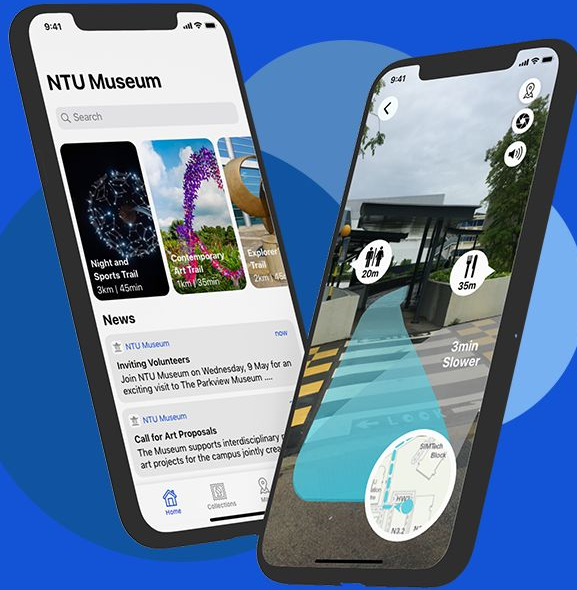


Nebin Bjiu, 16U130016
Guide: Prof. Kristy. H. Kang



NTU Museum App

An enhanced experience for the NTU Museum Tour.

What is NTU Museum

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NTU Museum promotes a keen awareness and strong interest in art and heritage on the Nanyang Technological University Singapore campus..

Opened in 2008, the Museum has a modest contemporary and Southeast Asia art collection and exhibits mostly in public spaces on campus to maximise the outreach. This artworks, installations and sculptures together forms the **NTU Campus Art Trail**.



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Design Brief

To redesign the existing Campus Art Trail map

To enhance the user experience of the NTU Museum Trail by the best means possible.

“To design a mobile application that enhances the experience of the campus art trail and motivate users with the help of leading technology.”

Pathways Taken

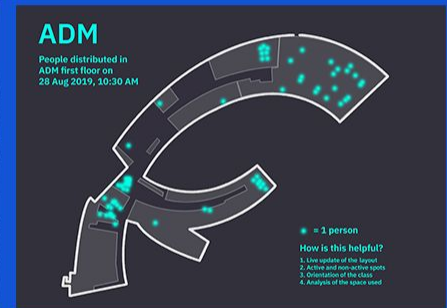
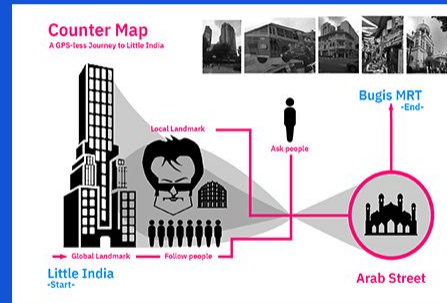
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Identifying activities that could be incorporated into the NTU Museum experience to make it more than usual tour.

Conducting spatial ethnography of the people at the NTU campus.

Redesign the existing physical map to understand the major shortcomings and challenges.

Translate insights from redesigning physical map into a digital experience.



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Research Findings

At present, the Museum has more than 200 physical artworks and 500 digital ones that are constantly vying for attention. Many who lives inside the campus are unaware of NTU Museum.

Due to the limited availability of volunteers, organising guided tours becomes a pain.

NTU attracts a lot of people for various events in the campus and NTU Museum is a nice way to spend their leisure time but it is often unnoticed.

There is less incentive for the general audience in the campus to see the art works.

It is very difficult to navigate with the existing Art Trail Map which primarily focus on aesthetics.

Poor visibility of the installations also leave them unnoticed.

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Ideation



Create motivation
for the users



Enhance navigation



Provide relevant information
when needed



Spread awareness
about artworks



Connect with other
activities in the campus

Ideation

1. Dividing artworks into suggested trails

Incentivise self-exploration with themed and suggested trails that would make it more meaningful, thus also keeping with the original motivations of the NTU Museum.

Chunking of artworks by proximity and zones on the campus map.

Suggestion of new possible experiences along the trail: food stops, soundscape explorations and outdoors activities.

Effective grouping and chunking in such a way that it won't affect when there is a new addition.



Ideation

2. Telling stories while travelling

The time for travelling between artworks can be effectively used to tell stories about NTU which has a rich history. The 'Nantah Spirit' still lives. The importance of each location or buildings can be narrated with the events that happened in the past at the respective places thereby adding richness and educating people more about the place.

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Images of Nantah Campus from A pictorial History of Nantah, Selection and text by Kee Pookong and Choi Kwai Keong, Chinese Heritage Centre

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Ideation

3. 'AR Navigation' as a delighter feature

Some artworks are spread inside buildings and it is been found that users find it difficult to navigate inside buildings and often get confused between floors.

With the incorporation of Google Street View API or self generated scene, the navigation experience indoor can be made more joyful by integrating it with AR.



4. Personal Collection, Tasks and Prizes

Each profile will be allocated a collection board (in the form tiles) with all the artworks locked initially. Upon scanning a QR code at the artwork, the tile unlocks and the user is given a small random task like inviting friends, a question regarding the visited artwork or using the NTU Museum hashtag in social medias. Rewards like discount coupons for food inside the campus can be given on doing this. A bigger reward or a NTU Museum goodie can be given upon completing the trails. This



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User Persona

After conducting user study and secondary research, a persona of the user was created to make a reliable and realistic representation of the situation.



Shu Hiratsuka

Age: 22

Male

Osaka, Japan

“I like travelling and learning about new culture and society.”

Shu is an **exchange student** in NTU from Japan. He likes to **travel** a lot and **explore** everything possible when in a new place. As a student of humanities, he likes to explore the **history, society and the culture** of different places. Shu is little weak with his **sense of direction** and often misses the shortcuts and sometimes the right way. Being a **shy** person, he is reluctant to ask people for direction and help. **Language** is also a barrier for Shu at times.

Travel enthusiast

Humanities student

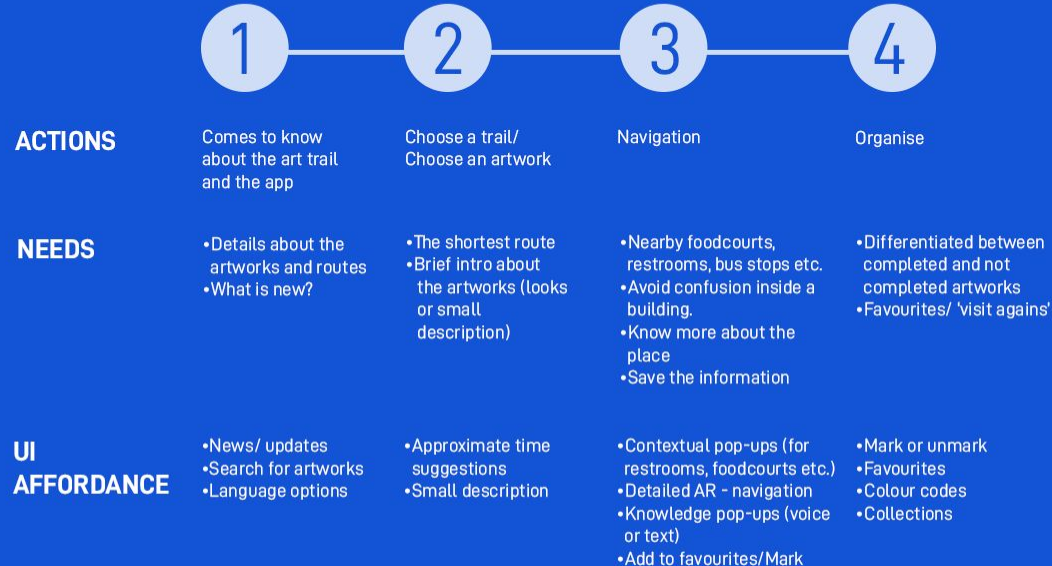
Shy person

Speaks only Japanese

Weak sense of direction

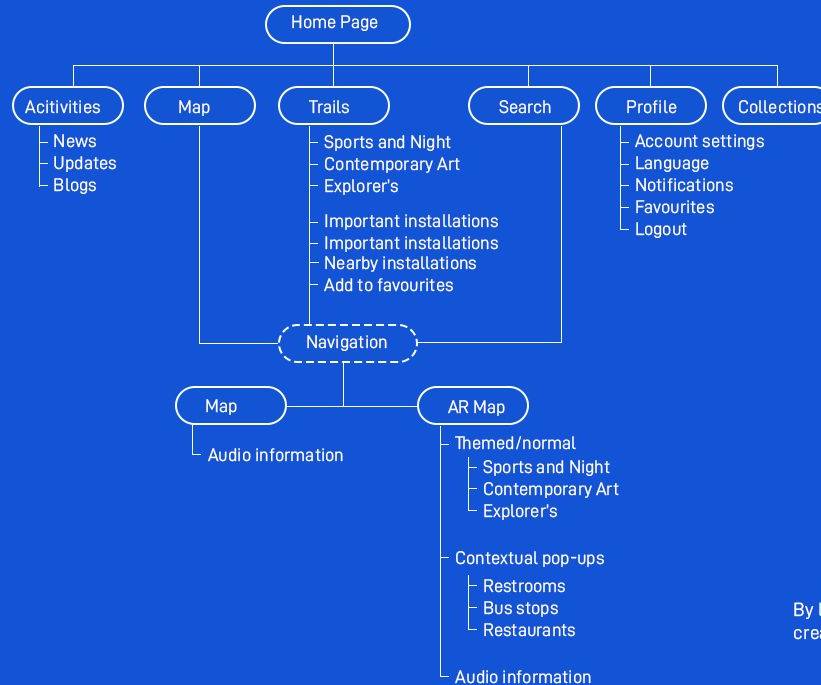
User Journey

The following chart illustrates how a user might possibly navigate through the Campus Art Trail with the APP. The user needs and UI affordances are also mapped along with it.



Information Architecture

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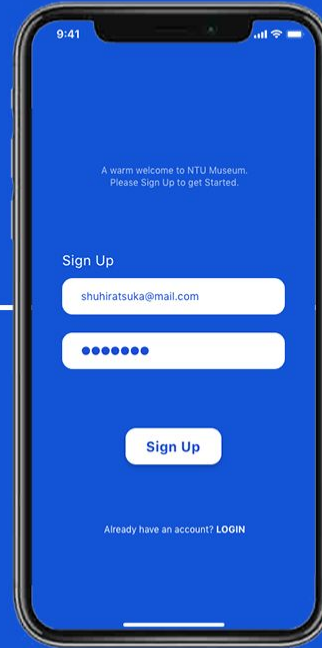
By listing out all the features, the information architecture was created to make the development of the app simple and logical.

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Launching Screen



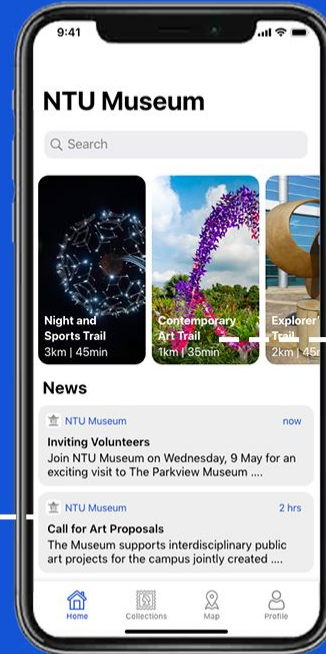
Sign Up



Language preference

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News/Updates/Blogs
regarding NTU Museum is
displayed here.

Suggested trails with
approximate distance and
time taken mentioned.

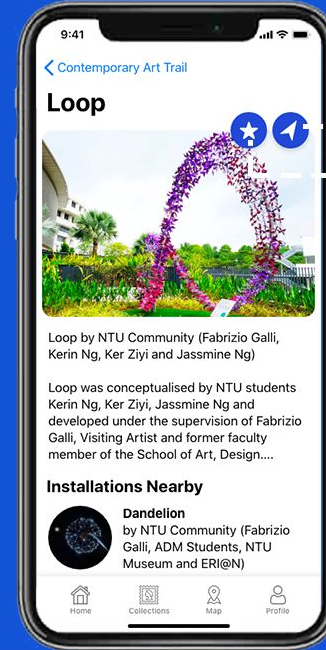
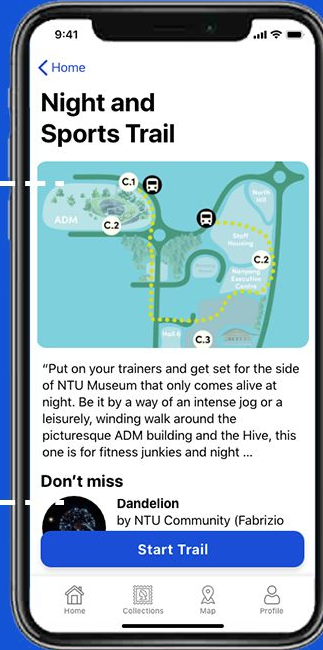
Home Page

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The same map redesigned for the physical map is used here with interactivity so that user can compare and navigate easily

The featured installations of the trail are mentioned so that the important ones can be covered if the time available is short.

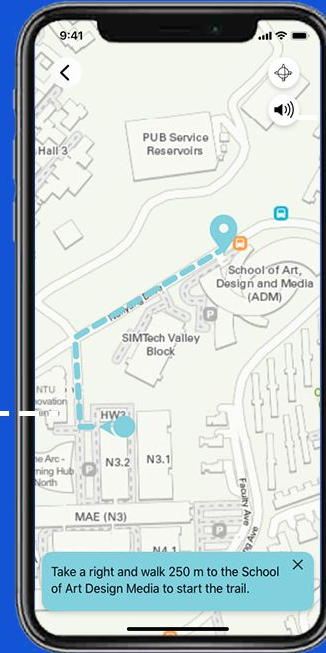


- To start navigation
- Add to favourites

- Installations nearby is made available for the users not in a trail.

Screens Explained

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- To activate AR navigation
- To disable/enable audio assistance

Used the already available NTU official map for navigation.

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Screens Explained

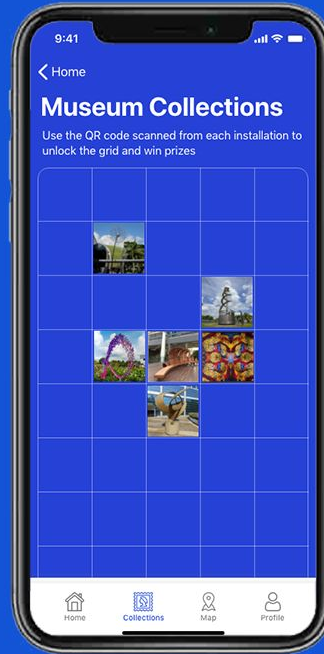
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Upon scanning the QR code at the installation, an activity is initiated which primarily focuses on awareness and publicity of NTU museum. Once the activity is completed the installation gets added to the collections board

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The completed installations are made active by showing their image. The inactive boxes give the user a gist about the yet to complete installations.

Collections Page

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Key Features



Easy and accurate
navigation



Themed navigation



Contextual information



Know your place

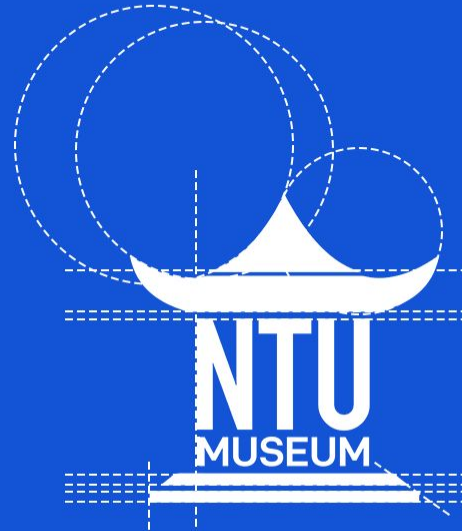


Personal collection

Logo Design

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The iconic octagonal pavilion in the Yunnan Gardens of NTU was the major inspiration in making the logo as it represented an identity. DIN Universal was taken as the font to make it a part of NTU family.

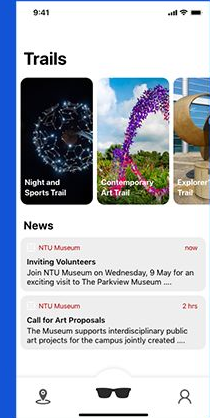
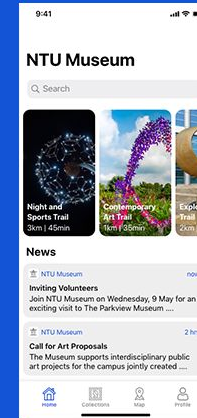
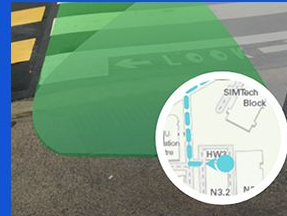


Major Changes

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The Prototype was tested with **6 users** and following changes were made in the APP after discussions.

Giving language preference for a place like NTU which has a huge mix of culture
Introduction of the search bar in the home page
Revamping the Bottom Navigation
Introduction of the reference map in AR Screen
Adding estimated time and distance in the trail
Adding the Favourites Button
Color code for the AR Trails



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Key Learnings

Introduction to AR Coding

Importance of understanding the spatial ethnography of a place while designing for navigation and the value that adds

How language play an important role in a mixed culture

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Readings Done

Chapter 1: Donald Norman - The Design of Everyday Things Revised and Expanded Edition

Chapter 1 Annette Kim, Sidewalk City: Remapping Public Space in Ho Chi Minh City(2015)

Chapter 5 Jan Chipchase, Hidden In Plain Sight: How To Create Extraordinary Products For Tomorrow's Customers. (2013)

Chapter 4, Jan Chipchase, Hidden In Plain Sight.

For more detailed response

<https://drive.google.com/drive/folders/1H6Y1ogepB9sTxwREtgaWmrsDCFLK8Vle>

Thank You