CSCE 4901 – Computer Science Capstone

User Manual 4/15/2016



Table of Contents

Introduction	3
Description of the Project:	3
Tutorials Part I – For both the Student and Teacher Apps	4
User Login	4
Main Screen Selection	4
Music Screens	4
Coordinates Screens	6
Using the Toolbar	8
View Notifications Page	8
Add/Edit Book, Movement, Sheet, Set Pages	9
Remove Book, Movement, Sheet, Set Pages	9
Tutorials Part II – For the Teacher App Exclusives	10
Coordinate Screen – Teacher App Alteration	10
Toolbar – Teacher App Additions	
Attendance Screen	12
Send Notifications Screen	12

Introduction

This document is a User Guide deliverable created to instruct all users how to navigate and visualize the application and access all functionalities of the project. Team Nova Elite is the team behind the construction of the proposed project and will also be tasked with refining the base product and any extra details that arise throughout development.

The Team consists of the following members who each currently attend the University of North Texas in pursuit of a degree in Computer Science: Jason Hoang, Imran Akhtar, Kai-Chuan Chan, and Sabrin Thamed. We will use this project as an opportunity to learn more knowledge and skills about our science along with how to produce an application that is useful in the real world. Team Nova Elite is dedicated to ensure that the final base product is fully functional within the time given to complete the project.

DISCLAIMER:

All of these tutorials and visuals are not yet finalized or complete and are subject to change as the project is still in development and under construction at this point in time when this deliverable was turned in.Also, pictures of the application will be added later as they currently inaccurate in the project's current phase of development.

Description of the Project:

This project consists of a teacher app and student apps that communicate directly with each other, giving the teacher the ability to guide the students who spread across the marching field/rehearsal room via a single device and allowing students to ask questions and take notes with ease. The program will focus on compiling all of the paperwork, sheet music, and coordinate sheets involved with students learning, rehearsing, and performing a marching band show onto their own personal devices and tablets. This will make the process of teaching easier and help the students stay organized with all of their papers. All apps will also have access to vital learning tools for a performing ensemble so that the students can practice with the app on their own. These apps will be designed for marching bands across the United States, but they can be adjusted to satisfy other indoor rehearsals for any type of ensemble.

Tutorials Part I - For both the Student and Teacher Apps

User Login

Procedures

- To login to the application enter your, or another user's, username and password into the respectively labeled text fields.
- ➤ Then press the login button and wait for authorization to take you to the Main Screen Selection page.

Main Screen Selection

Procedures

- ➤ To navigate to the Music Main Screen, press the button labeled Music.
- > To navigate to the Coordinate Main Screen, press the button labeled Coordinates.
- To access the Toolbar, press the toolbar button in the upper right corner of the page, identified as 3 stacked dots. The toolbar will create a drop down menu containing all of the extra toolbar options.

Music Screens

- Switch Main Screens
 - 1. Press the main screen switch icon button at the top of the page next to the toolbar.
 - 2. This will transfer the user to the coordinate main page from the music screen.
- Music Book
 - 1. A list of music books, if any exist within your device, will be automatically shown on the screen.
 - 2. To access a specific book, select one from the list and touch the screen where it is listed. This action will take you to the music movement selection screen.
 - 3. To create a new music book, press the "Create New Book" button at the top of the screen.

- 4. This will take the user to a new screen where they can enter in the details for the new music book that they want to add.
- 5. To remove a coordinate set, press the "Remove Book" button at the top of the screen.
- 6. This will take the user to a new screen where they can enter in the details for the music book that they want to remove.
- 7. To exit this page, press the "Back" button at the top of the page.

Music Movements

- 1. A list of music movements, if any exist within your device, will be automatically shown on the screen.
- 2. To access a specific movement, select one from the list and touch the screen where it is listed. This action will take you to the music sheets screen.
- 3. To create a new music movement, press the "Create New Mvt" button at the top of the screen.
- 4. This will take the user to a new screen where they can enter in the details for the new music movement that they want to add.
- 5. To remove a coordinate set, press the "Remove Mvt" button at the top of the screen.
- 6. This will take the user to a new screen where they can enter in the details for the music movement that they want to remove.

Music Sheets

- 1. On the music sheets page, a slideshow of pictures will be shown, displaying each page of music belonging to the movement selected on the previous screen.
- 2. To view the next page of music, use your finger to swipe the page to the left, like you were reading a book left to right.
- 3. To exit this page, press the "Back" button at the top of the page.

Coordinates Screens

Procedures

- Switch Main Screens
 - 3. Press the main screen switch icon button at the top of the page next to the toolbar.
 - 4. This will transfer the user to the music main page from the coordinate screen.

Coordinate Book

- 1. A list of coordinate books, if any exist within your device, will be automatically shown on the screen.
- 2. To access a specific book, select one from the list and touch the screen where it is listed. This action will take you to the coordinate sheet selection screen.
- 3. To create a new coordinate book, press the "Create New Book" button at the top of the screen.
- 4. This will take the user to a new screen where they can enter in the details for the new coordinate book that they want to add.
- 5. To remove a coordinate set, press the "Remove Book" button at the top of the screen.
- 6. This will take the user to a new screen where they can enter in the details for the coordinate book that they want to remove.

Coordinate Sheets

- 1. A list of coordinate sheets, if any exist within your device, will be automatically shown on the screen.
- 2. To access a specific sheet, select one from the list and touch the screen where it is listed. This action will take you to the coordinate sets screen.
- 3. To create a new coordinate sheet, press the "Create New Sheet" button at the top of the screen.
- 4. This will take the user to a new screen where they can enter in the details for the new coordinate sheet that they want to add.
- 5. To remove a coordinate set, press the "Remove Sheet" button at the top of the screen.

- 6. This will take the user to a new screen where they can enter in the details for the coordinate sheet that they want to remove.
- 7. To exit this page, press the "Back" button at the top of the page.

Coordinate Sets

- 1. On the coordinate page, a table list of coordinate sets is displayed consisting of all the coordinates on the coordinate sheet selected on the previous page.
- 2. To add or edit a coordinate set tuple, press the "Add/Edit Set" button at the top of the screen.
- 3. This will take the user to a new screen where they can enter in the details for the new coordinate set that they want to add/edit.
- 4. To remove a coordinate set, press the "Remove Set" button at the top of the screen.
- 5. This will take the user to a new screen where they can enter in the details for the coordinate set that they want to remove.
- 6. To exit this page, press the "Back" button at the top of the page.

Using the Toolbar

Procedures

Pressing the toolbar button will create a dropdown menu overlay on the current screen with several options for the user to access.

Logout

- 1. To logout of the application and the system, press the "Logout" menu option from the toolbar.
- 2. This will take the user back to the login screen, and close the rest of the application.

View Notifications

- 1. To read any and all broadcasted notifications sent by a teacher or other staff member, press the "Notifications" menu option from the toolbar.
- 2. This will take the user to a new page that lists all of the notifications that have been sent out.

Metronome

- 1. This is a music education tool for users to utilize while practicing at home or at school.
- 2. The tutorial on how to use this feature of the app will be added to this guide after the tool has been implemented into the application.

> Tuner

- 1. This is a music education tool for users to utilize while practicing at home or at school.
- 2. The tutorial on how to use this feature of the app will be added to this guide after the tool has been implemented into the application.

View Notifications Page

- This page will load all of the notifications and list them in order of oldest to newest(top to bottom).
- The list will consist of two columns, the teacher that sent the notification(on the left) and the message sent(on the right).
- > To exit this page, press the "Back" button at the top of the page.

Add/Edit Book, Movement, Sheet, Set Pages

Procedures

- > Add Items
 - 1. To Add an item, enter the new details into the corresponding text fields on the page for the new item.
 - 2. Then, press the "Update" button below the text fields.
- Edit Items
 - To Edit an item, enter the details into the corresponding text fields on the page for the existing item, along with the details that you want to edit. The first text field on the page is the key detail that links with the item that you want to edit.
 - 2. Then, press the "Update" button below the text fields.

Remove Book, Movement, Sheet, Set Pages

- > Remove Items
 - 1. To Remove an item, enter the key detail that corresponds with the item that you want to remove into the text field labeled on the page.
 - 2. Then, press the "Remove" button below the text field.

Tutorials Part II - For the Teacher App Exclusives

Coordinate Screen - Teacher App Alteration

Procedures

- Switch Main Screens
 - 3. Press the main screen switch icon button at the top of the page next to the toolbar.
 - 4. This will transfer the user to the music main page from the coordinate screen.

Coordinate Book

- 1. A list of coordinate books, if any exist within your device, will be automatically shown on the screen.
- 2. To access a specific book, select one from the list and touch the screen where it is listed. This action will take you to the coordinate sheet selection screen.
- 3. To create a new coordinate book, press the "Create New Book" button at the top of the screen.
- 4. This will take the user to a new screen where they can enter in the details for the new coordinate book that they want to add.
- 5. To remove a coordinate set, press the "Remove Book" button at the top of the screen.
- 6. This will take the user to a new screen where they can enter in the details for the coordinate book that they want to remove.

Coordinate Sheets

- 1. A list of coordinate sheets, if any exist within your device, will be automatically shown on the screen.
- 2. To access a specific sheet, select one from the list and touch the screen where it is listed. This action will take you to the coordinate sets screen.
- 3. To create a new coordinate sheet, press the "Create New Sheet" button at the top of the screen.
- 4. This will take the user to a new screen where they can enter in the details for the new coordinate sheet that they want to add.
- 5. To remove a coordinate set, press the "Remove Sheet" button at the top of the screen.

- 6. This will take the user to a new screen where they can enter in the details for the coordinate sheet that they want to remove.
- 7. To exit this page, press the "Back" button at the top of the page.

Coordinate Sets

- 1. On the coordinate sets page, a slideshow of pictures will be shown, displaying each set of coordinates belonging to the movement selected on the previous screen.
- 2. To view the next set of coordinates, use your finger to swipe the page to the left, like you were reading a book left to right.
- 3. To exit this page, press the "Back" button at the top of the page.

Toolbar - Teacher App Additions

Procedures

Same Options from the student app, with two additions.

- Attendance TEACHER APP ONLY
 - 4. To access the student attendance lists, press the "Attendance" menu option from the toolbar.
 - 5. This will take the user to a new page where they can select from many organized student attendance lists.
- Send Notification TEACHER APP ONLY
 - 1. To broadcast a notification message to the entire class, press the "Send Notification"
 - 2. This will take the user to a new page where they can type out a message and send it to the entire class.

Attendance Screen

Procedures

- ➤ This page will display several buttons labeled by instrument that gives the teacher access to the student attendance lists organized by instrument.
- > To add a student to the system, press the "Add Student" button at the top of the page.
- ➤ To add a teacher/staff member to the system, press the "Add Staff" button at the top of the page.
- > To broadcast a notification message to the entire class, press the "Send Notification"

Send Notifications Screen

- On this page, the teacher is allotted 200 characters to type a message into the text field given.
- After the message is complete, press the "Notify" button below the text field to broadcast the message to the entire class.
- > To return to the previous page, press the "Back" button at the top of the page.