Revised Test Case Suite

Original Requirements:

The primary objective for Sprint 1 was to develop the basic functionality that allows users to interact with the application. This includes a basic user interface, playback of musical notes, selectable answer choices, and feedback on answer selection. These requirements are shown below for reference.

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| **Requirement** | **Test Location** |
| **Note Generation:** The application must be able to generate and play a musical note within a predefined range. | NoteGenerator.test.js |
| **User Interface (UI):** Develop a simple UI where users can:   * click a button listen to the note as many times as desired. * select their answer from multiple choices. * change their answer after selecting. * submit their answer via a button. * view a message after submitting to see if their answer was correct or not. * view a new note button/question after submitting a previous answer. | ui.test.js |
| **Answer Validation:** Implement logic to check if the user's selection is correct or incorrect by comparing the user-selected answer to the predefined question-answer that corresponds to the music note generated/played. | question.test.js  questionManager.test.js |
| **Repeat Functionality:** Allow users to replay the note before submitting an answer. | NoteGenerator.test.js  ui.test.js |

Original Test Cases:

The initial test cases submitted with our previous assignment were based on our team’s very limited exposure to testing. As a result, there were cases that were redundant, that were missing, or that lacked the necessary skeleton code to ever be able to pass. Thankfully, through the lessons learned during the semester’s lectures and the feedback from trading our test suites with another group, our team was able to improve our understanding of how to create a more thorough test suite.

For our final submission, additional tests were added, redundant tests were removed or reworked, and all tests have been given the necessary code to pass successfully. Additionally, more detailed comments were provided above each test to more clearly communicate what the test was attempting to check. The most significant amount of work had to be done to the UI components, as they were not thought through well enough with our first sprint submission. This gave our team the opportunity to think more in depth about exactly what requirements needed to be met and how we could set the test suite up to check for these things without having a fully functional user-interface implemented.

As a result of these edits, the test suite now has nearly 40 tests to cover very basic functionality for the application. Even with our additional work accounted for, I am sure that with more time and experience, we would think of additional tests to add to further increase the thoroughness of the suite. While there is still much work to be done on the app itself, the test suite helps increase our confidence to move forward with designing more of the app's features.

Overall, this assignment proved very valuable in furthering our understanding of the testing process.