

2019-12-9

Final Report

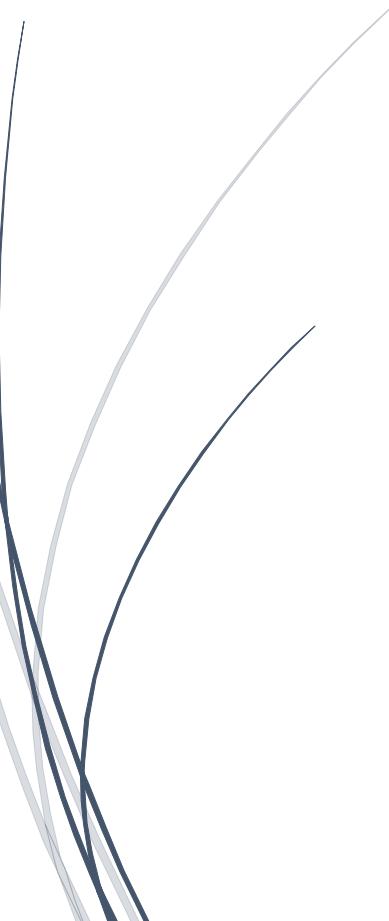
2019 COMM 5961

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Website: oliviawxt.github.io/final_project/home1.html

Topic: 音乐剧咖 Musical Goers



I. Introduction

The Musical Goers website is designed for musical lovers who have a basic understanding of musical culture as well as musical newcomers in China, aiming to further promote the musical culture to the wider public. This idea is driven by my personal experience. As a loyal musical fan, I have developed interests in musical performances since the senior middle school. However, I find that it is difficult to search for thorough information about musicals and few communities are provided for musical lovers to share their stories. Also, musical, as a significant part of culture property, is still in its infancy in the Chinese market and musical culture is not well accepted to the public. Therefore, it is essential to disseminate the musical culture to more people. This report will leverage both design thinking pattern and computational thinking pattern to elaborate the process of designing the website.

II. Problem Definition

i. Strategy

1. Site objective

The site objective is the primary step of the whole process. In order to specifically define the problem, I tried to recall personal experience through the journey of joining the musical circle. Before watching the performance, musical lovers often take much time and effort to search for

musical information. A majority of websites mainly focus on ticket-selling and the information is scattered. On purchasing the tickets, it is sometimes hard to choose from various shows and people expects recommendation according to the popularity and themes, especially for the newcomers. Some of my friends also have a tough time in choosing the right theatre and specific seats to improve their viewing experience. After watching the performance, people find that there are very few communities for musical lovers to share their reviews and stories. One of my friends also argue that it is difficult to understand some professional jargons and also nicknames of performers given by musical fans.

Therefore, this website has two main goals. As very few websites offer comprehensive information about musical performance such as performers, original works, videos and titbits, the website plans to save the time and effort of musical goers spent on searing for the relevant information. The second objective is to offer an interactive community for musical goers to share their opinions and stories and help them to have a better comprehension about musical cultures.

2. User Needs

This website targets two groups of people. One group is musical lovers in China who have watched some performance and have a basic understanding of musical culture. The other is musical newcomers who

have few knowledge about musical but show their interest in this field. In order to explore the needs of target users, I interviewed with two classmates who have just started to know this field and two friends who have watched several performances. From their sharing, I mainly summarize user needs from three perspective: 1) More comprehensive and interesting musical information; 2) Detailed tips of purchasing and watching musicals; 3) Engagement with other like-minded people. A user journey mapping is presented below based on the interviews (see *Figure 1*).

User Journey Mapping			
Persona	Stage	Goals	Artifacts & Touch Points
Musical Goers	Awareness	Want to know more about musicals in China	/
	Search	Search online	Search engine; Social platforms such as WeChat & Weibo
	Browse	To know about the latest musical performance	Landing page&剧目有利 page
		To choose what musicals to watch	“近期演出”section & “热门推荐”section
		To know how to	“近期演出”section

		purchase the tickets	
		To know where to watch latest shows	“观剧地图” section
		To know how to choose the seats	“选座贴示“ section
		To know about drama etiquette	“观剧礼仪”section
		To know about the musical practitioners	“大咖来访”page
		To know about musical jargons and terminologies	“剧圈文化” page
Interact		To share stories and communicate with others	Landing page & “分享你的故事” section
Retain		Go back to the website to check updated information	Other pages
		Go back to the website to engage with musical fans	“剧圈文化”page

Figure 1. User Journey Mapping

ii. Scope

By examining the user journey mapping and analyzing the user needs, this section will solve the problems encountered throughout the whole process, providing the musical-related information in an organized way, as shown in the diagram in Figure 2.

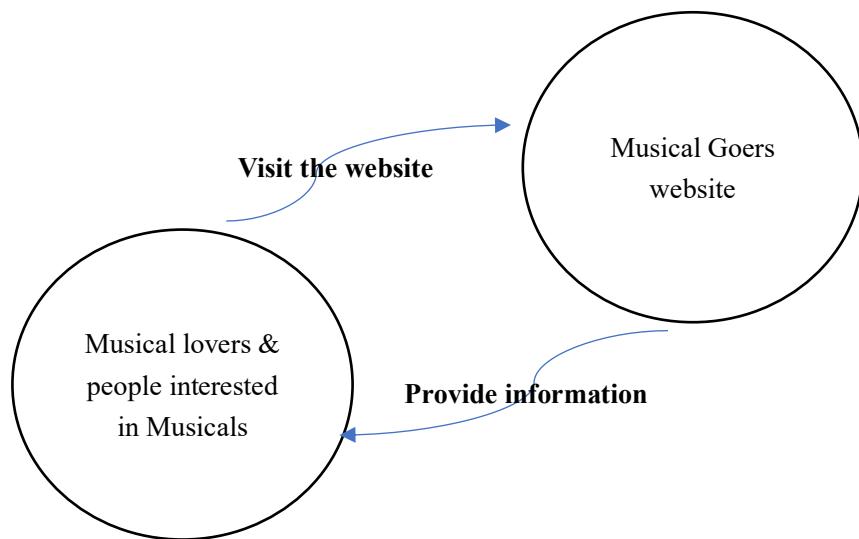


Figure 2. Context Diagram

The information for target users is summarized into four categories, including Musical Recommendation, Musical Guidance, Musical Practitioners and Musical Culture. For the Musical Recommendation page, performances on the stage, coming shows and purchase information are offered. Recommendation will also be provided to help users to choose popular musical to watch. Musical Guidance will present a musical map to directly show the locations of latest performances, tips of seats selection and drama etiquette. As for the Musical Practitioners, interviews from

actors, actresses, directors and composers are provided in videos, FAQ and image forms. As for Musical Culture, interesting information such as terminologies and jargons in fan circles should be covered. Additionally, I invite six friends to share their stories and feelings in different steps. A “share your stories” section is also created to attract users to further engage.

III. Problem Solution

i. Structure

Since the problems and user needs have been stated, I have a rather clear picture of contents that should be covered on the website. However, these contents are scattered in pieces. It is important to categorize them in different pages and sections to form a logic pattern in order to guide the users to search for appropriate contents. Therefore, contents have been divided into several categories and under each category are some sub-categories to enrich the detailed information, as shown in the site map (see *Figure 3*).

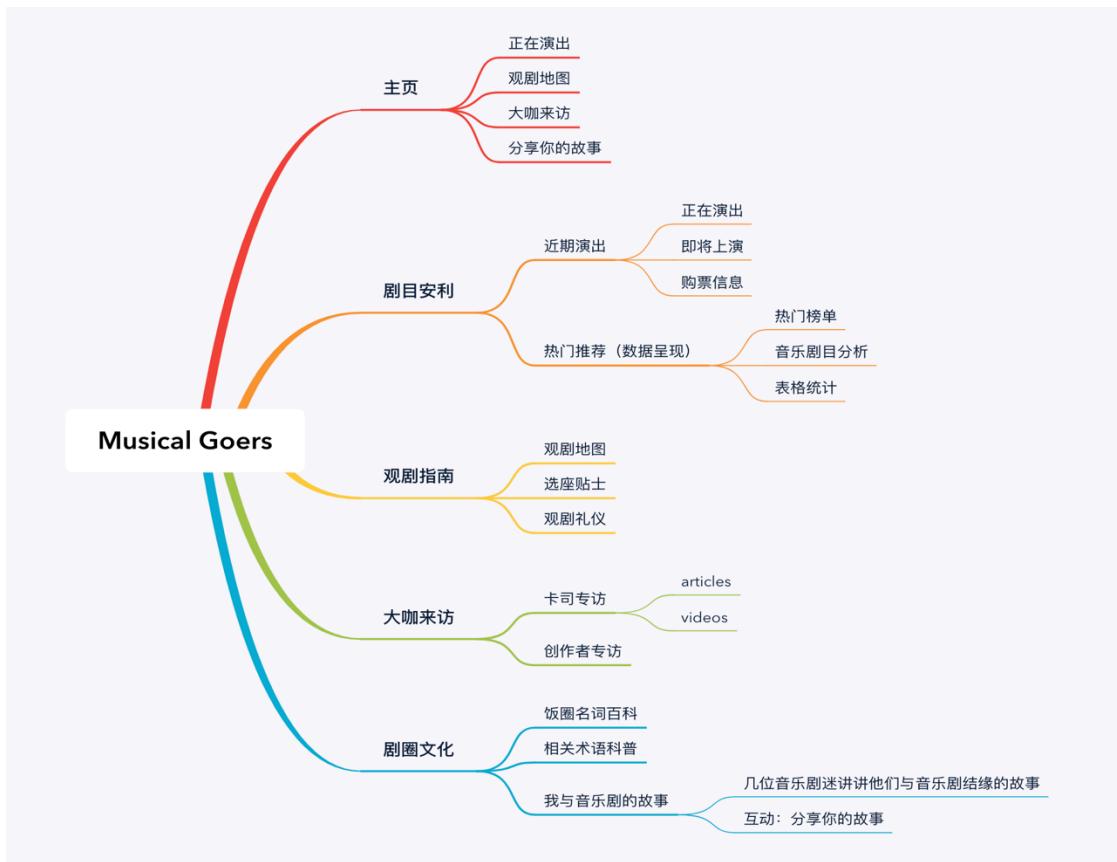


Figure 3. Site map

ii. Skeleton

After mapping out the structure, I draw several low-fidelity prototypes of key pages to evaluate the usability of the website. The wireframe prototype is illustrated below (see Figure 4-8)

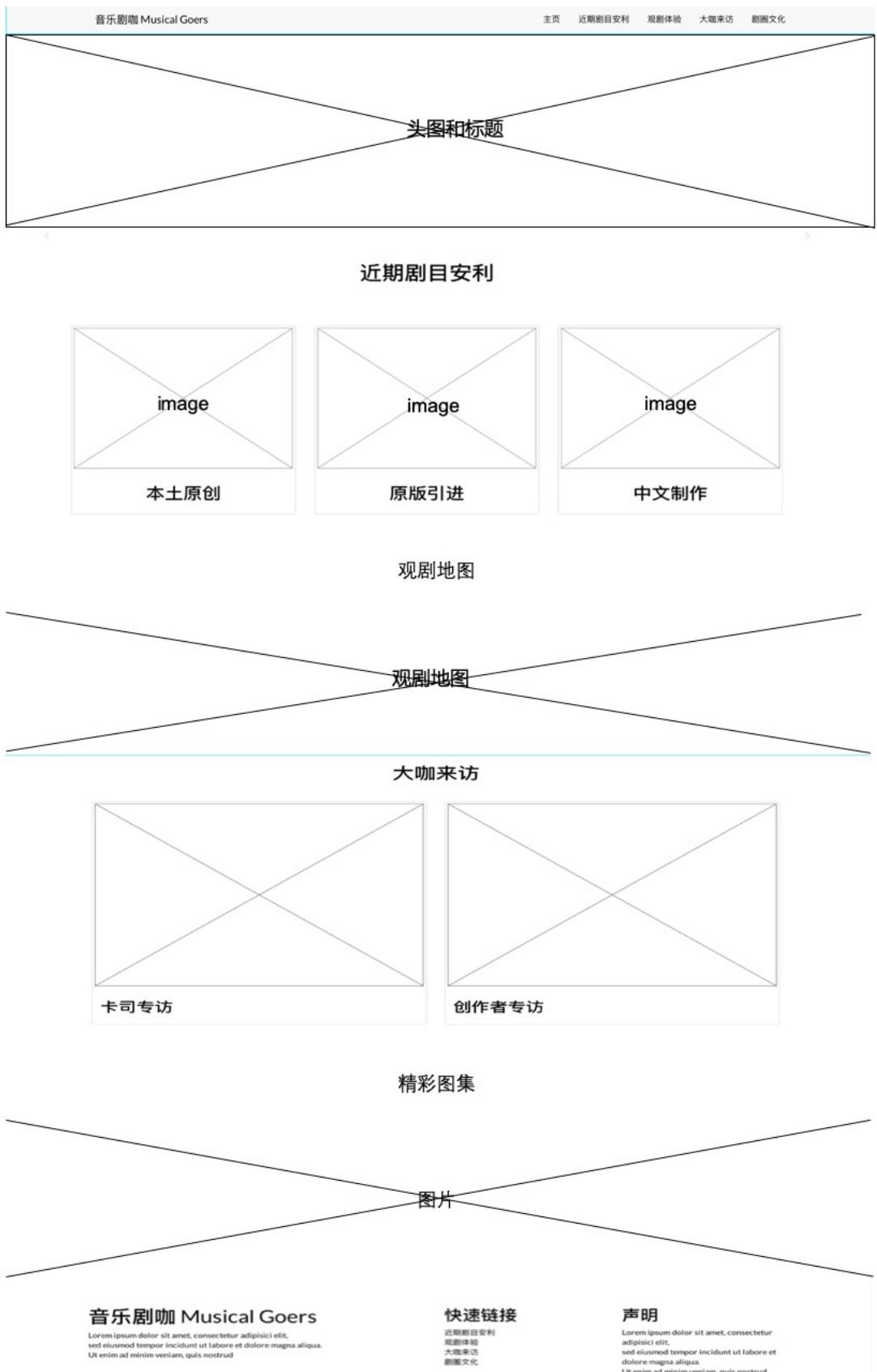


Figure 4. Home page

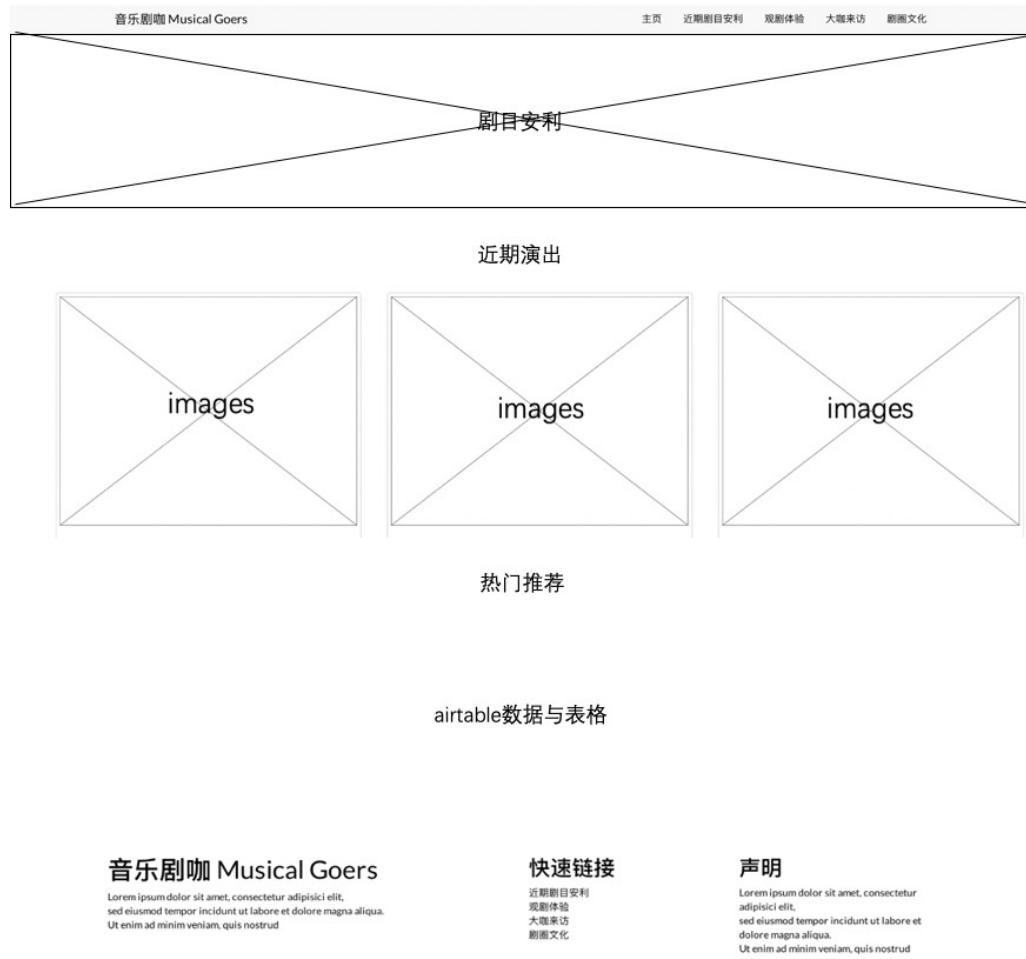


Figure 5. Performance recommendation page

音乐剧咖 Musical Goers

主页 近期剧目安利 观剧体验 大咖来访 剧圈文化

观剧地图

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快速链接

[近期剧目安利](#)
[观剧体验](#)
[大咖来访](#)
[剧圈文化](#)

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Figure 6. Performance guidance page

音乐剧咖 Musical Goers

主页 近期剧目安利 观剧体验 大咖来访 剧圈文化

大咖来访

卡司专访

卡司专访

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音乐剧咖 Musical Goers

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快速链接

近期剧目安利
观剧体验
大咖来访
剧圈文化

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Figure 7. Musical practitioner page



Figure 8. Musical culture page

As the wireframes showcases, the musical goers website contains four

sections, including musicals recommendations, guides for watching musicals, interviews of performers and creators as well as musical cultures. In order to evaluate the effectiveness of contents and layout, I conducted a usability test with five participants.

The problems five participants raised are quite helpful for me to further improve the user experience. First of all, four of them mentioned the contents on the home page. The two newcomers considered the classification and the subtitles quite confusing because they don't know the different between “中文制作” and “原版引进”. In the section of latest performance, two of them mentioned the significance of purchase information and detailed information about musicals such as plots and comments. Additionally, two fans thought the musical culture section quite meaningful and creative, but they think the title should be further revised. It is not genuine to call “卡司外号科普” and “专有名词科普”. One of the newcomers thinks that the name “观剧体验” is a little bit confusing.

iii. Surface

After testing the usability of the website, I collected all the useful feedbacks from the interviewees and started to work on the visual design. I leveraged bootstrap and some templates to create the contents that met my initial expectation. A simplified pattern was adopted as too much information will distract users' attention.

Firstly, I would like to talk about the combination of visual design with

user needs. As is suggested in the usability test, the contents on the landing page is of great significance and people are eager to know information about latest performances. Therefore, the data table and a map were presented to showcase the performances on stage and locations (see Figure 9). The information on the gallery card was also well-selected, including musical name, type, posters, the latest casts, creators, plots and comments.



Figure 9 performance on stage on the landing page

Furthermore, the website also leverages data visualization to demonstrate various information, which effectively integrates musical related data. As users strongly proposed the significance of the recommendation, a recommendation list with detailed information has been presented by leveraging Airtable data table. The process of data analysis was also illustrated on the website with texts explaining the criterion (see Figure 10). The collected data has been further processed by using the rollup function in the Airtable to calculate the total count of

recommendation. A table has been generated with a pie chart below to show three degrees of commendation (see Figure 11). The website also presented a data map to offer the information about theaters. The location has been categorized in two groups based on the time of musical performances, which was showcased in markers with different colors (see Figure 12).

	音乐剧名称	评价数量	获奖数量	好评率	推荐程度
1	《长腿叔叔》	889	4	66.8%	一般
	《我的遗愿清单》	1392	0	66.3%	一般
3	《拉赫玛尼诺夫》	861	1	47.9%	一般
4	《贝隆夫人》	1318	19	64.7%	一般
5	《放牛班的春天》	547	2	59.7%	一般
6	《水曜日》	1402	3	58.8%	一般
7	《音乐之声》	1826	0	89%	值得一看
R	《空中花园谋杀案》	8577	0	77.1%	值得一看

Figure 10 Airtable data table



Figure 11 table and pie chart in the recommendation section



Figure 12 map

Additionally, I also address the engagement and interaction of users in the visual design. In the page of musical culture, I set up a share section by leveraging Airtable form view and invite users to share their stories (see Figure 13).

音乐剧咖 Musical Goers

主页 励安利 观剧指南 大咖来访 剧圈文化

分享你的故事

你与音乐剧的二三事

你的称呼

你的故事/你的观剧感想

Submit

Airtable

Figure 13 interactive form in the share section

IV. Usability Tests

To evaluate the design of my website, I invited five respondents to conduct a second usability test. Two of them are musical new commers that have little knowledge about the website but have great interest in this field, and the other three participants are musical loyal fans who have watched at least five musical performance and grasp a basic understanding of musical culture.

Two tasks were designed for participants to evaluate the surface of the website:

- 1) Share your stories with musicals and submit on the website
- 2) Find out the musical recommendation list

The test result provided me with valuable implication to modify my website. The first task is rather difficult to finish as all the five participants spent much time to search for the right page and section. Two of them tried to scroll down the content in the home page but failed to find it. One of them was not sure about which page contains this section and have tried to click other pages. Therefore, based on their suggestions, I added the share section on the home page, which is not only easier to navigate but also highlight the interactive design of this website (see Figure 14).

The screenshot shows a web form titled "分享你的故事" (Share Your Story) with a sub-section title "你与音乐剧的二三事" (Your Stories About Musical Theater). It contains two input fields: one for "你的称呼" (Your Name) and another for "你的故事/你的观剧感想" (Your Story/Your Viewing Sensation). Below the second field is a blue "Submit" button. At the bottom of the form, there is a note: "Never submit passwords through Airtable forms. Report abuse" and the Airtable logo.

Figure 14 add interactive form on the home page

The result of task two revealed some important issues in my web design. All of the respondents reflected that it was quite simple to navigate the contents through the navigation bar on the top. However, four of them found it hard to click other contents through sub-categories on the home page as they had to go back to the top navigation area to search for more contents. Therefore, I created clickable titles on the home page to lead users to their destinations (see Figure 15). A hover effect was applied to each header to guide users to click. In addition, the recommendation list is automatically displayed in the section which is well-accepted by all five participants. However, they thought the musical analysis should explain the process of collecting data. Three of them also found the button below named as “剧目呈现” was quite confusing. Therefore, I added a line below

to explain how to get the data and changed the name “剧目呈现” to “表格统计” (see Figure 16).



Figure 15 *clickable title on the home page*



Figure 16 *a clearer navigation in the recommendation section*

V. A/B Testing

For quantitative usability test, I conducted an A/B testing to evaluate whether the video on the home page banner will attract people's interest

and improve the page duration. Musical performance is always passionate and vivid, so I personally think that it should be more attractive to present a video on the home page compared with solely images and texts. Hence, I conducted this test to see whether this is a common opinion. A version presents below has the play video button, while version B is without the video (see Figure 17).

After running the experiment for three days, I have received results which reflected my expectation. As shown in the figure 18, the original version had a higher conversation rate and higher performance, which has greatly surpassed the performance of the version B. Therefore, the video button on the landing page should keep and may effectively attract more users.



Figure 17 A/B testing



Figure 18 A/B testing result

VI. Web Analytics

When it comes to measure the performance of the website, Google Analytics plays a vital role. With the help of Google Analytics, I created a dashboard with nine metrics, as shown in Figure 19. The dashboard visually illustrates various data including the total number of visitors, user type, user by country/region, user by browser and by device category. Additionally, the dashboard also showcased the average session duration and pages/sessions viewed and page views by page titles.

According to the dashboard, during the three days of testing, there are 265 users visited the website with 4.1% of them as returning users. Among all the users, most of them are from mainland China which accounts for 68%. It is worth mentioning that 15.6% of people view the website in the United States and 8.6% in Hong Kong. Other countries include Japan, the United Kingdom and Canada, which implies that a global version of the website may be worth developing to meet the needs of people from the world. As the language of the website is in Chinese, users are likely to be Chinese studying or working in foreign countries, so it is also important to offer more musical information beyond the Chinese market. In terms of the traffic source or medium, 77.6% of users come from Wechat, which may result from a majority of Chinese people tend to receive information from this popular social platform.

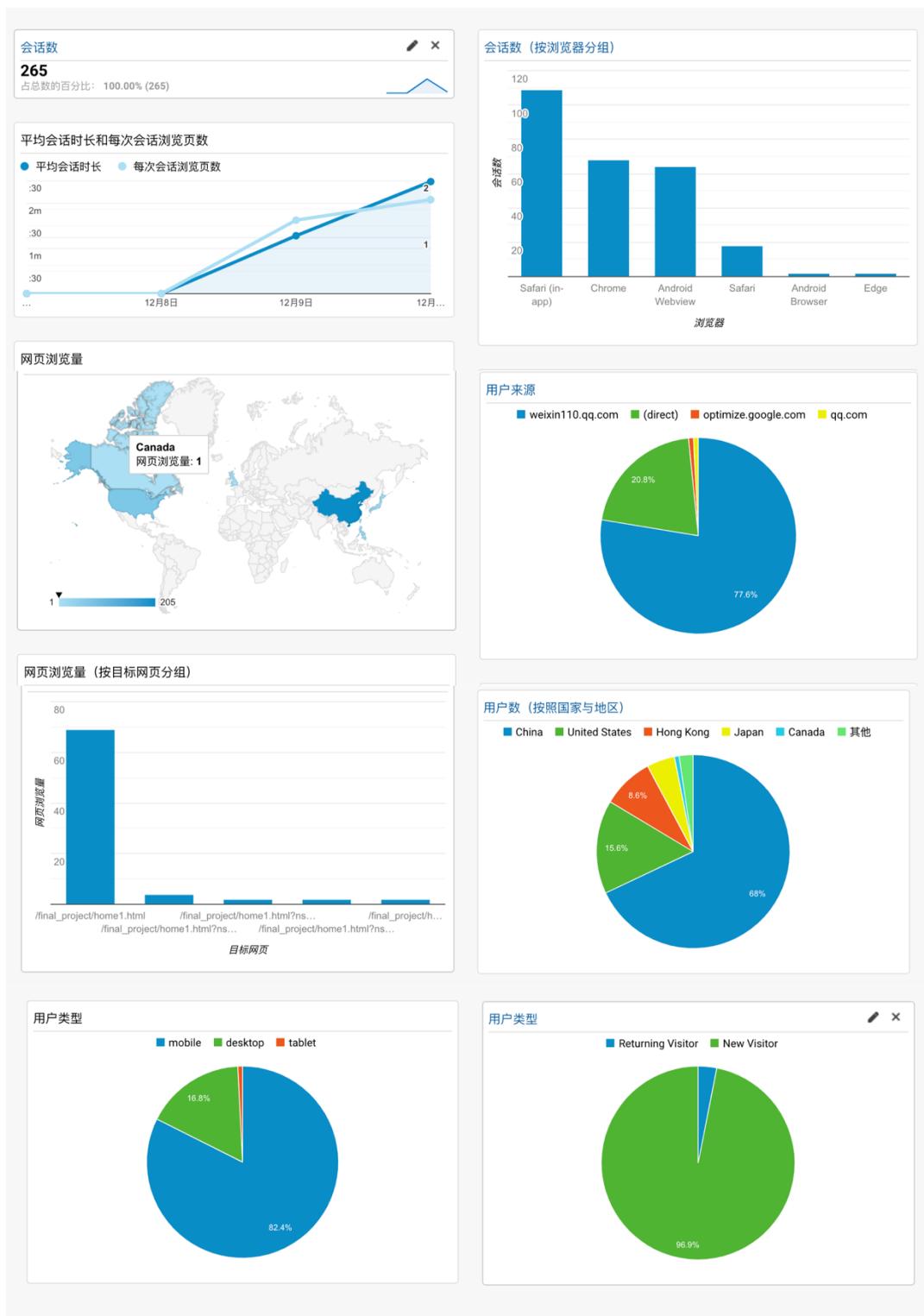


Figure 19 Dashboard

Furthermore, it is also worth mentioning that 82.4% of people browse the website through their mobile phones, while only 16.8% people and 0.8% of people use desktop and tablet respectively. This phenomenon presents

the user habit of my target users. Therefore, it is rather important to develop a more responsive design for mobile phone as more people tend to absorb information through their mobile devices.

Additionally, concerning the statistics, the average session duration is around two and a half minutes and the average number of pages viewed during the session is 1.67. The landing page is the most popular page with 191 pageviews, followed by the performance recommendation page and musical guidance page.

VII. Conclusion

i. Limitations

The data collection period has revealed several limitations concerning the designing process. Firstly, the A/B testing experience lasts for a rather short time and the data revealed in Google Analytics is not sufficient enough to implement a thorough analysis. Due to technological problems, the A/B testing stopped running in the middle of the experiment, so some data has not been collected effectively.

ii. Suggestions

I would also like to put forward some suggestions for future improvement of the website. Firstly, as mentioned in the web analysis part, the worldwide user background suggests that the website should add more global contents like musical performances on Broadway. The website

should also emphasize more responsive design as an increasingly number of people tend to browse the website through mobile phones. In addition, as the website aims to create a community for musical lovers to share their repos and stories, it is important to add more interactive elements, for example, designing test games for users to evaluate their level of understanding. This may help users to communicate with others and enhance the engagement of the website.