User Stories Implemented

As a music producer, I want to be able to sort and manage by music in relation to their genre, so that it will be easier for me to locate and work with the tracks I need for a particular session instead of looking through the files sequentially. <mark>(shown from initial sample project)</mark>

As a music collector, I often want to rename mp3 files to correspond exactly to the title. Other times, I want to set the Title tag to be the same as the mp3 filename. I want to avoid having to retype or copy and paste these strings. <mark>Under context menu as two distinct options</mark>

As a student, I would like to be able to sort my music by their properties such as titles, length, genre etc, particularly their length so that I can try to fine-tune the number of songs I can get through during my travels to and from the University. <mark>(shown from initial sample project)</mark>

As a musician, I would like to know how many Beats Per Minute are in all my music tracks. This could be achieved by retrieving their title properties, and presenting these as buttons which when clicked would open up a web browser and simply append "BPM" into the address bar and search it for me. <mark>Works and assigned shortcut CTRL+B</mark>

As a parent, I'm aware that lots of features are in modern programs so would like an intuitive context menu system that's similar to other programs to help me use this one with ease, allowing me to have an enjoyable experience and not give up half way through due to difficulty in locating the features I'm looking for. <mark>At top of program with "File", "Tools" and "Help" menus</mark>

As a student, I want to be able to use keyboard shortcuts for the context menus that allow me to browse to a media collection, retrieve song info and so on. This would help save a few steps regards navigation as opposed to using the mouse. <mark>Works and shortcuts are listed alongside the menu items</mark>

As a music producer, I don't have time to set metadata for each of the songs in a library individually, so would like to be able to select multiple items and set an attribute down the list in one go. For example, for today's 20 newly recorded tracks I want to set the same **year and genre** in one go. <mark>Correctly updates through CTRL+CLICK selection of items and utilisation of options above the list</mark>

As a parent I need to finetune or add the year metadata attribute for my songs, so that when I sort by year I know these values are accurate as I will have edited them myself. To save time, I would like to be able to set the same year for multiple songs if for example they are different versions of the same song (hence would have the same year). <mark>Implemented as with above User Story</mark>

As a student, I would like to read up on a few songs in my library. Wikipedia is my preferred site, so I would like to see the application handle the displaying of a Wikipedia entry for the currently selected song. This would save me time typing in the song title into Wikipedia manually, and a shortcut key for this would make it even easier. <mark>Works and assigned shortcut CTRL+W</mark>

How to run the application

Import the file with File > Import ZIP. A welcome message should pop up after the Project has been compiled, and after dismissing that message the main Application window should appear. If you

inspect the "File" context menu, you can see that shortcuts CTRL + (1-4) can be used to open certain folders.

Press a combination or choose it from the menu and a file chooser window will pop up, use this to finetune the media library location you would like to load from. <mark>IMPORTANT:</mark> The location opens "recursively", meaning all mp3 files will be grabbed from both the currently selected folder and sub-directories, so make sure there are not many mp3 files or the table will take a while to load them all! After your mp3 files are listed in the table, you can change their metadata through double clicking on the column field for a row to enter the value and pressing enter on the keyboard.

Additionally, you can select one or more (CTRL + click) rows in the table, choose an attribute from the "Select Attribute" drop down, enter a value in the "Set this to.." text field and press the "Set Selected" button. Both methods result in the file/s being copied temporarily while a rename process initiates to swap it back to the original filename, and the table is correctly refreshed to show the changes.

Some additional features are under the "Tools" context menu; BPM, Wiki, Filename > Title and Filename < Title. BPM retrieves the "Beats Per Minute" of the currently selected song (if multiple songs are selected, this works off the last song clicked on), whereas Wiki displays the song's Wikipedia page. The other two features replace the Filename with the metadata value for its Title, and vice versa.

Each have shortcuts shown next to them under Tools, either calling up a new browser tab with their unique links or performing the necessary swapping for the selected files. The "Help" context menu shows a Greyed out item just for demonstration, and an About icon, presenting a small message about the program. File > Exit closes the program.

Test Suite

The full test suite should pass without errors. Currently the tests are:

- TableViewFactoryTest.java (three unit tests) – Proves that the ProcessInput function raises exceptions as expected under various invalid argument conditions.
- TestMainApp.java (End-to-End integration test) – Proves that Collection A is loaded, and that the Media files found in the tableView correspond exactly to the same Media files as separately loaded inside the test suite.

GIT Repo Web Link

https://github.com/darkquake93/PIIIdc