

Reorganizing the Music Library

An Interactive Qualifying Project Report

Written by

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Abstract

A few years ago, the choral music library was destroyed. After this, there have been a series of IQPs set up in order to restore and improve upon the sorting system. Our IQP is a conclusion to the restoration and improvements of the system. We set out to sort the remaining pieces into the system and give an analysis of the system that was implemented along with recommendations for improving the system. After gaining an understanding of the library and sorting the remaining pieces, we turned to the analysis of the system. We compared WPI's system to other systems to determine its efficiency and how to make possible future improvements.

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1. Introduction

The focus of our project was to sort music sheets and to review the whole library entry system and improve upon it. We sorted the music sheets which were recorded with wrong or missing box number and created a method to enter it into the existing database.

We began with sorting the pieces into alphabetical order. We then recorded the alphabetically sorted sheets and put the names into the choral library database. We then learned how to search the database. Next, we put the music sheets into boxes and learned ways to make new entries into the database. In order to learn more about how to better organize the library in the future and to get a reference point for WPI's system, our team went to Holy Cross to visit their music library. In addition, we found several websites that are also helpful for referencing our music library and to gather information for future recommendations. Lastly, to meet the needs of the Glee Club, we moved music sheet sets into new binders with the help of the ISP team. During the entire process, we met with Professor Delorey and Katelyn weekly to discuss the agenda and other issues.

2. Background and Research

Background:

In 2008, a large chunk of the Choral Music Library was destroyed by water damage due to a burst pipe. Along with destroying much of the library, it was brought to the music department's attention that when they are restoring the library, they should create a formal system to store the music. A series of IQPs were then set up to restore the library and improve upon the previous library system. The system that the IQPs had set up is the current, fully functional system for storing the music library. Our IQP comes after the system has been implemented and it covers the analysis of the implementation of the library and how it can be improved for the future. We also added the remaining pieces into the library and created our own new entries form.

Research:

The first part of our project required us to research how WPI's Choral Music Library works. In order to do this we had Professor Delorey and Katelyn walk us through the system. They brought us to the closets which hold the library and showed us how they were stored. After the walk through we came up with an outline of how the system works and how to sort music into the system:

Each piece of music has an assigned number. This number along with information about the piece is recorded on an excel spreadsheet.

A box is then made for the piece to go in. That box is then labeled and it is placed in the one of the three closets dedicated to storing the library. The boxes are ordered in the closet in chronologically.

How to sort the music:

Step 1: Find the composer and the name of the piece of music.

Step 2: Search the excel database sheet for the piece and corresponding assigned number of the piece.

Step 3: Find the box and make sure the music in the box matches what the excel sheet says

Step 4: If it matches, put the music in.

After figuring out how to sort music into the library properly, we were able to then sort the unsorted music.

Our second step in our research was finding the previous IQPs that worked on the choral library and review their work. From this we were able to further look into how the library was put together and see what could be done in the future to improve the library. The majority of the research was done on the Alden Hall Music Library Rearrangement IQP. This IQP was the last IQP to modify the system and made the latest version of the numbering system. This project took the idea of sorting by using consecutive numbers. This system has shown to be best for libraries that are constantly being updated and being added to. This sorting allows you to give each piece of music a unique number which corresponds to the chronological spot that it has on the shelf. The number that the piece is assigned to has no correlation to the piece itself. The problem with this system is that you must rely on having the master sheet which names all of the pieces with its corresponding number. This is the only efficient way of finding the piece that you want since they music is not stored in any specific order. The advantage to this system is that if you are limited in space all you have to do to add another piece is to assign it the next highest number and put it at the end of the library. This keeps you

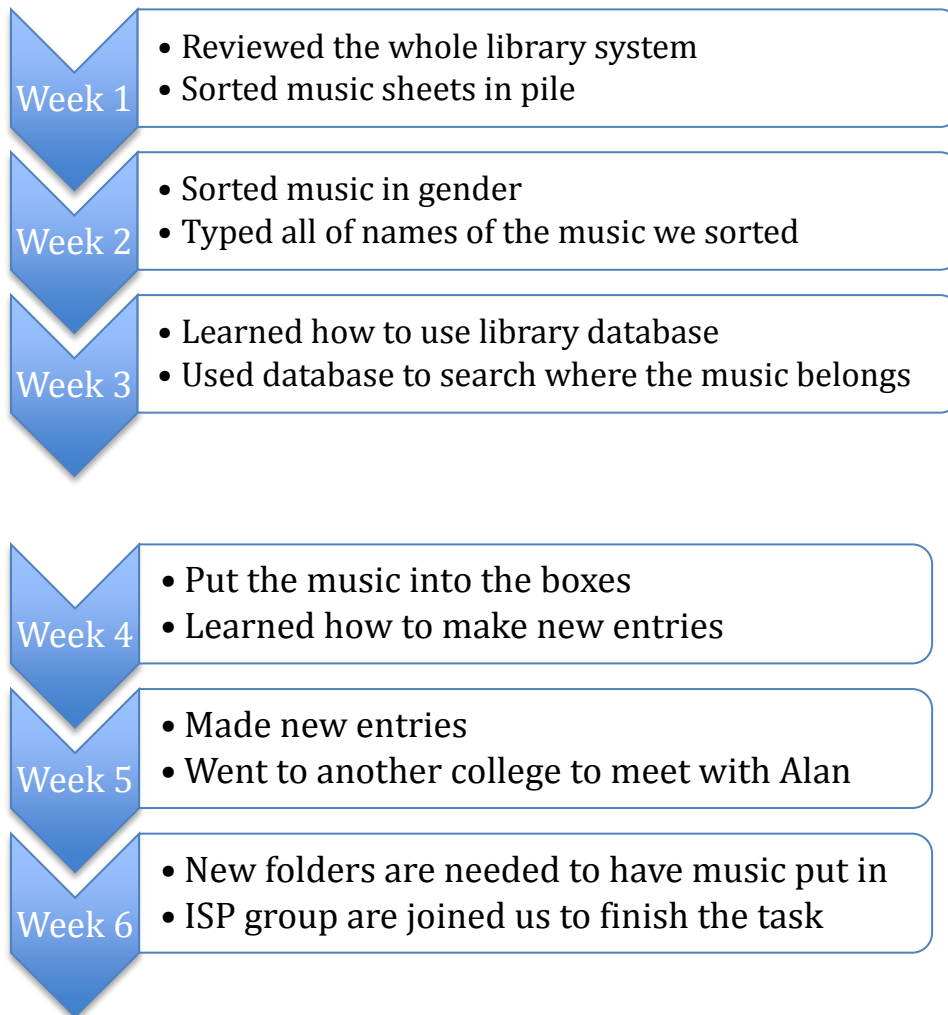
from having to readjust the shelving in order to fit the box in the right place such as if you sorted the music by composer or song name.

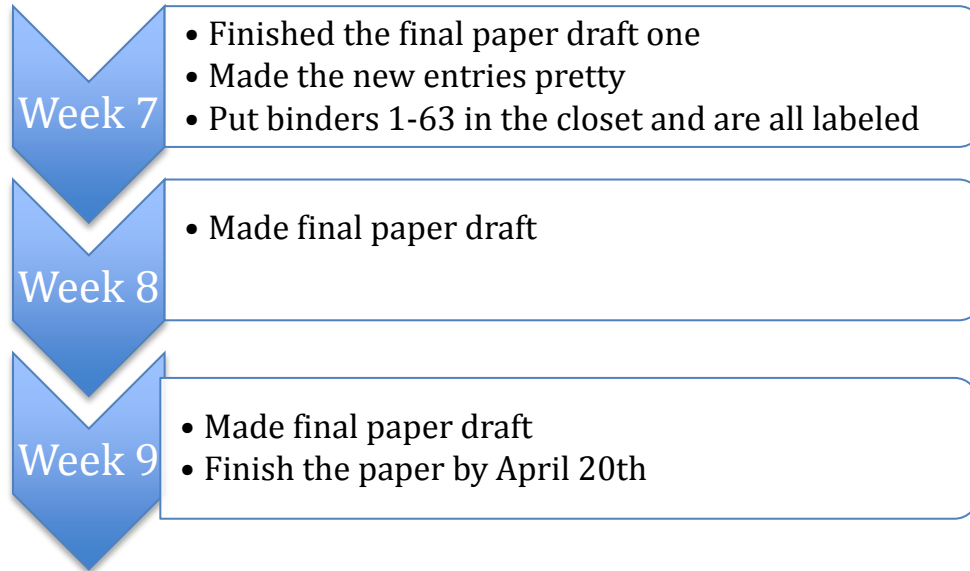
In order to get a reference for how well WPI's library works, we visited Holy Cross's Choral Library where we were shown around by Alan Karass. We were able to view how their general music library works along with how they deal with their separate library holding the American Guild of Organist's pieces. Their entire system is based off of a piece of software which stores all of the data about each piece. You can see an example of what information that is stored by the picture in appendix B. The software allows you to quickly and easily find any piece in the library by a simple search. Once you find the piece, all of the information on the piece will be shown and it will give the location of it for you to grab the copy.

From looking at their system, it is clear that there are many ways in which WPI's library can be made more efficient. Moving WPI's library to a single area dedicated to storing the music would help. The current library is split between two small closets and this can lead to confusion and inconvenience. Another way in which the system can be improved is by using a better way to store the information the pieces. Currently we are using an excel sheet in which is a very inefficient way of storing this data. First off, this is very insecure since it could be easily lost and all the recent information would be gone since there is only one up to date excel file. The second negative side to this is that if anyone needs to find a piece or add a new piece to the library, they can only use that specific excel file which is inconvenient. It would be recommended that WPI upgrades their database into a piece of software similar to what is at Holy Cross. It would be time

consuming and costly to put the database into a new piece of software but the move would make the database a lot more organized and easy to use. A check in and check out system could also be implemented into the system with the software.

Flow Chart





3. Methodology

For the first week, we went over how the music library works. All of the music is stored the closets in Alden Hall. The music is numbered numerically and is put in different boxes in order. However, there are many problems that need to improve, like that the boxes are not always put back in order and in each box many pieces of music are missing. The main task of first week was to sort the remaining unsorted music which was located on a table in pile in front of the closets.

For the second week, after put the music in pile, we started to learn how to sort them by gender. We sorted music by male, female, and both. For example, if the music shows Bass and tenor, the music piece is guys only. If there only both Alto and Soprano in the music, the piece is girls only. SATB means for both boy and girl. We then typed up all of the pieces by gender in order to make the task easy for the next week. In the meeting with professor Delorey, we learned how to organize our meetings. This includes

making a PowerPoint, Agenda, and Meeting minutes for every week. Our weekly agenda included four parts: minutes, old business, new business, and action items. Recording these items in an agenda helped us organize what our goals were for each week.

For the third and fourth week, we learned how to use the music library database and use it to search where the music belongs. In the database it shows the title, the composer, the number of copies, the gender, and the box number. What we did was find the title of the music and the matching box number and then put the music into the corresponding boxes. If we could not find the music on the database, we recorded the information on that piece. After we finished, we learned how to make new entries for the music that do not have boxes for yet. Also, around this time, we received the keys for closets in order to be able to work on the project on off hours.

For the fifth week, we finished the new entries and made appointment with Alan Karass. We visited Mr. Karass at Holy Cross's music library in order to research how their music library works and to also get ideas on how WPI's system can be improved. We were walked through their music library and Alan showed us how they sort their music and how the music system works on their computer. We also took many pictures of their music library for future reference.

For the sixth week, the ISP group joined up with us to do a new task. New folders needed to have music transferred into them. This totaled sixty-eight folders for the men and sixty folders for the women. The music needed to be three-holed punched, put in the folder alphabetically, and then numbered. The music that was missing was noted

and we located new copies to be put in in order to complete the sets. Finally, the folder was to be put into closet in order. We met two to three hours per day for a week.

For the seventh and eighth weeks, we separated work for our final paper and wrote draft one. Also, we made the new entries form in Excel and formatted it to look proper. The form was then converted to PDF format.

In the following weeks, we focused on writing the paper. We made three paper drafts before our final draft.

4. Recommendations and Possible Changes for the Future/Results

At this point, all the boxes are numbered. A new entry form has been created to record the music sheets. However, some of the sheets are still missing. What remained for future IQP teams is to create a system that records the borrowing and returning of the sheets. The system can be an online system. An entry of the system should records language, gender, date of creation, and location of a music sheet.

In addition, to prevent another accident from happening, the music department may consider moving the boxes to another place which is safe and large enough for storing all the boxes. The current music library is in a good shape; however, it has a potential of being destroyed by water or fire. The system can be based on the system of Holy Cross College. (Appendix C)

5. Conclusion

Our overall goal was to analyze the current system, propose new ideas, and refine the system. We finished our work on time and achieved our goals. The boxes with wrong music sheets have been filled with correct ones. The music sheets are sorted by names, parts, instruments and composers. The disorder in the library has been addressed and the future use of the library should be more convenient. In addition, we recorded our work through PowerPoint slides, meeting minutes, the agendas, and our paper which may help future IQP teams.

Our IQP was to help the music department in sorting the remaining music sheets and to give insight and suggestions on the existing music library. We hope that our project will help with the decision making on future changes. For our personal gains, we learned how to sort music sheets, coordinate with other groups, manage our time, and record the work we have done on a weekly basis effectively. This project was a good way for us to familiarize ourselves with the workings of a chorus when we formerly knew very little on how it works.

Appendix

A: New Entries Form

New Entries

Choral IQP Group: Shuyang Wang, Jay Miller, Chutian Zhao

TITLE	GENDER	COMPOSER	# of copies	# of original
Quodlibet on Sea shanties	male	/		3
MEGURU. Kabango song from Namibia	both			
Deal Gently With Thy Servants, Lord	both	The Revivalist		2
Star in the East	female	/	8	1
A Virgin Unspotted	both	William billings		3
Hanacpachap cussicuinin	both	/		2
The Star of Bethlehem	both	/		5
Baba yetu	both	Christopher Tin		2
Christmas Hymn	both	/		2
Jesus the light of the world	/	/		1
A Christmas Festival	both	Leroy Anderson		4
Stairway to the Stars	female	/		3
Boogie Woogie Bugle Boy	both	Don Raye;Hughie Prince		3
Ronde du crepuscule	female	Cecile Chaminade		6
Christmas on Broadway	both	/		2
We beheld once again the stars				
salve regina	both	william cornysh		1
Hallelujah Amen	both	handel		3
Hallelujah Chorus	female	Handel		19
The babe of Bethlehem	/	/		9
love is sweeping the country	/	George Gershwin		2
officium Defunctorum	/	cristobal morales		3
Wlak together children	both	Anthony Leach		4
willow tree	both	/		6
I let a song go out of my heart	both	Duke ellington		3
Psalm 54	/	Ainsworth Psalter		2
Credo	/	/		3
Senior song	male	J.S.Hamilton		19
preces and responses	male	/		3
Xicochi cicochi	both	Gaspar Fernandez		4
Media Vita	both	/		1
Down among the dead men	male	/		5
Verbum bonum et suave	/	/		2
M.L.K.	male	The King's singers		4
The chemical worker's song	male	C.Freitas		12
Fortuna imperatrix mundi	male	Carl orff		3
Stouthearted men	male	sigmond romberg		17
By the Rivers of Babylon	both	Bob Marley		36
Pavane	male	Arbeau		4
Psalm 148:7-14	/	tim brumfield		18
Kafal Sviri	female	/		1
lemanja	/	/		13
jazz radio	/	/		2
sanctus	Both	/		1

B: Holy Cross Computer Database Form

Mon Feb 25 15:42:25 EST 2013
 b15263368 Last Updated: 10-10-2011 Created: 12-03-2007 Revisions: 6

Language engEnglish Cat. Date 12-03-2007 Bib Code 3 -
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 Location hm Music Scope (DO NOT USE) Material Type cPRINTED MUSIC

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 Misc. 049 HCDM
 Call No. 099 AGO|aM2003|aH36|aM47|aB37|a1972
 Author 100 1 Handel, George Frideric,|d1685-1759.
 Title 240 1 0 Messiah.|sVocal score
 Title 245 1 0 Messiah :|boratorio in three parts /|cGeorge Frideric Handel ;
 edited by John Tobin ; vocal score based on the Urtext of the
 Halle Handel Edition ; arranged by Max Schneider.
 Publication Info. 260 Kassel ;|aNew York :|bBärenreiter ;|aNutley, NJ :|bExclusive
 distributor in the U.S.A. and Canada, Foreign Music
 Distributors,|cc1972.
 Description 300 1 vocal score (345 p.) ;|c27 cm.
 Note 500 Publisher's no. : BA 4012b.
 Note 500 For solo voices (SAATB), chorus (SSATB) and orchestra; acc. arr.
 for piano.
 Note 500 Libretto compiled from the Old and New Testaments by Charles
 Jennens.
 Subject 650 0 Oratorios|vVocal scores with piano.
 Subject 600 0 0 Jesus Christ|vSongs and music.
 Subject 690 0 American Guild of Organists Worcester Chapter Collection
 Added Author 700 1 Tobin, John,|d1891-1980.
 Added Author 700 1 Schneider, Max,|d1875-1967.
 Added Author 700 1 2 Jennens, Charles,|d1700-1773.|tMessiah.
 Misc. 994 C0|bHCD

C: Photos of Holy Cross Library

Tools Admin Help

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Misc. 048 HCDM

Misc. 049 AGO|aM2003|aH36|aM47|aB37|a1972

Call No. 099 Handel, George Fr|deric,|d1685-1759.

Author 100 1 Messiah. |sVocal score

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