

User evaluation report

GROUP 6

Project Neverland

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Introduction

The essences of online gallery is exploration. Based on the core idea of NEVERLAND, which is to share the knowledge of each individuals and value their personal feelings and thoughts, we tried our best to design the platform in the most intuitive and non-intrusive way. Since two team members in our team are studying human computer interaction and have experience in user experience design, we put efforts to provide subtle interaction effects for the users. For NEVERLAND, usability is not purely design for their convenience but rather for inspiring and calling for.

The benefits we want to bring to the users by developing this webpage: reflective, inspirational, immersive and recreational experience.

What we don't want to provide to the users: fast consuming and roughly skimming experience.

For evaluating the usability of the web more thoroughly, we have adopted the five aspects proposed by Neilson Norman Group, which are learnability, efficiency, memorability, errors and satisfaction, to generate interview questions and user test tasks. Here are the summary of all the designed tasks categorised based on different pages:

	Task	Expectation	Categories	Key feature
1	Find the entrance of NEVERLAND	Users can complete the task easily without guidance or with little explanation	Learnability/efficiency/errors	1. Underlined introduction descriptions 2. Mouse cursor display: none 3. Hand cursor on NEVERLAND 4. Parallel scrolling effects in different sessions 4. Mix of paintings and photographs
2	Find out how to switch to another art piece	Users can complete the task easily without guidance or with little explanation	Learnability/efficiency/errors	1. Mouse cursor display: none 2. Keyboard control 3. Immersive exhibition with dark background/major colour background 4. Screen fitting automatically
3	Find the details of the particular art piece	Users can complete the task easily without guidance or with little explanation	Learnability/efficiency/errors	1. Mouse cursor display: default 2. Font design 3. Layout design 4. Sufficient information about the art piece and the artist 5. Keyboard control
4	Find out how to add art piece to favourite list	Users can complete the task easily without guidance or with little explanation	Learnability/efficiency/errors	1. Click and sign in
5	Find out how to return from the favourite list to gallery page	Users can complete the task easily without guidance or with little explanation	Learnability/efficiency/errors	1. Font design 2. Layout design 3. Back button
6	Remember how to find the entrance to NEVERLAND	Users can remember how to complete the task easily without guidance or tips	Memorability	-

Task		Expectation	Categories	Key feature
7	Remember how to switch to another art piece	Users can remember how to complete the task easily without guidance or tips	Memorability	-
8	Remember how to find the details of the particular art piece	Users can remember how to complete the task easily without guidance or tips	Memorability	-
9	Remember how to add art piece to favourite list	Users can remember how to complete the task easily without guidance or tips	Memorability	-
10	Remember how to return from the favourite list to gallery page	Users can remember how to complete the task easily without guidance or tips	Memorability	-
11	Overall understanding of NEVERLAND	User can understand the core value of NEVERLAND	Satisfaction	1. Sharing 2. Reflective 3. Relaxing
12	Overall evaluation of the aesthetic of NEVERLAND	User can appreciate the design of NEVERLAND	Satisfaction	1. Simple 2. Intuitive

Target user group

The profile of the target user group for our webpage could include:

1. People who have internet access;
2. People who are interested in art but don't have time for visiting museums or travelling abroad;
3. People who want to have some leisure time and appreciate the art;
4. People who want to get some inspiration from art.

Test plan

Test material	Method	Participant number estimated	Duration per person	Purposes
Middle-high fidelity prototype	Expert interview - unstructured interview	2	60 mins	1. Critique on the core design idea of this project 2. Find design flaws 3. Refine the functionalities design

Test material	Method	Participant number estimated	Duration per person	Purposes
Webpage	Interview; concurrent think aloud; retrospective think aloud	5	15 mins	1. Learnability evaluation 2. Efficiency evaluation 3. Satisfaction evaluation 4. Find errors
Webpage improved	Interview; concurrent think aloud; retrospective think aloud	7 (including the same group of users for the first round user test)	15 mins	1. Memorability evaluation 2. Find errors 3. Efficiency evaluation 4. Satisfaction evaluation
Webpage defined	Interview; concurrent think aloud; retrospective think aloud	5	10 mins	1. Satisfaction evaluation 2. Find errors

Evaluation on middle-high fidelity prototype

DATE: 04-08

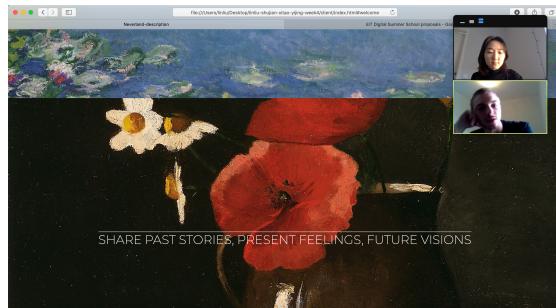


Figure1 the zoom screenshot of the expert evaluation

User profile	Key comments	Improvements	Time
B: Master student sound design & interaction design track have web development experience	<ul style="list-style-type: none"> - very bold and interesting idea - the front page lacks of introduction to the platform - reduce affordances on the webpage to implement the concept we want to deliver - some people may not get used to this kind of interaction design but this is the part which differentiate this webpage from others 	<ul style="list-style-type: none"> - add more introduction to the front lading page 	89 mins
H: Master student architecture design & human computer design track User experience have designer working experience	<ul style="list-style-type: none"> - very nice drawing prototype - Interesting vision of online sharing platform - The entry barrier for learning how to use this webpage could be a problem - The visual and feeling design is very appealing and satisfying 	<ul style="list-style-type: none"> - combine the about us and about NEVERLAND page into one page 	42 mins

First Formative User Test

DATE: 04/16-04/26

Tasks 1-task 5, task 11, task 12

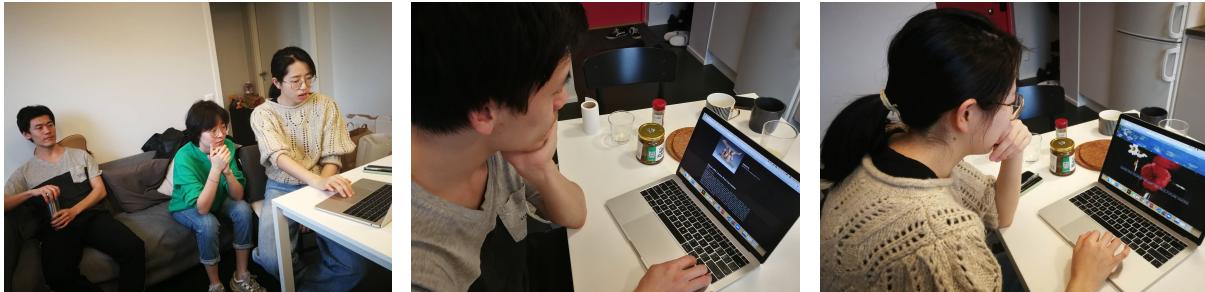


Figure 2 formative user evaluation and discussion pictures

User profile	Number of errors	The performance of completion on tasks	Time	Comments
J: master student transportation major	5	Task1-5: failed task 11: completed task 12: completed	16	- I thought the words are clickable at the beginning and stuck at there for quite some time. - The pictures are really nice -
G: doctor student material computing major	5	Task1-5: failed task 11: completed task 12: completed	15	- It took me a lot of time on the front page and without your instructions, I don't know how to move to the next stage. -
Melih: Master student data science major	5	Task1-5: failed task 11: completed task 12: completed	15	- the mouse cursor is very necessary - The website looks nice
Sara: master student: industrial management major	3	Task1-5: failed task 11: completed task 12: completed	34	- I love the idea behind this website. At the beginning, I wondered how to go to other pages and was confused. But I gradually feel that on this website, it is very simple and intuitive. The more I devote my time on appreciating the art piece, the more bothered I feel about the cursor. - The nicest thing was I am very relaxed while I am reading the art pieces. - I do like the exploration part after some time.

User profile	Number of errors	The performance of completion on tasks	Time	Comments
YY: Master student Nuclear major	2	Task1-5: failed task 11: completed task 12: completed	10	<ul style="list-style-type: none"> - the invisibility of the cursor on the front page makes no sense, I always wonder whether my computer is broken. - If you don't give me tips on how to navigate through all the pages, I won't know how to navigate myself - the pages are very appealing and easy to be understood - Love the visual design

ADJUSTMENT ON THE PROTOTYPE

General feedback

Bad learnability and efficiency. Since we have very condensed user feedback focusing on the bad experience which didn't make users feel comfortable and in control while they are skimming on the website, we hugely sacrificed the interaction design which was designed for fitting the design vision before.

- mouse cursor: visible for user to make them feel more in control
- page flipping: give more action choices such as clicking
- scrolling image affordance: put an downward arrow image to give scrolling hints to users
- wording modification: polish some words using on the front page

Second Formative User Test

DATE: 05/01-05/03

Tasks 1-task 12

User profile	Number of errors	The performance of completion on tasks	Time	Comments
J: master student transportation major	0	Task1-12: completed	5mins	<ul style="list-style-type: none"> - so easy to be used - simple and clear
G: doctor student material computing major	0	Task1-12: completed	2mins	- nice
Mel: Master student data science major	0	Task1-12: completed	3mins	- I want to read more art pieces

User profile	Number of errors	The performance of completion on tasks	Time	Comments
Sa: master student: industrial management major	0	Task1-12: completed	2mins	<ul style="list-style-type: none"> - feels better - The cursor now kind of bothers me since your pages are very clean and intuitive - Maybe you should hide the cursor
YY: Master student Nuclear major	0	Task1-12: completed	4mins	<ul style="list-style-type: none"> - provides more convenience for the users - Your website has very good quality
Jo: master student art major	0	Task1: failed Task 2- 12: completed reversed to the previous test version during the test	27mins	<ul style="list-style-type: none"> - even though I have hard times finding the cursors when I first entered the website - I have to admit that your design changed the user behaviour a lot, but that's also the goal you want to achieve on this website - I don't think it's a good idea to provide too many hints and instructions on the website - Exploration and patience are important here to show respect to all the art pieces and also the experience that the user-self would feel on the website
Ne: Full time worker used to majoring in marketing	0	Task1-3: failed Task4-12: completed reversed to the previous test version during the test	46mins	<ul style="list-style-type: none"> - very nice vision - Keep your vision as it is at the beginning - If I understood it right, take food making as an example, you don't want to provide fast food here. You don't want users to come here and consume art easily and go away. You want users to show respect and patience. So keep your idea - I don't think they would be bothered that much. At least I won't. The content on the website is clear and simple. I can easily understand and once I find it out. It is very easy and intuitive. - The cursor on the art pieces is very distracting. Hide it.

ADJUSTMENT ON THE PROTOTYPE

General feedback

Good memorability and satisfaction. After we have added on the improvements, the results shows a huge decrease in the time of completing the tasks which is not what we want to see. We expect user to enjoy this website and spend some time on it. So we invited two more new friends to evaluate the previous version and

the current version. It turned out that the previous version could raise more discussions and reflections we would like to see and their feedback shows huge success on memorability which means after users have used it once, even though they got quite confused in the first time, they knew how to use it when used it second time and some of them pointed out the bad influence the cursor could bring.

- mouse cursor: invisible for user to encourage them to explore and spend more time thinking.
- scrolling image affordance: delete the image.
- micro-effect: change the scrolling interaction effect on different pages into different speed to create more subtle feeling.

Summative evaluation

DATE: 05/05

User profile	Comments
Kelun	This is a very dedicated work. It looks very simple, even sometimes I feel it too simple. However, there are some fun and mechanics incorporated inside it. It requires quite a lot from the users. Under the simplicity of the web page, I really enjoy the thinking and vision of it.
Yifei	To be honest, I can totally understand the value of this website. But I think it is too simple. I want to have more stuff on the page.
Shen	Efficiency is the most important thing for me to learn knowledge. I don't think it as a good choice to sacrifice the efficiency just to fit more into the vision you have for this website. However, your design is very intuitive and simple. I feel very comfortable while I know how it works.
Qufeng	I like the idea. Don't change it.

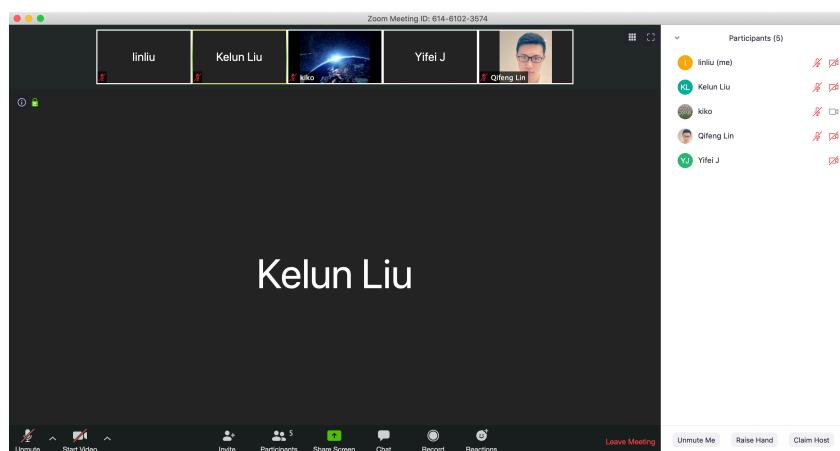


Figure 3 summative user evaluation and discussion screenshot

Discussion

During the process of conducting user evaluation by using concurrent think aloud and retrospective think aloud methods, we do encountered the situation that several users felt several confused feelings when they were trying to experience website. Regarding to the usability completion in this project, we ask the users to score each different aspects and generated a average scoresheet:

Usability aspects	Description	Overall score
learnability	How easy is it for you to accomplish basic tasks the first time they encounter the design?	6.7/10
efficiency	Once you have learned the design, how quickly can you perform tasks?	7.5/10
memorability	When you return to the design after a period of not using it, how easily can you reestablish proficiency?	10/10
errors	How many errors do users make, how severe are these errors, and how easily can you recover from the errors?	2/10
satisfaction	How pleasant is it to use the design?	9.2/10

To evaluate the usability aspect of our project, we have to admit that we are not trying to only feed user with the popular design standards but try to achieve something that might be not welcomed under current design principles. Ever though the interaction design has been changed several times, during design phase and user test phase, we are happy that this website raise discussions on the deliverability of the core value and vision this website has.

We would like to point out that the effectiveness of actions design is quite satisfying. We tried to use the simplicity visual elements to balance the out of control feeling caused by not displaying the cursor. We did expect that there would be discussion and controversial opinions on the visibility of the system status part. A small element on the page could influence the design vision so much. Usability is not to spoil the users but bring values to the users. We finally decided to keep the design vision as it was at the beginning because this website is not targeting fast consuming users and fast browsing is not the experience we want to introduce to our users. As we can see from the results we got from several round of user feedback, there are some users who can reflect upon the interaction design we set on this webpage and agree to the vision behind it.

We believe that by paying time and effort to understand, explore and reflect upon actions, the whole user experience could be more peaceful and more enjoyable.