

Towards a New Interface for Music Listening: A User Experience Study on YouTube

Ahyeon Choi*, Eunsik Shin*, Haesun Joung*, Joongseek Lee**, Kyogu Lee*

* Music and Audio Research Group, Seoul National University, Seoul, Republic of Korea

** User Experience Lab, Seoul National University, Seoul, Republic of Korea

{chah0623, esshin, gotjs3841, joonlee8, kglee}@snu.ac.kr

Motivation

- In light of the enduring success of music streaming services, it is noteworthy that an **increasing number of users are positively gravitating toward YouTube** as their preferred platform **for listening to music**.
- However, despite the increasing popularity of using YouTube as a platform for music consumption, there is still a lack of comprehensive research on this phenomenon.
- We aim to delve into **YouTube's role as a music listening tool** and explore **potential improvements in its usability and interface**.

Participants

- 27 participants (mean=23.40, sd=3.13, 12 males and 15 females)
 - Who listen to music on YouTube at least three times a week** (while walking, exercising, taking breaks, studying, working on a PC, and socializing)
 - excluding those who rely solely on YouTube Music without using regular YouTube.
 - compensated with 10,000KRW

Study Design

- A preliminary questionnaire - to collect participants' demographic data and relevant info.
- semi-structured interviews** (approximately 30 minutes)
 - 1) **Verbal interview** : talk about habitual music consumption patterns, including weekly duration, preferred streaming platforms, and genre and content type preferences.
 - 2) **Usability test** : demonstrate the process of searching and listening to music on YouTube, which allowed for a natural exploration of the platform's advantages and disadvantages in comparison to other music streaming services.
 - 3) **UI proposal** : feedback on any aspects of the YouTube user interface that they found inconvenient or would like to see improvement. (provided empty interface templates on iPad for both music searching and listening situations, allowing them to freely configure the screen ratio, functions, buttons, etc.)
- Every interview was recorded, transcribed, and analyzed qualitatively.

Phase	Requirements
A Verbal Interview	Asking about participants' music listening habits and preferences along with the motivation to use YouTube.
Usability Test	Comparison of YouTube and other music streaming services and feedback on the interface of YouTube for searching and listening to music.
UI proposal	Propose YouTube interface design for music listening freely, and explain yourself.

Table 1. Three steps of semi-structured interview

Results

Category	Keyword	Freq	Total
Musical Diversity	official soundtrack + α	14	23
	playlist	9	
Convenience	familiarity	4	15
	accessibility	4	
	subscription fee	4	
	Customizing	3	
User Interaction	recommendation	10	13
	comments	3	
Visual Contents	thumbnail	6	10
	video	4	
etc.	etc.	1	1

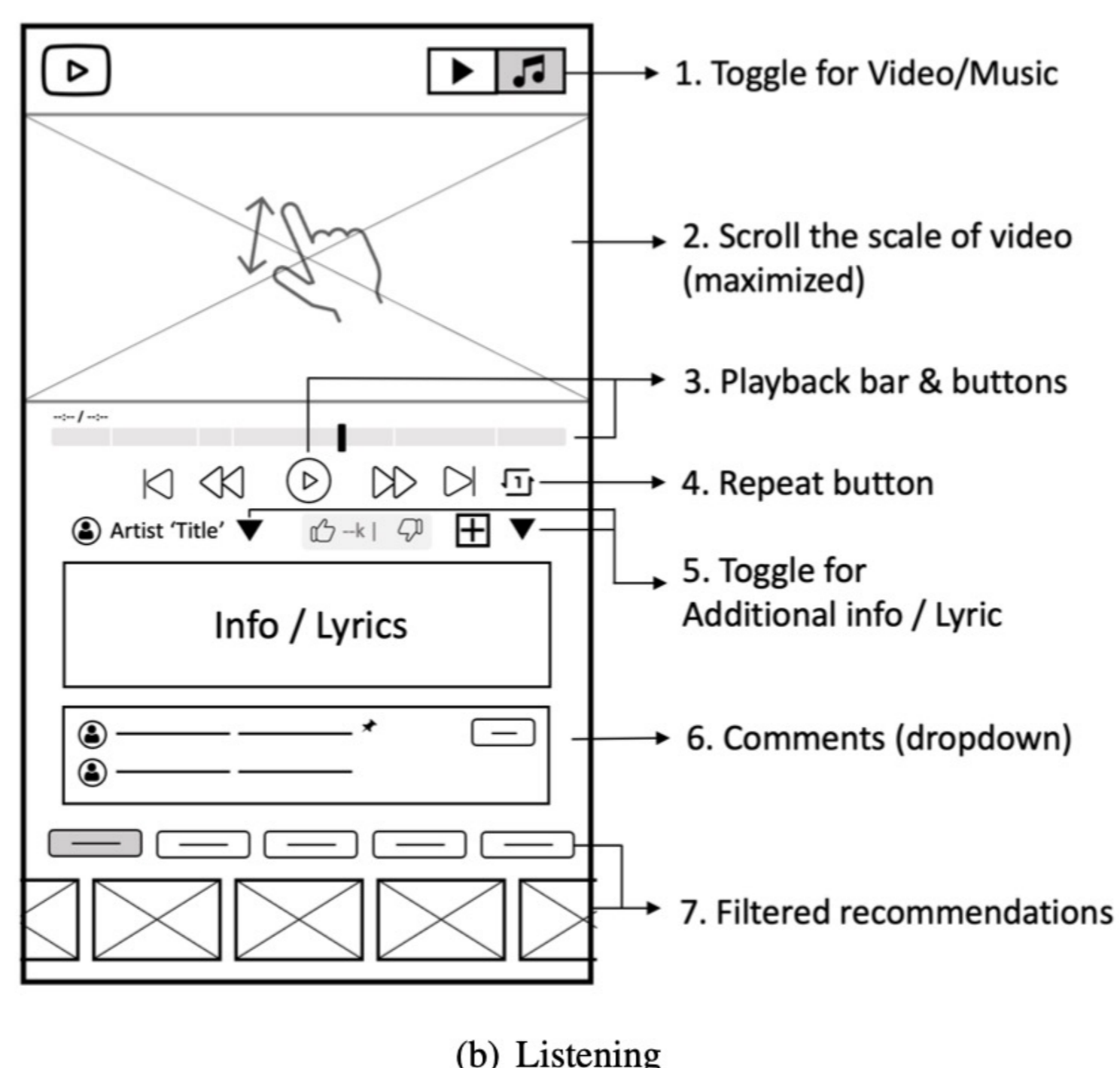
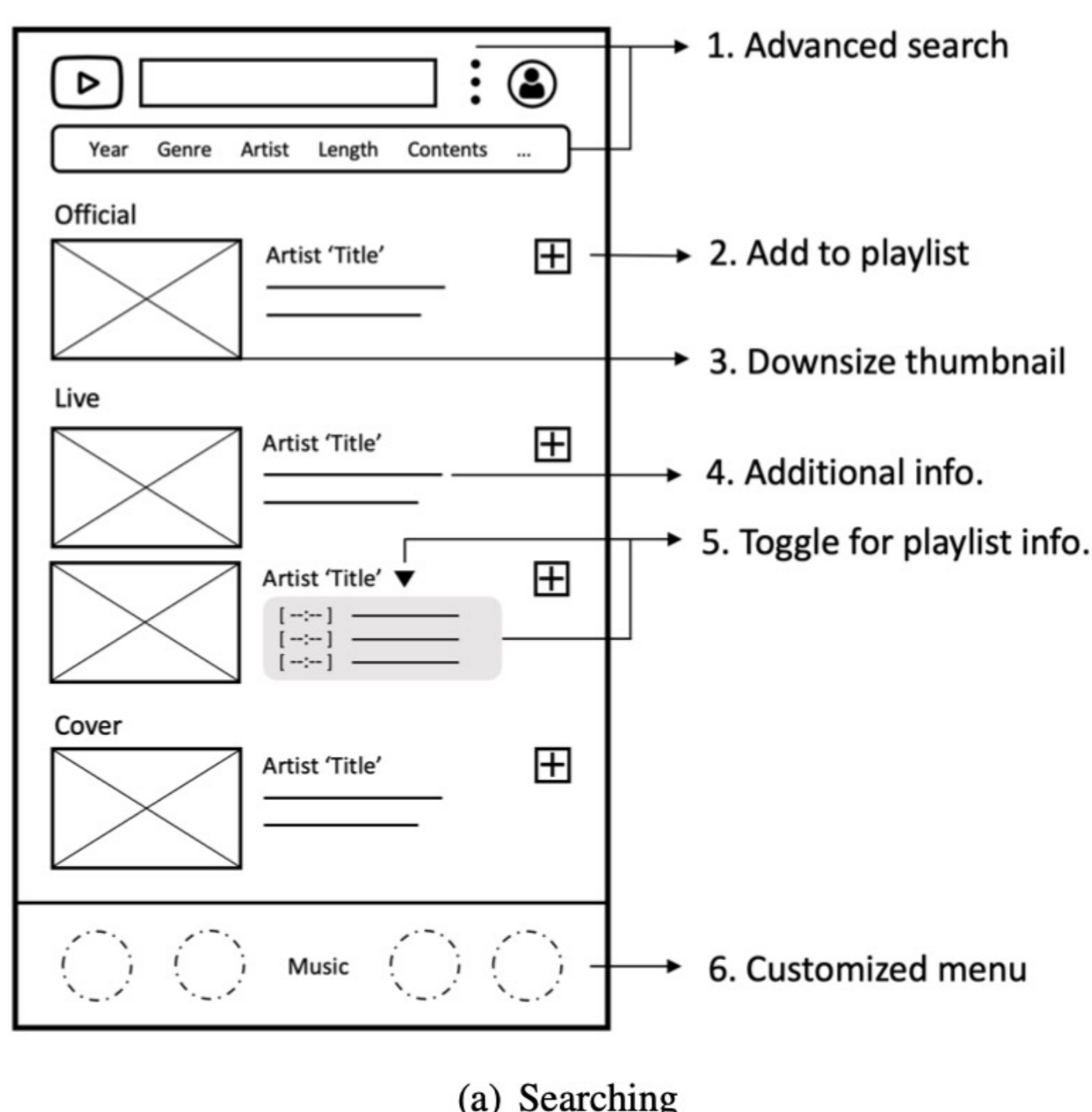
Table 2. Pros. keywords of usability test

Category	Keyword	Freq	Total
User Interaction	comments	12	21
	recommendation	9	
Manipulation	button / tap	10	17
	display ratio	7	
Playlist	playlist contents	4	10
	making playlist	4	
	mix playlist	2	
Section Search	timestamp	6	9
	playback bar	3	
Lack of Info.	song information	5	8
	log information	3	
Underutilization	replay	5	8
	volume control	3	
Contents Quality	sound quality	5	6
	video quality	1	
etc.	(video) data size	4	6
	etc.	2	

Table 3. Cons. keywords of usability test

- Our qualitative analysis found that **YouTube has five main meanings** for users as a music streaming service
 - 1) **exploring musical diversity** : a wide variety of musical genres, artists, and songs to discover and explore
 - 2) **sharing unique playlists** : select playlists based on keywords like mood or activity (e.g. spring day, driving playlist)
 - 3) **providing visual satisfaction** : musicians' expressions, gestures, style, and repetitive animations or thumbnail images
 - 4) **facilitating user interaction** : likes, dislikes, subscriptions, comments features, and recommendation algorithm
 - 5) **allowing free and easy access** : accessibility, cost-effectiveness, and cross-device compatibility

Findings and Discussion



- The research findings have broad application potential across various streaming services.
 - Features such as advanced search, customizable menus, and enhanced playlists can boost user engagement and satisfaction.
 - Effective music-related information presentation can enrich the user's listening experience.
 - Additional functionalities like video zoom and comment pinning provide a personalized user experience.
- These findings can significantly benefit YouTube, as well as aid other music streaming platforms like Spotify, Apple Music, and Amazon Music, and video streaming services including music videos, like Bilibili and Vimeo, in optimizing their interfaces according to their unique characteristics and users' needs.

Figure 1. A Wireframe of youtube UI for music listening