

Final Report

Group 11 (Youwen Xiao)

MUTOPIA

P r o j e c t

Overview

The Mutoria Project is a free sheet music website that I accidentally discovered. On this website, users can search directly or select instruments, composers, and styles to find the sheet music they need, and quickly download the required file format. Users can also upload music scores to the website without copyright issues. The navigation of the Mutoria Project is poorly designed, with important content placed in other locations instead of being in the navigation bar, and the navigation bar itself contains too much redundancy. This sometimes forces users to spend more time browsing the website to find the sheet music they need.

In this project, I hope to redesign this online free sheet music website and reconfigure the navigation bar and website content to make it easier to use.

The main functions of Mutoria:

1. Enable users to find the sheet music they desire.
2. Enable users to contribute sheet music that is not available on the website.

Personas:

Name: Chiaki Shinichi

Chiaki Shinichi is a young conductor. The day before an important concert, he lost his score. As the sheet music store in the city had already closed in the evening, he had to look for a sheet music website to download and print the score he needed.

Name: Isaac

Isaac is a student at a music college. He once downloaded the sheet music for Bach's Cello Suites from the Mutopia Project website. His classmate sent him a clearer version of the sheet music recently, and he hopes to upload this better version to the Mutopia Project so that more people can access it.

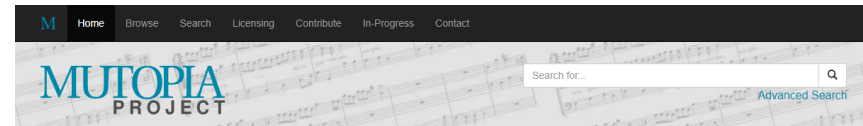
Research Methods:

- Content Inventory
- Card Sorting
- Information Architecture Testing
- First-click Testing
- Usability Testing

Problem of Mutoopia

The sheet music website needs to provide users with access to various music compositions from different instruments, countries, styles, composers, and time periods. If developers want to make this website more user-friendly, they need to consider how to provide an intuitive and convenient way for users to explore. Mutoopia has some design issues that make it difficult for users to use.

The two screenshots on the right are good examples. Mutoopia separates these categories into two different web pages, which may lead users to believe that one of the pages represents all the types.



Free Sheet Music for Everyone

2124 pieces of music – free to download, modify, print, copy, distribute, perform, and record – all in the Public Domain or under Creative Commons licenses, in PDF, MIDI, and editable LilyPond file formats. [More](#)

Latest Additions

2019/07/24 - Vocalise Nr 1, by Adf - for Voice, Piano

2019/07/13 - O tu ch'innanzi morte (L'Orfeo), by Monteverdi - for Voice (Bass), Reed Organ

2019/07/12 - Lesson I, The Diatonic Scale, by Vaccai - for Voice (Baritone), Piano

Instruments

Accordion [1]

Bagpipe [1]

Basso Continuo [78]

Bassoon [37]

Cello [107]

Clarinet [29]

Double Bass [14]

Composers

F. Abt [2]

A. Adam [2]

S. Adams [1]

D. Aguado [26]

I. M. F. Albéniz [1]

C.-V. Alkan [4]

G. Allegri [1]

Styles

Baroque [677]

Classical [612]

Folk [110]

Gospel [1]

Hymn [111]

Jazz [24]

March [8]

Collections

J. S. Bach's Inventions and Sinfonias

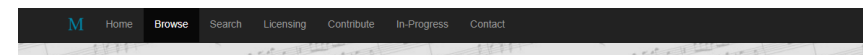
J. S. Bach's English Suites

J. S. Bach's French Suites

J. S. Bach's Goldberg Variations (BWV 988)

J. S. Bach's Lute Suite (BWV 997)

J. S. Bach's 14 Canons (BWV 1087)



Browse by instrument, composer or style

Some pieces in the archive are organised into collections, a list of which is immediately below. Click on any of the collection titles to display all of the music in that collection.

Below the collections are lists of instruments, composers and musical styles. Click on any of these to display all the relevant music in the archive. The numbers in square brackets indicate how many pieces of music are available in each section.

- J. S. Bach's Inventions and Sinfonias
- J. S. Bach's English Suites
- J. S. Bach's French Suites
- J. S. Bach's Goldberg Variations (BWV 988)
- J. S. Bach's Lute Suite (BWV 997)
- J. S. Bach's 14 Canons (BWV 1087)
- J. S. Bach's Orgelbüchlein
- J. S. Bach's Leipziger Choräle
- J. S. Bach's "Das Wohltemperierte Clavier"
- J. S. Bach's Solo Cello Suites
- Beethoven's Piano Sonatas
- Blake's "A Second Set of 6 Duets for a violin and a tenor" (Opus 2)
- The Gimo Music Collection
- Haydn's String Quartets (Opus 76)
- 60 National Airs of Different Nations, by F. Horetzky
- Hymns medley
- Scott Joplin's Piano Rags
- Mozart's Twelve Duets for Horn (KV 487)

Goal

My goal is not only to address these current issues but also to make this website more user-friendly through redesign. I will modify some navigation bars to make the website more intuitive. I will also completely redesign the entire navigation bar regarding the functionality of searching for sheet music to improve it.



Card Sorting 1

	About	Styles	Licensing & Co...	Nationality	Time Period	Instruments	Contribute	I don't know	unsorted
Popular		7							
License Details			6	1					
Classical		7							
Jazz		7							
Brass		1				6			
Woodwind						6		1	
String						7			
Medieval & Renaissance 476-1600					7				
Baroque 1600-1760					7				
Classical 1730-1820					7				
Romantic 1815-1910					7				
modern After 1900					7				
German		1		6					
European		1		6					
American		1		6					
Asian		1		6					
French		1		6					
Italian		1		6					
Mailing List	5		1				1		
Other Sheet Music Sites List	1		4				1	1	
Typeset Music		2					5		
Percussion		1				6			
Proofread/Check Music							4	3	
Upload New Sheet Music							6	1	
Romantic		7							
Rock		7							
Site Support	6						1		
FAQ	7								
Update Sheet Music							7		
Connect	5		1					1	

FAQ
Site Support
Connect
Mailing List
Classical
Jazz
Popular
Rock
Romantic
License Details
Other Sheet Music Sites List
American
Asian
European
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German
Italian
Baroque 1600-1760
Classical 1730-1820
Medieval & Renaissance 476-1600
Romantic 1815-1910
modern After 1900
String
Brass
Percussion
Woodwind
Update Sheet Music
Upload New Sheet Music
Typeset Music
Proofread/Check Music

	About	Styles	Licensing & ...	Nationality	Time Period	Instruments	Contribute	I don't know	unsorted
100%									
86%							14%		
71%			14%					14%	
71%			14%				14%		
100%		100%							
100%		100%							
100%		100%							
100%		100%							
86%			86%	14%					
14%	14%		57%				14%	14%	
14%		14%		86%					
14%		14%		86%					
14%		14%		86%					
14%		14%		86%					
100%					100%				
100%					100%				
100%					100%				
100%					100%				
100%					100%				
100%					100%				
14%		14%				100%			
14%		14%				86%			
86%						86%			
86%						86%			
100%							100%		
86%							86%	14%	
71%							71%		
57%							57%	43%	

People can reach a consensus on the classification of music. However, there are some disagreements regarding the categorization of Typeset Music and Proofread/Check Music. Regarding Typeset Music, I believe some of the testers misunderstood it as a music type. Therefore, I should modify the name to help testers understand its purpose correctly.

Card Sorting 2

	About	Styles	Nationality	Time Period	Instruments	Contribute	Contact	I don't know
Popular		6						
License Details	6							
Classical		6						
Jazz		6						
Brass					6			
Woodwind					6			
String					6			
Medieval & Renaissance 476-1600				6				
Classical 1730-1820				6				
modern After 1900				6				
German			6					
European			6					
American			6					
Asian			6					
French			6					
Mailing List							6	
Other Sheet Music Sites List	1					1	4	
Typeset Sheet Music					6			
Percussion					6			
Uploaded New Sheet Music						6		
Romantic		6						
Rock		6						
Site Support	6							
FAQ	6							
Update Sheet Music						6		
In-progress Upload Item						6		

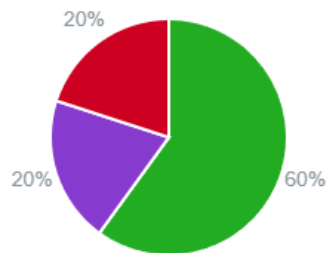
	About	Styles	Nationality	Time Period	Instruments	Contribute	Contact	I don't know
FAQ	100%							
License Details	100%							
Site Support	100%							
Classical		100%						
Jazz		100%						
Popular		100%						
Rock		100%						
Romantic		100%						
American			100%					
Asian			100%					
European			100%					
French			100%					
German			100%					
Classical 1730-1820				100%				
Medieval & Renaissance 476-1600				100%				
modern After 1900				100%				
Brass					100%			
Percussion					100%			
String					100%			
Woodwind					100%			
In-progress Upload Item						100%		
Typeset Sheet Music						100%		
Update Sheet Music						100%		
Upload New Sheet Music						100%		
Mailing List							100%	
Other Sheet Music Sites List	17%					17%	67%	

In the second round of testing, I removed "Proofread/Check Music," changed "Typeset Music" to "Typeset Sheet Music," replaced "connect" with "categories" on the card and added "In-progress Upload Item". The second Card Sorting was much better than the first one. Although there were still not enough participants, their choices aligned with my expectations. Therefore, I have decided to use it to design my website.

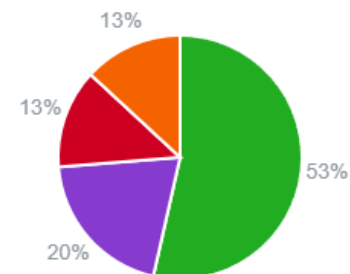
Treejack 1

I have conducted a survey to determine how many testers have previously used a sheet music website, and the results indicate that most people have not used one before. That is interesting.

Answer	Percentage	Frequency	
Yes	<div><div></div></div>	40% 6	
No	<div><div></div></div>	60% 9	



	Success	Direct	9	12	60%	80%
		Indirect	3		20%	
	Fail	Direct	3	3	20%	20%
		Indirect	0		0%	
	Skip	Direct	0	0	0%	0%
		Indirect	0		0%	











	Success	Direct	8	11	53%	73%
		Indirect	3		20%	
	Fail	Direct	2	4	13%	27%
		Indirect	2		13%	
	Skip	Direct	0	0	0%	0%
		Indirect	0		0%	

The first Treejack test went poorly as many users did not make the choices I expected.

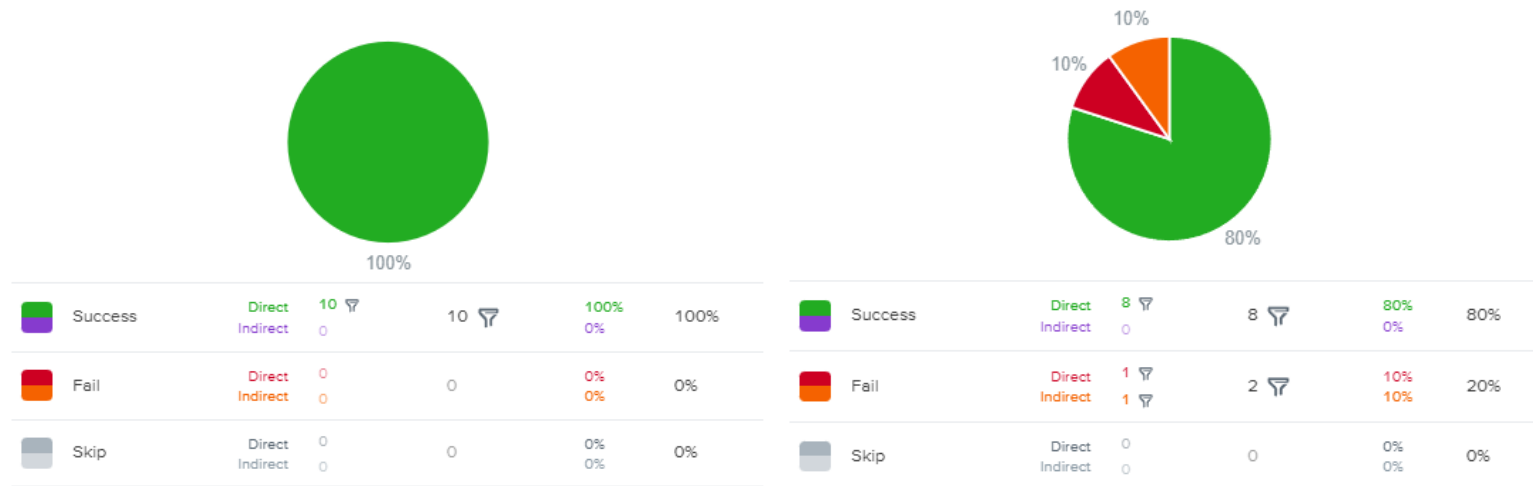
Both of these tasks are related to two main functions of the website, so this test is meaningful. I discovered some issues when I reviewed the user paths.

In Task 1, many participants chose to search for string instrument sheet music. This approach is feasible in actual usage, so I consider it as a pass in the test. However, to ensure the completeness of the test, I will make some modifications in the second round of testing.

In Task 2, I noticed that some participants seemed unaware that uploading sheet music required using the "Contribute" button. Therefore, I believe adding an explanation on the webpage could address this issue.

Result 	# of Participants 	Path 
 Direct success	9 (60%)	Home Page > Sheet Music > Instruments > String
 Indirect success	1 (7%)	Home Page > Search < Home Page > Sheet Music > Instruments > String
 Indirect success	1 (7%)	Home Page > Sheet Music < Home Page > Sheet Music > Instruments > String
 Indirect success	1 (7%)	Home Page > Search < Home Page > Home < Home Page > Sheet Music < Home Page > Contact > Other Sheet Music Sites List < Contact > Mailing List < Home Page > About < Home Page > Contribute > Upload New Sheet Music < Contribute < Home Page > About < Home Page > About < Home Page > Contact > Other Sheet Music Sites List < Home Page > Sheet Music > Instruments > String < Sheet Music > Instruments > String
 Direct failure	3 (20%)	Home Page > Search

Treejack 2

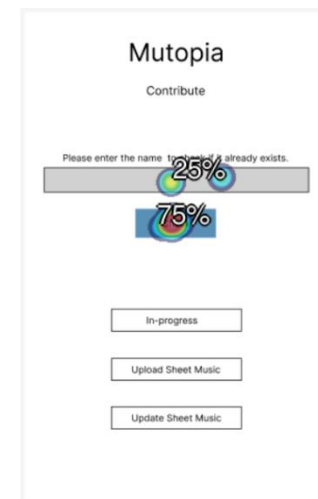
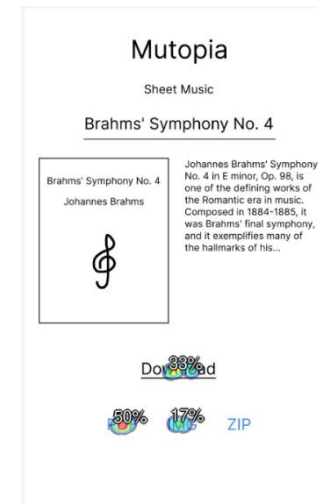


The second round of Treejack testing was very close to success. All participants were able to find the string instrument section in different ways. Although there were still two participants who couldn't find the correct location to upload sheet music, it was a significant improvement compared to the first time.

First Click

Task 1 is to have participants select the location to download the current sheet music from the download page. Unfortunately, 33% of participants clicked on the download icon instead of the three file formats. I believe the actual webpage should remove the underline or make it appear less like a clickable button.

Task 2 is to have participants select the position where the sheet music exists. So far, all participants have found the correct position.



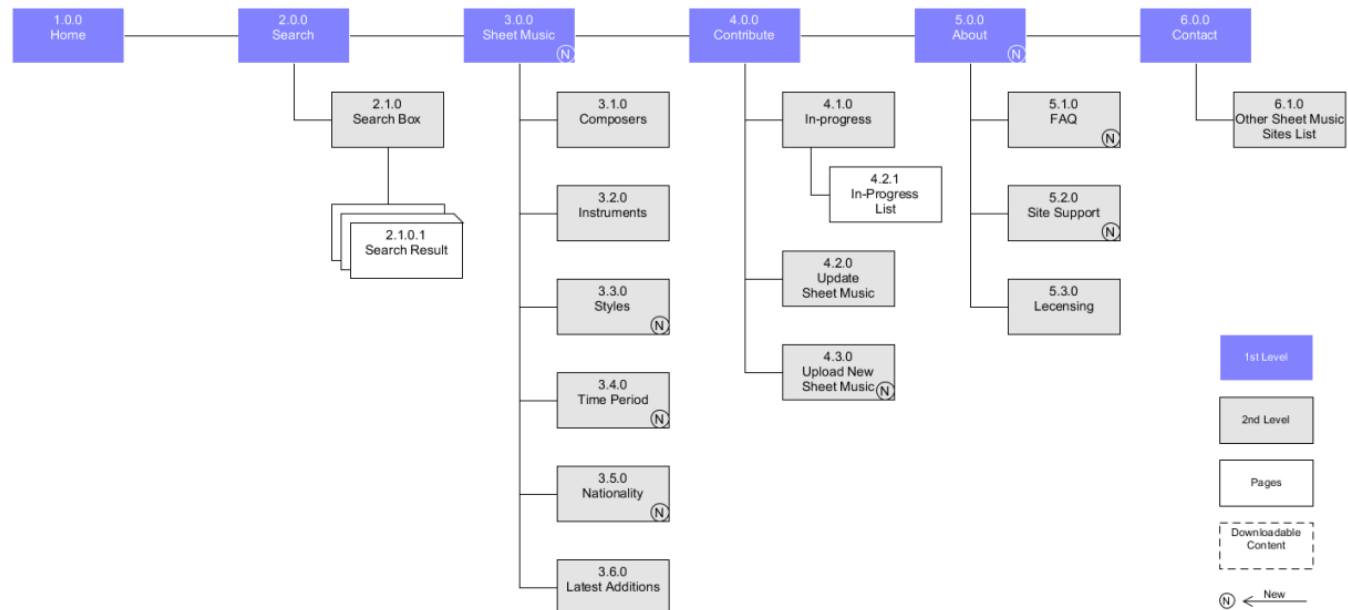
Free Listing

[click here for free listing](#)

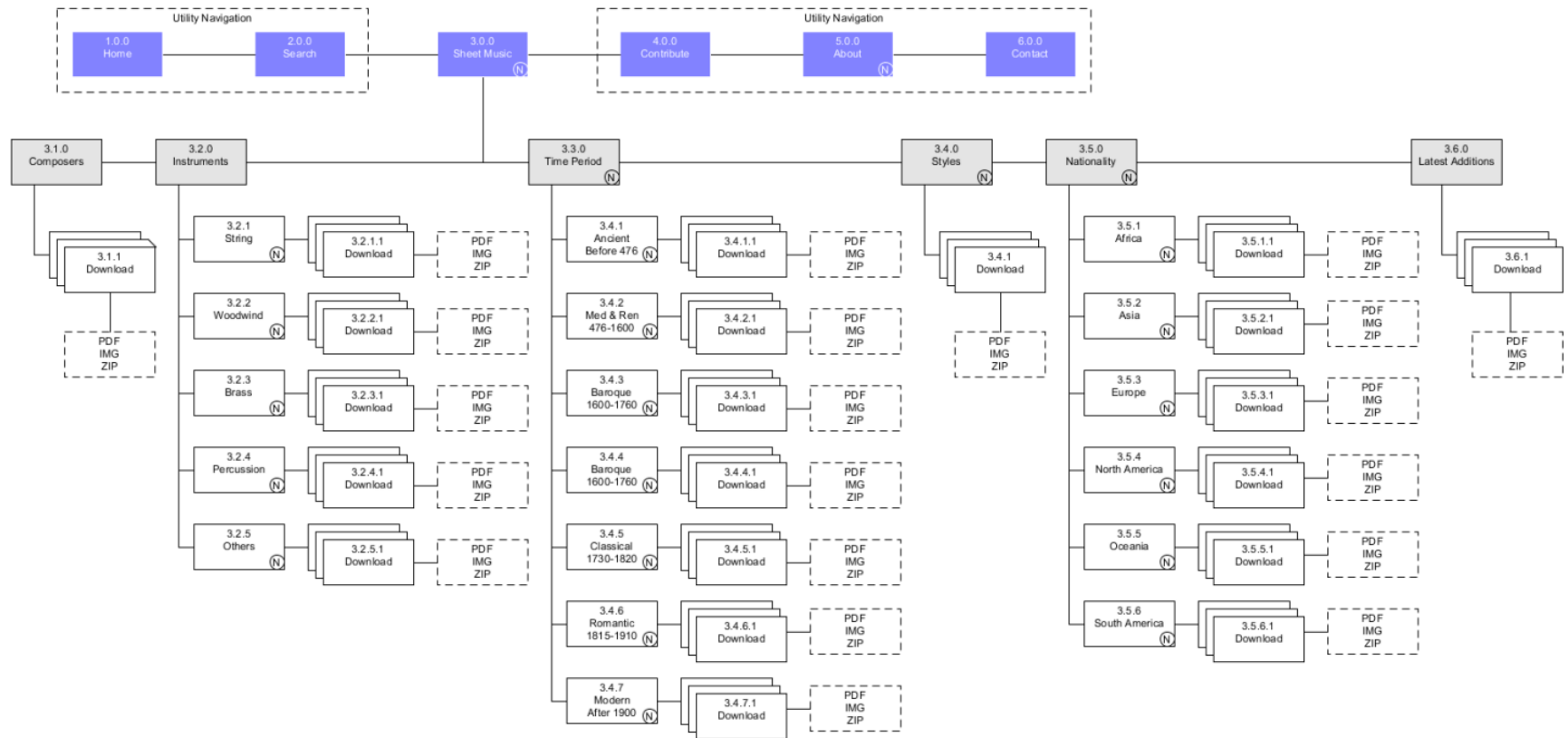
ID	Top	2nd	3rd	4th
1.0.0	Home			
2.0.0	Search			
2.1.0		Search Box		
2.1.1			Search Result	
3.0.0	Sheet Music			
3.1.0		Composers		
3.1.1			Download	
3.2.0		Instruments		
3.2.1			String	
3.2.1.1				Download
3.2.2			Woodwind	
3.2.2.1				Download
3.2.3			Brass	
3.2.3.1				Download
3.2.4			Percussion	
3.2.4.1				Download
3.2.5			Others	
3.2.5.1				Download
3.3.0		Time Period		
3.3.1			Ancient Before 476	
3.3.1.1				Download
3.3.2			Med & Ren 476-1600	
3.3.2.1				Download
3.3.3			Baroque 1600-1760	
3.3.3.1				Download
3.3.4			Baroque 1600-1760	

This chart can be viewed together with the Sitemap, which lists all the locations regarding the navigation bar and categories.

Sitemap



The navigation bar is divided into six sections, with the most important ones being the Search, Sheet Music, and Contribute sections, which serve specific functions. In the Contribute section, users can view ongoing projects and update or upload sheet music to Mutopia.



Although the Sheet Music section may appear complex, all branches primarily rely on six sections: Composers, Instruments, Time Periods, Styles, Nationalities, and Latest Additions. Different categories may link to the download page of the same sheet music, and users have three formats of sheet music available for download: PDF, IMG, and ZIP. Considering that some chamber music and large ensemble music pieces may have multiple instrument parts, the ZIP format is necessary.

Key Task 1:

Download Sheet Music

1.0.0 Home Page
Users can choose "Sheet Music" to search for sheet music through various categories.

3.0.0 Sheet Music Page
Users can search for desired music scores in various ways on this page.
In this task, users need to select the period to find sheet music.

3.4.0 Time Period Page
This page displays various time periods of music, and users can also make judgments based on the specific years on the right side. In this task, users need to select the Romantic period to find the desired sheet music.

3.4.5 The Romantic Period Page
The corresponding description will be displayed beneath the page's title.
The sheet music will be displayed in alphabetical order.

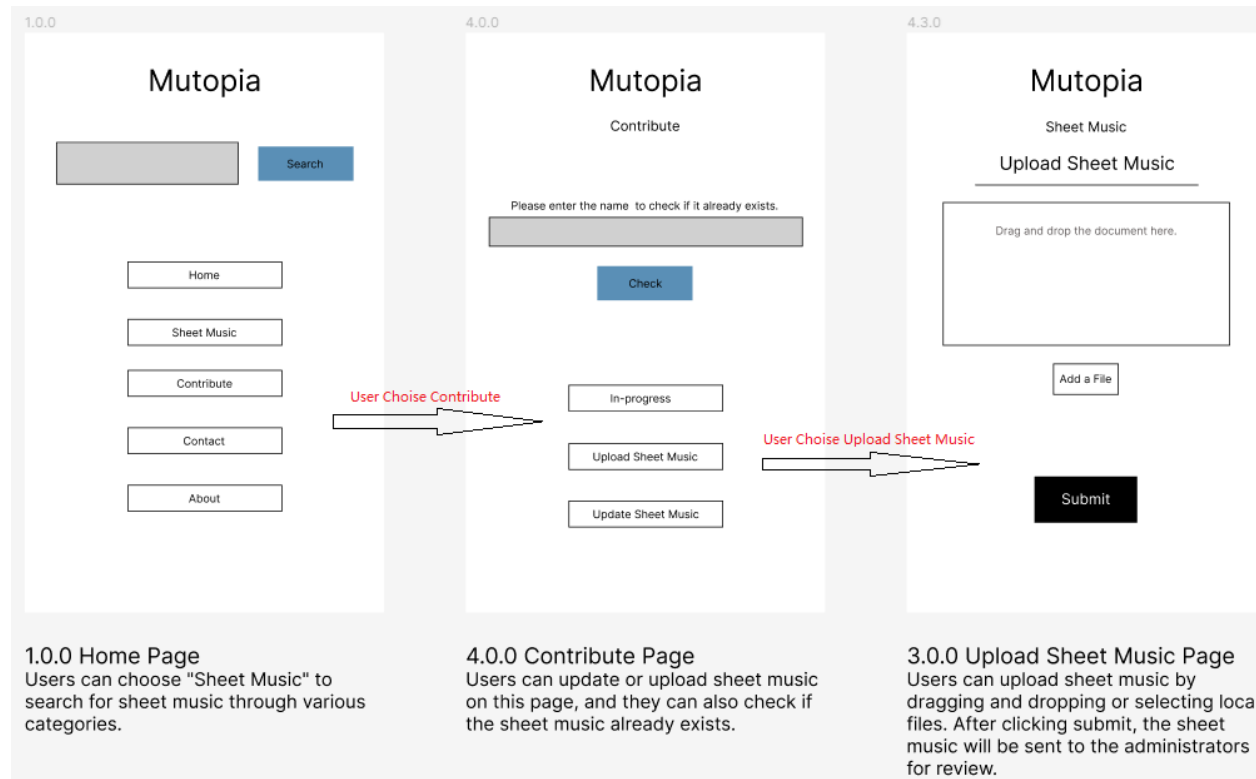
3.4.5.1 Download Page
This page includes cover previews, brief descriptions, and download links for music scores. The files are available in PDF, IMG, and ZIP formats, and users can simply click to download.
Here, when we click on the PDF, the download will be completed immediately.

User annotations:
- "User Choose Sheet Music" (arrow from Home to Sheet Music)
- "User choose Time Period" (arrow from Sheet Music to Time Period)
- "User choose Romantic" (arrow from Time Period to Romantic Period)
- "User choose they wanted" (arrow from Romantic Period to Download page)
- "User clicks PDF to download" (circle around PDF link)

In this task, the user needs to find the sheet music for Brahms' Symphony No. 4 via period and download it in PDF format.

Key Task 2:

Contribute Sheet Music



In this task, users can contribute to the website by uploading new sheet music.

Retrospective

During the process of completing this project, I made a lot of mistakes, such as forgetting to conduct a second round of testing and not saving the revision history of the site map, among others. It was more challenging to accomplish this task alone than I had imagined, but in the end, I managed to do it. When I first discovered that the Treejack I considered to be quite perfect still had issues that could mislead participants, I thought of many ways to solve this problem, and each iteration of the current task brought me joy.

When designing the site map, I need to ensure that each category is logically organized. Additionally, I consider whether users can easily accomplish key tasks during each iteration.