactions with artworks more easily and enjoyable, while art-related knowledge or interest is not necessary. Passive viewing of artworks could become more active by building emotional connections between artworks and visitors.
- **Navigation Simplicity:** We plan to offer users more effective guides on visiting the space with less confusion. The map provided by the museum couldn't give visitors enough clear guidance on routes they

could follow, especially between three different buildings, which has caused repeating visitings and extra walks.

- **Information Accuracy:** The current method that the High Museum of Art uses to communicate updates on ticketing/exhibition information has been reported as ineffective and has caused wasted trips for many visitors. We shall offer solutions to communicate changes/notifications to visitors in a more timely and accurate manner.
 - **Social Motivation and Influence:** As part of users' experiences in the museum, we shall identify possibilities to meet desires and needs for social sharing and interaction even for solo visitors or small groups during the pandemic.
 - **Accessibility:** We will primarily focus on our major user group, but we will also investigate edge cases where needs from people with disabilities are considered.
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Expected Methods

In this project, we expect 4 stages to develop our final solution to the problem. And we intend to use several different methods to help us better understand the problem and improve our design. We also accept potential changes including adding or dropping of methods based on new findings and opportunities or limitations coming up in the future. A detailed discussion of the expected methods used in different stages is provided below.

R1: Understanding The Problem

During this phase, we aim to understand the problem space, identify our user groups, and learn background information that is relevant to our problem as thoroughly as possible.

Background Research

- Preliminarily, we conducted **secondary research** and **literature review** on the topic of problems related to the museum visiting. The scope of the research includes the official websites of the High museum and other similar museums and people's comments and reviews of the High museum on Google Reviews, Yelp, TripAdvisor, Facebook, etc. We tried to learn about the history, current situation, and future potentials of the High museum and the museum industry. We focused on collecting people's comments about their personal feelings about their visit to the museums.
- We also collected visiting experiences from people we know and ourselves who have been to the High museum.

Panel Meeting

- After we collected the information we need and identified the initial problem space, we met with our second-year panelists to hear their feedback on our work. We discussed the definition and the direction of our research and design, improving our work based on their suggestion.
- The meeting will also happen during the R3 phase, at that time, we will be presenting our concepts and prototypes to the panelists and also working together to improve the design.

Observation

- The whole team visited the High museum together to do an initial observation. We focused on the actual atmosphere and facilities in the High museum currently and meanwhile observing things going on around us, including other visitors' behaviors and reactions to the artworks in the museum.
 - We took notes in text, photos, and videos while complying with the manners and policies of the High museum.
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R2: User Needs and Design Implications

After having a basic understanding of the context and the problem space, we set our goal in this phase to get insights into our user groups and their needs. As the phase goes, we will also define the potentials and direction of our design based on what we discover.

Participants Recruitment

- For our participants in this stage, we plan to find visitors who are not involved in group visiting or with paid guiding services like a tour guide in the High museum as our primary subjects. We will find the target group in the High museum that is willing to either be interviewed or participate in the contextual inquiry or both.
- There is also a group of people that we decided to be our potential participants of the interview - our stakeholders. We are trying to reach out to the faculties of the High museum that are working on tasks relevant to our project, for example, faculties working on exploring tools. And we may also reach out to GT faculties who have collaboration with the High museum that is of our interest. We may find some people that could help us develop a more in-depth understanding of the problem space and our user group.

Interviews

- We will conduct **semi-structured interviews** in person and virtually with the following groups:
 - Visitors in the museum
 - We will visit the High museum again and find people in the museum who are willing to be interviewed under the approval of the High museum.
 - We plan to focus on asking their current thoughts about their visit and let them recall their pre-visiting experiences.
 - People who have had the experiences of visiting the High museum
 - We intend to find this group on platforms like Google Reviews and Yelp, and we would try to contact mostly people who left negative reviews of the High Museum.
 - We plan to ask them to recall their whole experiences, especially what the pain points were, what frustrated them the most, what would improve their experiences if changed.
 - People who want to but have never been to the High museum before
 - We are also reaching out to people (probably GT students or people around us) who have no previous visiting experiences and plan to do a visit.

- We will ask about their goals regarding museum visits.
- Museum faculties
 - We are also interested in faculties like tour guides in the High museum.
 - We will ask their previously encountered problems in terms of visitors trying to understand the artworks.
- We will do **affinity mapping** after the interviews to organize the information we obtain.
- Our goal in the interview session is to have more knowledge about problems visitors have encountered before and to understand their expectations for an emotional-engaging visit.

Contextual Inquiry

- We will also conduct a **contextual inquiry** with our participants in person. And we decided to do this only with those who want to but have never been to the High museum, considering that visitors in the museum might not be able to have the time to do a contextual inquiry with us.
- We will go and visit the High museum with our participants. We may visit the museum together with them to get a better sense of how people would acquire information in the museum and their efforts to enjoy their visit.
- After the process, we will also do the **interpretation** session to analyze the information and data we collect.

Personas and Empathy Maps

- Based on what we have after learning about our potential users, we would create both **personas** to clarify the users' characteristics, needs, and goals, and **empathy maps** to display their behaviors and attitudes toward our design.

Storyboards/User Journey

- After clarifying our users, we will create **storyboards** or **user journeys** to tell the story about how the users' experiences with our design might be.
- We expect the work to communicate about how our users will be interacting with the artworks.
- The final form of presentation depends on our findings till then.

R3: Design Ideas and Feedback

In R3, we will translate our findings of the users and design implications into design ideas and prototypes for further evaluation and testing.

Brainstorm

- We will first do **individual brainstorming** to provide as many thoughts as possible.
- Then we will come to put everyone's ideas together and discuss the possibilities and feasibilities.

- We aim to find a relatively optimal idea that fits into our initial expectations and that we can work on.

Wireframe

- We will build low-fidelity wireframe after we settle down on our design idea.

Prototypes

- We will try to develop on-screen high-fidelity prototypes to further display our idea in a more accurate form.

Panel Meeting

- We will have our panel meeting again to probably run the first round of usability testing and get some feedback from the panelists.

R4: Design Evaluation and Validation

In this phase, we will be testing our design idea and evaluating its performance. We will also try to get the opportunity to further improve it after we get enough feedback.

Usability Testing

- We will meet with our potential users, our TA, our panelists, our peers, the professors, and the faculty to do an initial usability test and collect their feedback and helpful information throughout the test.

Analysis

- Based on the gathered data and findings, we will do an analysis and evaluation of our design and come up with potential improvement implications.
- We may also analyze the priority of places that need to be improved and schedule our following optimization.

Expected Resources

We expect to need the following resources:

Software and Websites

- The current official websites of the High museum and other art museums.
- Figma
 - We will use Figma for wireframing and prototyping
- Zoom
 - We will use Zoom for virtual interviews

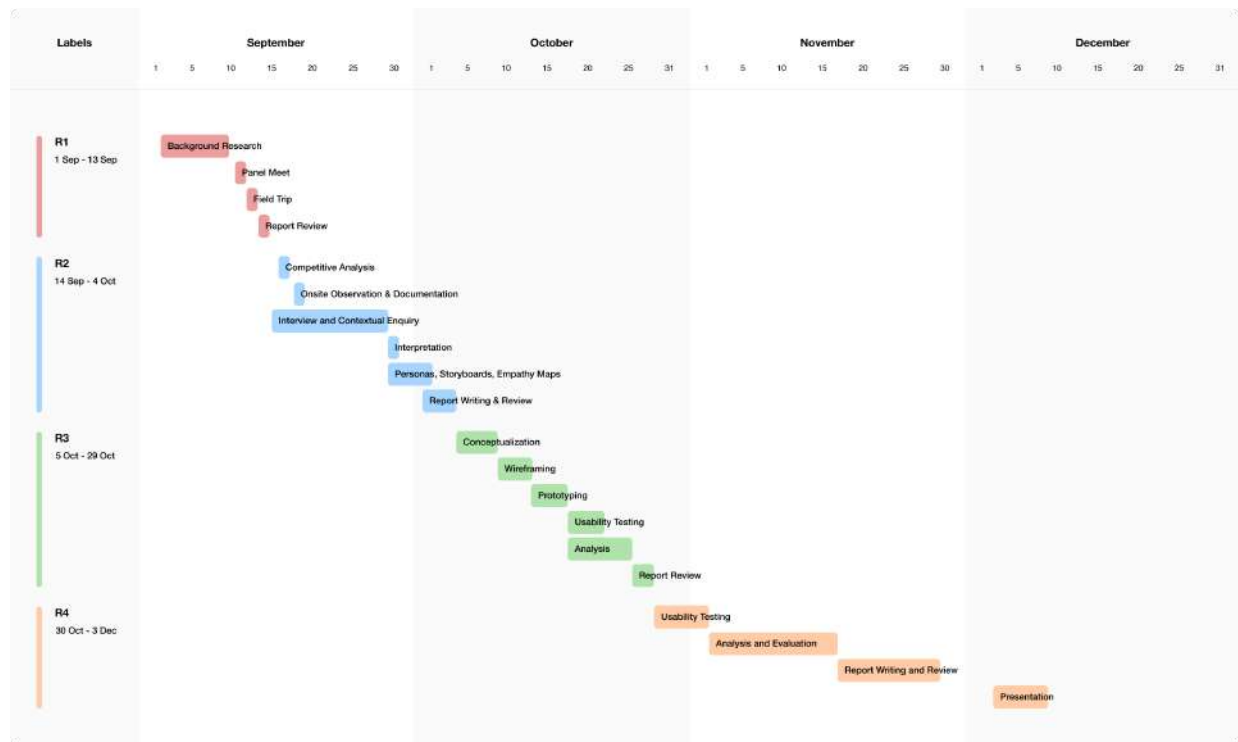
Hardware and Devices

- Recording devices
- Potential on-site implementation

People

- The High museum faculty
 - We will try to reach out to the faculty working for the High museum including service staff, security guards, and product developing people for interviews.
 - They can help us better understand the existing problems of our users.
 - And they can also be our stakeholders.
 - Previous, current, and potential visitors to the High museum
 - We will have interviews, contextual inquiries, and usability tests with them to get the primary information about the problem we are trying to solve.
 - We will reach out to them in the museum and on review platforms.
 - GT students, professors, and faculty who currently have collaborations with the museum or projects relative to our topic
 - We will consult them for suggestions and experiences to help us progress in our development and design of the project.
 - Our TA, panelists, our peers, and professors
 - We will do the testing and evaluation with them and get their feedback, which would help us discover improvements for our design.
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Schedule



Schedule

▼ Phase	Aa Time	≡ Description
R1	<u>8th September</u>	Background Research
R1	<u>10th September</u>	Panel Meeting
R1	<u>12th September</u>	Field Trip
R1	<u>13th September</u>	Report Review and Submission
R2	<u>14th September - 28th September</u>	Interview and Contextual Inquiry: Recruiting, Preparation, Interview, Inquiry
R2	<u>15th September</u>	Competitive Analysis
R2	<u>17th September</u>	On-site Observation and Documentation
R2	<u>30th September - 1st October</u>	Personas, Storyboards, Empathy Maps
R2	<u>1st October - 3rd October</u>	Report Writing and Review
R2	<u>4th October</u>	Report Submission
R3	<u>5th October - 8th October</u>	Conceptualization
R3	<u>9th October - 13th October</u>	Wireframing

▼ Phase	Aa Time	≡ Description
R3	<u>13th October - 18th October</u>	Prototyping
R3	<u>19th October - 22nd October</u>	Usability Testing
R3	<u>19th October - 27th October</u>	Analysis and Evaluation
R3	<u>To be decided</u>	Panel Meeting #2
R3	<u>27th October - 29th October</u>	Report Writing, Review, and Submission
R4	<u>30th October - 5th November</u>	Usability Testing
R4	<u>6th November - 20th November</u>	Analysis
R4	<u>21st November - 28th November</u>	Report Writing, Presentation Preparation
R4	<u>29th November - 3rd December</u>	Report Review and Submission
R4	<u>4th December - 10th December</u>	Presentation Rehearsal

Lessons Learned

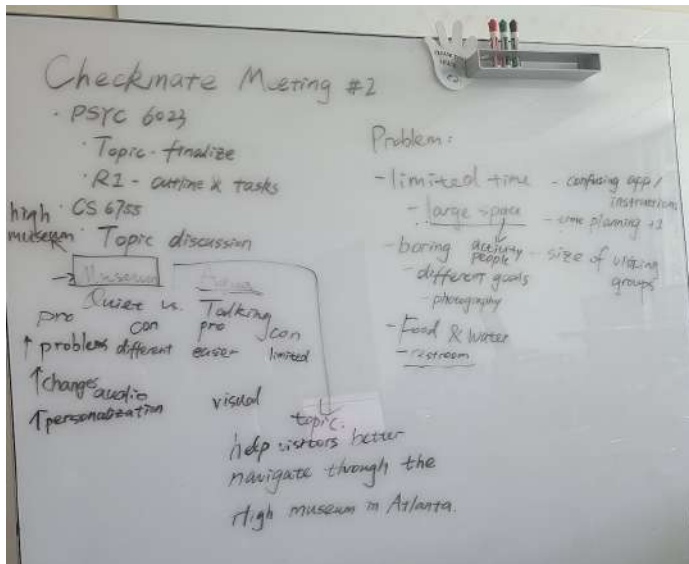
Project Work

During phase R1, one challenge we have faced is to identify and understand the scope of our problem space for this project. In the beginning, we considered working with external clients on an industrial-focused project, but after having a meeting with the client, we found this industrial project topic less related to our interest in universal design, so we decided to move on with our own project topic, which is this museum project. However, our initial topic still required a more specific user group and target behavior. This has placed another challenge to our progress, because we have not been able to directly contact the target user group during phase R1, and our first field trip to the museum was arranged one day before the due date of the R1 report, which left us a fairly short amount of time to process the information learned from the on-site observation. We depend largely on limited information from the secondary research, and feedback given from the second-year panel meeting.

Looking back on our process, although we reached a consensus on the topic after long discussions, we could have started research and on-site observation earlier, so there would be more time to interpret a variety of information for us to have a better understanding of the problem space.

Teamwork

In our short time working as a team, we have managed to create a plan of action throughout the semester, which helps each of the team members track the progress and ensure everyone has their assigned work done by deadlines. Works are divided based on personal preferences and skills.



We have found face-to-face meetings more effective than virtual meetings, during which we could write down ideas on the whiteboard and give feedback immediately. Therefore we decided to hold in-person weekly meetings after classes.

To effectively manage our project, we have created a workspace for our team in the platform called Notion, in which all team-related information is collected and organized. Before each meeting, team members write down their thoughts on the project, which will be brought up later in meetings. During meetings, we all agree that it is important to have each member's ideas heard and considered. When there are conflicting ideas, we are able to discuss and resolve issues by writing down the pros and cons, which allows us to consider all possibilities critically.

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