PROJECT ROLES AND RESPONSIBILITIES

Project Group Name	Mandobasses	
Name	**Role**	**Responsibilities**
Nathan Cameron	General Developer	Developing on all aspects of the codebase including the front and backend, planning meetings, and making notes on any topics the RMO mentions.
Yuting Li	General Developer	Main role is to work on both the front-end and back-end of development, help where the project is lacking and help pick up the slack. Will also focus on some of the designing parts of the project.
Michael Osachoff	General Developer	Provide support in front-end and back-end development while assisting in sections of project design.

PROJECT SPONSOR

Project Sponsor	Tim Macaig
Sponsor Description	ENSE 271 Lecturer & RMO Member

BUSINESS NEED / OPPORTUNITY

Proposed Project	Mandobasses
Date Started	May 11, 2022
Background	The Regina Mandolin Orchestra is a democratic, member-run, nonprofit group registered in Saskatchewan. RMO has its own website but the current version cannot fulfil all the needs. The purpose of our project is to build an efficient and highly usable website according to their needs and therefore to help them manage the orchestra as well as resources more efficiently. The primary focus of the project will be the functional features that help solve the problems and a user-friendly interface that can easily guide the users.

Business Need/ Opportunity	Primary Needs: - Being able to distribute music sheets efficiently to members from different teams - A database that can store each user's unique username and password - Corners such as a student-teacher corner that can store contact information - Well-arranged navigational elements Other Needs: - Audio file/youtube video for practice directing - Display only the music for the current season, and store the rest in the Archive - Able to arrange music in different ways such as past to present, present to past etc.

PROJECT PLANNING REFLECTIONS	
North star & Carryover Customers	**Northstar customers:** The conductor and administration board for easy additions to the website. **Carryover customers:** The regular members of the orchestra to make music gathering easier.
Assumptions & Constraints	**Assumptions:** One of the major assumptions made by our group for our project was that WordPress and its plugins would be able to easily facilitate all of the functions that we wanted to provide for the RMO for free. We also assumed that we would be able to implement most of the functionality we desired within the 7 weeks of time that was provided to complete the project. **Constraints:** The biggest constraint was using WordPress to create the site. The RMO also wanted this site to be as low cost as possible. The site had to be developed in 7 weeks with only 2 of those being for actual web development. Another constraint was the ability for users to have roles and see sheet music based on that role.
Key Findings	Through Affinity Diagramming and Empathy Mapping our key findings were that the RMO's biggest problem was with the distribution of music. They were sending out mass emails with too many attachments and it became very confusing. They want a way to distribute music based on section roles, so only the correct music makes its way to the members.

	The conductor and admins want an easy way to upload new files and music to the site and they want to do this in a clean way by both dragging and dropping and going through the file browser.

The RMO members also want the website to be responsive so they can use any device for downloading and printing music. |
| **Initial & Evolution of USM/MVP (and why is it an mvp)** | The initial User Story Map (USM) had lots of required features and some features that would make using the site more humane. As we went on we followed the map and most of the essential features in the minimum viable product (MVP) were met, there were some features that would be nice to have that didn't end up making it in yet but were not essential. Having all of the essential features done would delegate this as the first MVP as everything functions but the polish and efficiency of the features has not been completed yet. |
| **Summarise prototyping activities and findings.** | During prototyping we found that the RMO likes to have the buttons visible on each page. This links to gestalt's law of proximity where items are placed together to show similarity, which, for us, are the pages under the menu. The RMO also liked the signifiers that go along with pages so they always know where they are. We also found that the RMO wanted cards where possible to make mobile interactions more humane. This relates to the desirability and delight that the RMO will have for our website as it will be easier to use. |

PROJECT RESULTS REFLECTIONS	
Feelings towards the Project	Overall the project was good, with the prototyping and requirements gathering being beneficial and was an interesting process to be involved with. Going into WordPress was less enjoyable due to its limitations and constraints which made the development process trickier and it was harder for us to create the vision we had prototyped. This can be disheartening especially for features that the team was excited to implement or features we thought were unique and would add value to the website, and unfortunately many of these features became difficult to implement under full functionality.
What Went Well?	For the project the prototyping went well, the lo-fi designs were clean and met most of the requirements from the RMO and were iterated on for our hi-fi designs. The high-fi designs were cleaner than the lo-fi's and were able to show the RMO more of our vision and with this they were able to guide us in how they wanted some functionality to work.
What Didn't Go Well?	It was quite difficult to create a working WordPress solution that fitted the needs of our customers without using a few paid, or numerous free, plugins. The uploading, storing, and dynamic displaying of PDF's or other media that the RMO wished to have on their website was an arduous task without paying

	for plugins. Many of the plugins that we did find and wanted to use required an upgrade to a 'pro' version to have the functionality that the RMO desired, so keeping our project free was not easy. For a few of our group members who had done full-stack development in previous work terms and classes, the limitations and rigidity of WordPress was found to be restricting and exhausting.
How well did translating from Prototype to WordPress Go?	Converting the site from prototype into WordPress was a struggle. The vision we had in our hi-fi was no longer fully possible with the limitations of WordPress. In trying to make our vision work we had to make ____(like reservations but not) to ensure that the functionality was there. The design of the website was still important so where possible we tried to keep the feel of the prototypes but with the constraints of WordPress.
Did Class Topics Help or Hinder Design Exploration?	We found the class topics to both help and hinder our process as we became more aware of how certain decisions would affect our final website. This was helpful because it made the team really focus on purposeful colours, menus and the user experience. This hindered us by making us overthink some decisions or make experiences more complicated which needed new designs or ways of thinking to ensure that the user had a good experience. This limited the creativity we could have while designing the website as we wanted to follow as many theories or topics that were taught in class.
What Would you do the Same on Future Projects	For future projects we would still do the requirements gathering and then create lo-fi prototypes and use figma for hi-fi prototypes, as well we would use a form of task tracking. For the documentation and code base we would still use Github.
What Would you do Differently on Future Projects	For future projects we would not limit the customer to using a tool such as WordPress before the requirements were given. Instead we would gather the requirements from the customers and then ensure that the tool we would use is able to meet all the requirements without hindering the user interface or the maintainability of the website. For prototyping the website using figma development components would help to make realistic hi-fi prototypes by using WordPress styled components. This lets the customer see a hi-fi that would be more similar to the finished website than using boxes and text.
Summarise opportunities and design ideas for future work	Using off-the-shelf products to create a product for a customer can often be a difficult process due to the rigidness and support behind the products. The process of lo-fi to hi-fi prototypes to product development was a good opportunity to prepare for the workflow that would exist in many future employers.

WordPress Themes and Plugins

Name	Rating	Last Update	Active Installations	Use of Plugin
Theme- Astra	5/5	June 2022	1+ million	Active Theme
Akismet anti-spam	4.5/5	May 2022	5+ million	Check comments and form submissions for spam
Elementor	4.5/5	June 2022	5+ million	Block editor
Fluent forms	5/5	June 2022	200,000+	Create contact forms
Forminator	5/5	June 2022	300,000+	Create Forms
Jetpack	4/5	June 2022	5+ million	WordPress Security and performance
Max Mega Menu	4.5/5	April 2022	400,000+	Add menu options
Members	5/5	April 2022	200,000+	Add member role capabilities
Nav Menu Roles	5/5	Mar 2022	100,000+	Hide menus by role
PDF Embedder	4.5/5	Jan 2022	300,000+	Embed pdf's
Shortcodes ultimate	5/5	May 2022	700,000+	Allows use of shortcodes in blocks
Starter templates	5/5	June 2022	1+ million	Adds basic templates
TablePress	5/5	June 2022	800,000+	Create nice tables
The Events Calendar	4.5/5	June 2022	800,000+	Calendar plug-in
Ultimate Addons for Guttenberg	5/5	June 2022	300,000+	Additional Block editing
UpdraftPus- backup/restore	5/5	May 2022	3+ million	Simplifies backup

User submitted posts	5/5	May 2022	20,000+	Allows forms to post
WordPres file upload	4.5/5	May 2022	20,000+	Allows file uploads
WP-Optimise	5/5	June 2022	1+ million	Optimises performance
wpDataTables	4.5/5	May 2022	60,000+	Add tables
WPForms	5/5	May 2022	5+ million	Add forms to wordpress