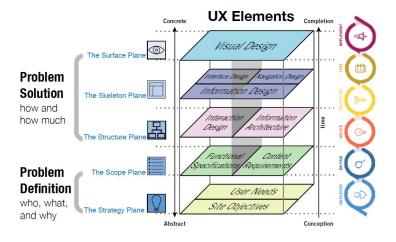
COMM5961 Final Project Report

ZHU Xiaoxi (1155131658)

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1. Introduction

Based on the concepts and theories that I learned from com5961, I create a stop-motion animation website. This report illustrates the process of building this data-driven website. Since the user experience is the key to the website design. This report will analyze all the stages from site objectives to the final visual design by combining the interaction of "Design Thinking" and "Computational Thinking".



2. Strategy

Site Objectives:

The Stop-motion Animation website is designed for anyone who is interested in stop-motion animation and wants some next movie recommendation or creates their own

stop-motion animation video. This work is conceptually driven by my personal preference. As a stop-motion amateur myself, I start to focus on this kind of animation about three years ago. When I registered a film course in college and start the analysis of some animated movies, I realized that lots of my favorite animation movies and videos are called Stop-motion Animation. At that time, I was eager to find more information about it. However, the targeted and well-informed website is limited. In this class, I've got a chance to spend time to collect what I'm interested in and create this special website.

I visited several popular and authoritative source movie websites, such as IMDb and Rotten Tomatoes, to collect all stop-motion animated movies and reviews around the world. As well as the stop-motion animation studios and clubs' official websites and tutorial sites. It is commonly known that the movie website can not live without resources and recommendations. YouTube is a great choice to find a useful video.

User Needs:

This website will serve two main groups of people: stop-motion amateur and people who are interested in it. But what they really need from a stop-motion animation website? In order to find the answer, I interviewed several friends. Except for those who never heard or watched any stop-motion animation videos, there are eight interviewees are interested in stop-motion animation and three are stop-motion amateur. Most of them are below 30 years old. I asked several questions, the two key questions are:

- 1. What websites do you usually visit to find the next stop-motion animated movie you are going to watch?
- 2. If there is a comprehensive Stop-motion animation website, what you do expect to find?

For the first question, their answers are diverse. IMDb, Google, Zhihu, film Advertising, and so on. However, their answer becomes more unified for the second question. First of all, most of them love the idea of a stop-motion animation website. Then, people who are interested in stop-motion animation tend to see movie recommendations and the direct link to watch those movies. While the stop-motion amateurs would love to know more about the studios and how to make a stop-motion animated video by themselves. One amateur already visited two stop-motion animation studios and create a lego stop-motion video by herself! Their great answers gave me a general idea about how to create this stop-motion animation website and to provide convenience condition to the users.

3. Scope

	起	承	转	合
人物	- Stop-motion amateur - People who interested in	- Want recommendation - Curious about how to make stop-motion animation video	- enjoy - getting serious and learning	Satisfied and trust
场景	Online searching	Find my website and look through the pages.	- Watch the recommend movies - Study useful information	- online - shooting video
物件	Website	- article/video - tutorial	- movie - camera/tripod /clay&Lego	- online review - screen
用例	- want movie recommendation - want more info	decide to watch one want to a video themse	by - visiting	become stop- motion amateur bookmark my website and visit again

A good way to figure out what opportunities I could have is to map out the whole journey that my target users will experience in the process of reaching their destination. Based on the interview and the classic user pattern, I create a sketched a journey map to collected and organized the categorized user stories.

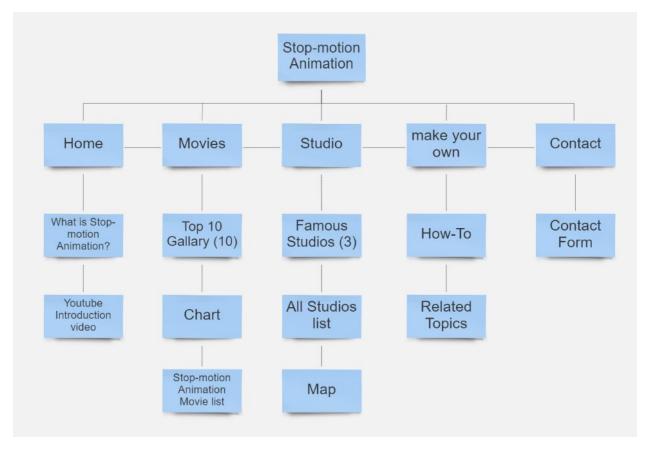
According to the journey map (above), the information needed by target users is summarized into four categories, including:

- Introduction of Stop-motion animation (home page)
- Stop-motion movies (recommendation)
- Studio (special)
- Tutorial about how to make a stop-motion animated video

In this way, I would like to create five pages to extend every topic. Contents regarding the introduction are the classification of styles, different forms, and filming principles. Since I watch most of the stop-motion animated movies, I provide top 10 stop-motion animated movie recommendations based on my own viewing experience. Also, shows all the stop-motion animated movies' data to my users. As for the studio, they can not live without their special studio culture and location. For all the images and the videos are coming from IMDb and stop-motion animation studio official website. Moreover, the "How-To" information comes from different personal channels and clubs' websites. I accept the way they teach and already tried some. I believe those videos and articles will help a lot for people who are new to create their own stop-motion animated video. For all the information, I searched by their keywords and choose the best one to present. Last but not least, I added a contact page for my website to collect more user data and messages in the future to inspire me a lot to improve my website.

4. Structure

Based on the above, I start thinking about the structure: how the information and content I provide to attract the users and to be used by them. The information architecture should be closely related to the user journey that I created. I want every user to feel comfortable as they visit my website. They don't need to confuse where they are and every click is as logically and coherently as possible. Therefore, I adopt the several-page web template with a fixed navigation bar at the top. Also, the "Home Page" including all the primary information of each sub-page. The site map of the Stop-motion Animation website is created as shown below.

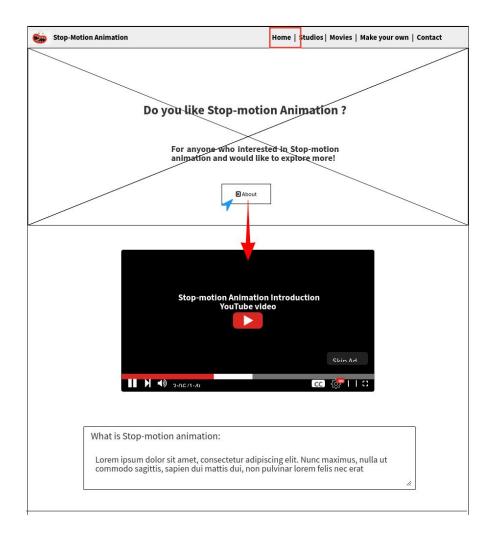


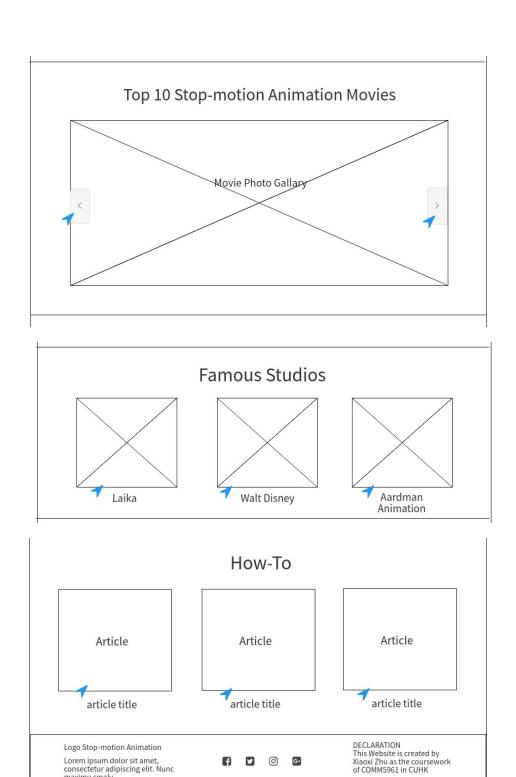
This site map emphasizes the linear structure that corresponds to the user journey. Yet the fixed navigation bar, it also makes a non-linear flow of information possible. As I learned from

this semester, 2-3 navigation buttons are also set on the header of every page. It let users jump to any section they want to focus on. In this way, some "Back" buttons are also going to set at the end of each sub-page.

5. Skeleton

Once the map has been set up, the next step is the wireframe. It will demonstrate the layout and location of different media (text) elements and shows the basic look of my website. It is the cheapest and most convenient way to test if the elements, such as media and buttons, are arranged reasonably. It is very clear and I can revise anytime I need to. The low fidelity wireframe prototype is shown as follows.



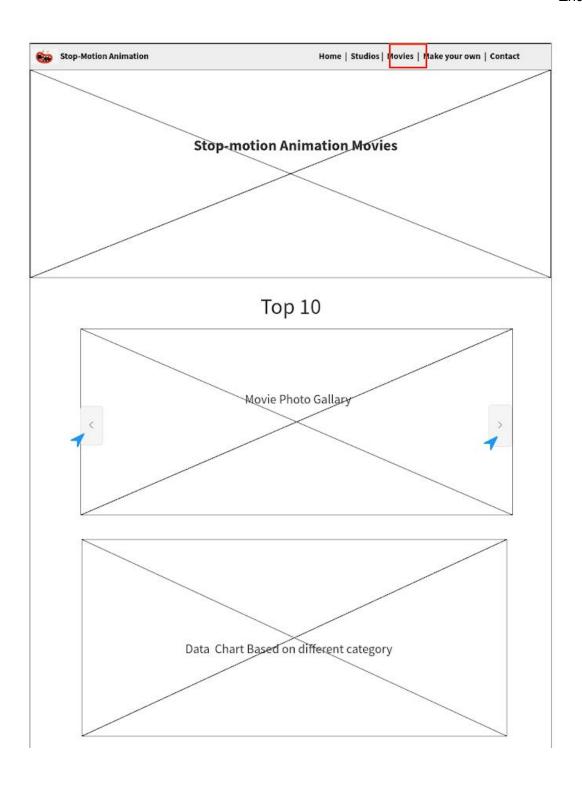


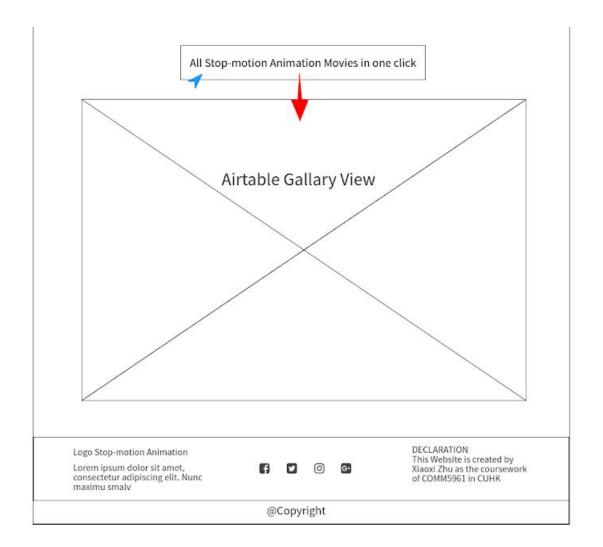
Home Page

@Copyright

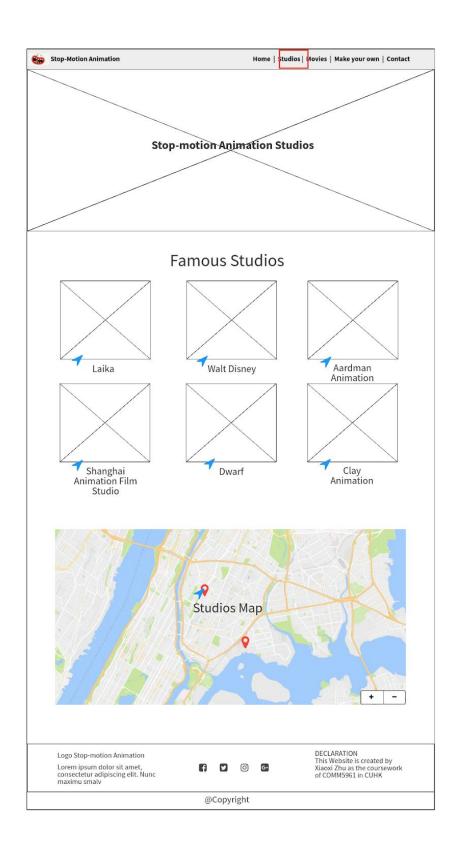
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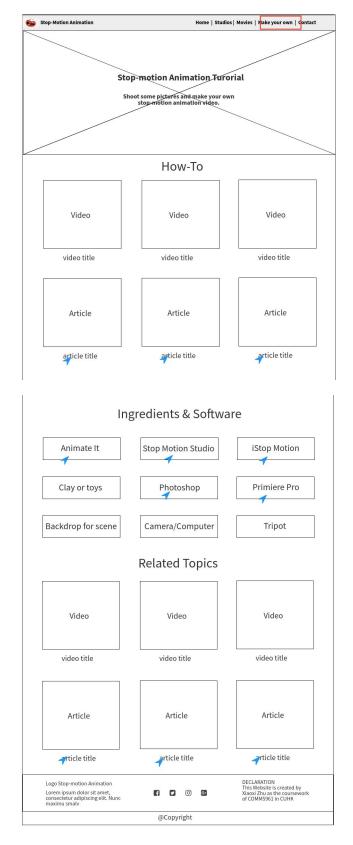




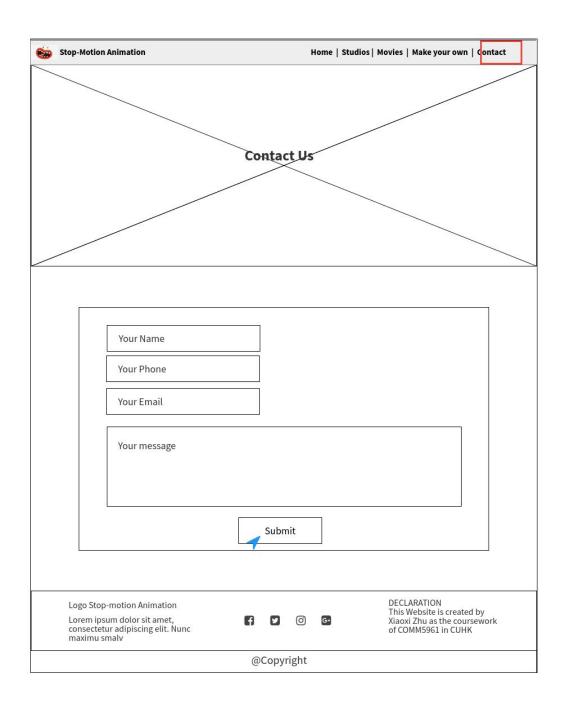
Movie Page



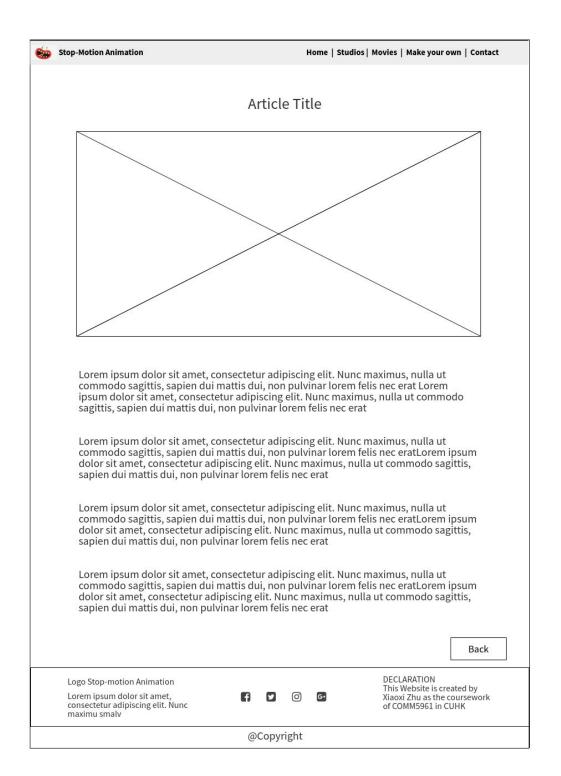
Studio Page



Make Your Own Page



Contact Page



As the wireframes show, the Home page presents the basic structure and the contents of the whole website, from the introduction of stop-motion animation to the contact page. I provide the primary information for every sub-page on the home page. The introduction part, the Top 10 movie gallery part, the most famous studio part, and the best tutorial article/ video part. Each page has its different header with a different image related to the content. In order to impress the first time visitor, I put a brief introduction to the center of the head part. An "About" button is under the brief sentence to jump to the introduction video. It starts the viewing behavior of the users.

On the "Movies" page, the top 10 movie gallery gives a strong visual effect when users visit this page. Personally, I don't like any website without any images. I added a data chart based on different categories to give users a general idea about all stop-motion animation movies. Then, the Airtable gallery view gives users a visual perception of every movie. It also allows users to filter the movies or search for their target film information. Of course, the top 10 is on the top of the original sort.

As for the "Studio" page, the famous studio part has clickable images that direct to article pages with more details. The map below will show the general distribution of all the stop-motion animation studios around the world. Every studio article page will also have an enlarged interaction map. Likewise, the "Make Your Own" page has clickable images and some YouTube videos. The difference is that the clickable images in the "Make Your Own" page are direct to the external links. It allows users to subscribe to the external channel or continue to read the other related articles. By the way, there will be a general description and a declaration at the footer part of this website.

Think Aloud Testing:

After I made all the wireframes, I wanted to know if my design would work well for users. A think-Aloud test will help me discover what my target users really think of the design. I decided to invite five of my friends to do a usability test. Two of them are big fans of stop-motion animation and want to create their own stop-motion animation video, the other three are interested in it but only watched one or two stop-motion animation movies. In order to do it in a simple way, I print out the wireframes that I create and show them to my friends. I decided not to have a mission for them and let them just freely navigate the website.

Before the test, I explained to my friends about the purpose and the detail about this usability test. I also informed them that I will record the whole process. I ask them to think aloud no matter its right or wrong. Their opinion is very important to me.

Stage	Question	Subjects (interested)			Subjects (amateur)	
		1	2	3	4	5
Homep age	What do you think this website is about?	A special website for people who love stop-motion animation. The "About" might change to another word?	Recommendati on and Basic creating acknowledge of stop-motion animation.	About stop-motion animation (movie).	I like it. I can see my favorite movie photos and videos.	It provides the information and sources of stop-motion animation.
Studio Page	How do you find the studio information you want?	From Home Page.	From the famous Studio part.	From the "famous Studio" part.	I can see the famous studios there. But I more like to find the local on the map.	By clicking the Studio photo.
Movies	How do you find the stop-motion	From the "Top 10" part.	"Top 10"	By clicking the "All	I choose the "Top 10" part	From the "Show all

Page	animation movie that you might be going to watch?			movies in on click" button.	first. Then, I'll look at the "All Movie List".	movies" area.
Make Your Own Page	How do think of the "Ingredients & Software" part?	good	It should include in the "How-To" part.	It is usable.	It should e include in the "How-To" part.	It's better to provide a download link.
	What do you think is the best part of this website?	Top 10 gallery	Top 10 gallery & Make your own.	Make Your Own Page	Home Page	Make Your Own Page
After Browsi ng All Pages	Is it easy to find what you are looking for?	Yes Better to put the "movies" page before the "Studios" page.	yes	yes	yes	yes
	Is there any other content you expect to see on my website?	Creation background (or YouTube link). Add names on the "Top 10" part pictures.	Put the famous movies of each famous studios in the studios' introduction article page.	Increase the number of recommended movies I've already seen the Top 10 movies.	Want more latest movies information and some related stories.	The sentence under the Main Title needs to shorten.

As is shown in Figure 13, subjects gave different feedback on the design and service of my website. According to the test, the website function was clear to users. The skeleton and content were reasonable too. Generally, all the information could be found by users in the way I had planned. The "Top 10 movies" part is their favorite and they could find their need information in many ways. However, users also pointed out some issues. Firstly, some of them think that the "Ingredients & Software" part is no use or should include in the article and video. So that I decided to delete that part! The articles and videos do include it. Secondly, they would like the "Top 10" has the general description of each movie image and it's better to be clickable. I'll also take this suggestion. Last, one person said that I should put the famous movies of the

studios' article page. That is a very good one! It will create a connection between the movies and the studios!

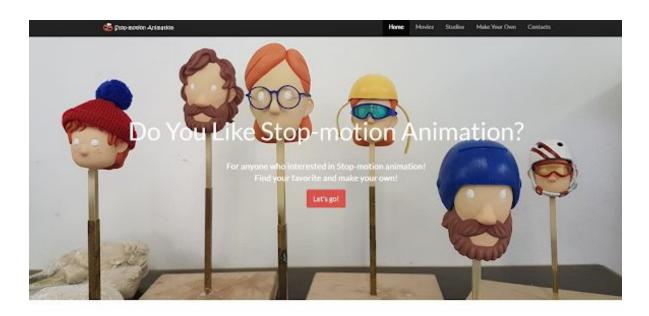
More specifically, an amateur would like more latest movies information and some related stories on the "Movies" page. It is also a good one. But I couldn't find enough records for additional categories in a short time. Want more latest movies information and some related stories. By the way, some of them talk about the "About" button and the sentence under the Main Title on the "Home" page. Therefore, I would leave this question to the A/B test to help me to decide. In a word, the paper prototyping usability tests helped me refine my design to better carry out surface creation.

6. Surface

According to the usability test results and the users' suggestions, I refined the website prototypes and applied the Pingendo and Bootstrap template to help me design the whole website. Responsive design is also considered to provide smooth user experience on different devices. Below is an example screenshot of the website home page.

For more details, please check via:

https://xxzhu1.github.io/xxzhu1.github.io/com5961 final/index.html





What is Stop-motion Animation?

Stop motion animation (also called stop frame animation) is animation that is captured one frame at time, with physical objects that are moved between frames. When you play back the sequence of images rapidly, it creates the illusion of movement.

The basic process of animation involves taking a photograph of your objects or characters, moving them slightly, and taking another photograph. When you play back the images consecutively, the objects or characters appear to move on their own.

The stop motion techniques can be used to create a wide range of film styles, not only clay animation.

- Commercials
- Music Videos
- · Television Shows
- Feature Movies













Step1 Film-maker



Claymation Basics



Home Page

7. Usability Test

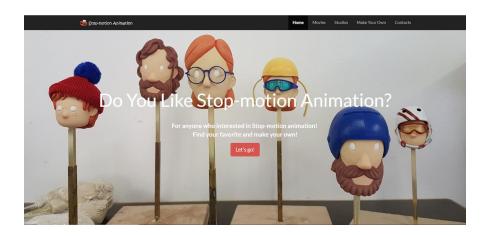
-- Five-second Testing & A/B Testing

Five-second Testing:

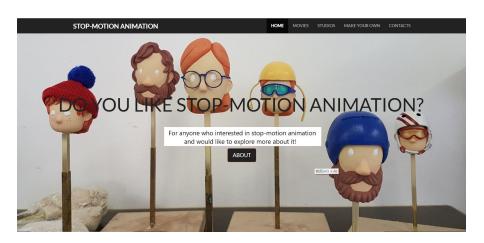
The five-second usability test was used to show the audience's first impression of the website and to measure how well the design conveys a message in a short period of time. I used the final "Home" page above to finish this test. To further exam the website, another round of user testing was conducted. This time, the participant is different from the think-aloud test. The question is the first question of the think-aloud test: "What do you think this website is about?" Every participant has a very clear idea that this is a website about stop-motion animation. They also said that the website design looks great and organized. Overall, the five-second test reveals that the webpage is able to communicate the intended message to the audience in an effective way.

A/B Testing:

For the quantitative usability test, I conducted an A/B testing to define the leftover problem from the think-aloud test. I change the color of the title, the description, and the button. I also changed the "About" button to "Let's go". The goal for the A/B test has been set as the user's "stay time" on the "Home" page. I already changed the look in the code, so the variant one the actually the original one that I set at the beginning. Cause believe in my participants. The shorten descrption and the "Let's go" button will works better. Below are the screenshots of the two versions.

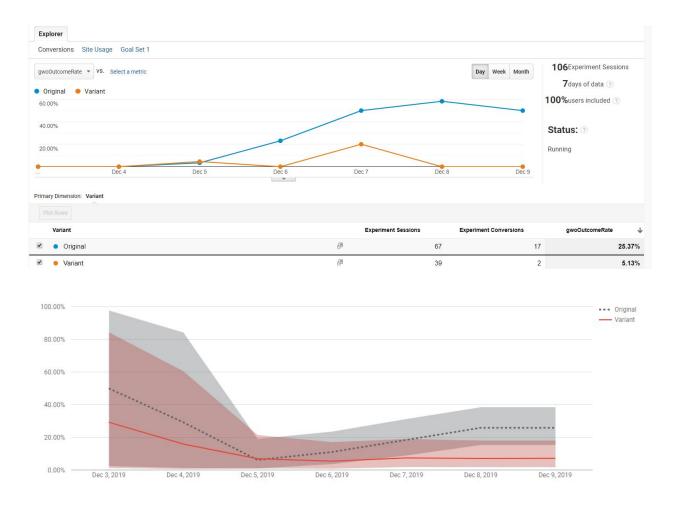


Original (Changed)



Variant

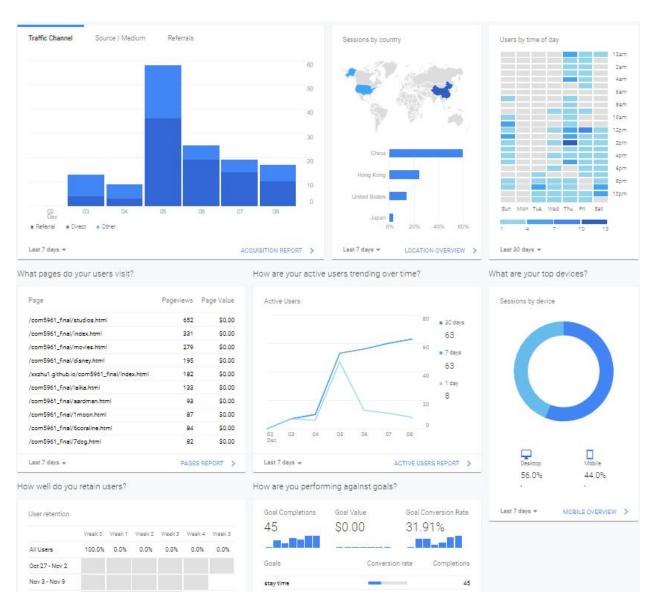
After running the experiment for a week, I have collected some data and it approved the thought of my participants and mine. As is shown in the report image below, the original (changed one) has attracted users' attention to stay on this page more times. The average Modeled Conversion Rate of the original (changed one) is higher. Though not all visitors are interested in stop-motion animation and the most traffic comes in the third tracking day, the result shows the difference. According to the statistics, overall, the "Original" (changed one) version performs better than the "Variant" version in terms of achieving a higher conversion rate, which means that people tend to stay longer in the "Original" (changed one) version.

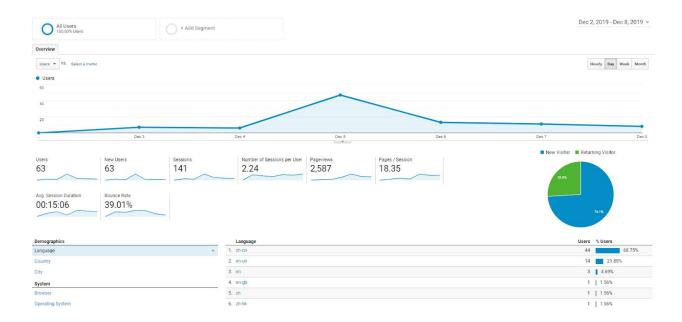


8. Dashboard

When it comes to measure and analyze the performance of the website, Google Analytics plays an important role. With the help of it, I created a dashboard with ten metrics, as shown below. Ideally, the target users of my website should be foreign visitors. However, it is not easy to find such a group of people and collect their responses within a week. Instead, I just sent my website link to my classmates and friends from American & Hongkong& Mainland. Some of them not know about stop-motion animation.

According to the data below, I have 63 visitors and most of them visit my website at noon. 59.57% of them come from Mainland China and 24.11% of them are from Hongkong. The rest of the visitors are my foreign friends. December 5th is a big day for me to collect data, I have 57 visitors on that day. Within all the visitors, 45 of them completed the goal of stay on the "Home" page for over 2 minutes. I'm still happy with that.





9. Conclusion

This is the first time to develop a data-driven website by myself. I would say that it was a precious and great experience. My website is still far from what I expected. For example, the browser shows the "Insecure Content Blocked" and I need to load the unsafe script. Also, the little uncomfortable view on the mobile device. However, I gained a deeper understanding of the principles of product development throughout he whole process. What I learned from this project is priceless! It will become a valuable experience for my future career, and I will bear them in mind to pursue further progress.