| Number | Reason | Data | Expected Outcome | Actual Outcome | Comments |
|--------|---|--|---|---|---|
| 1.1 | To ensure that the splash screen successfully fades away, taking the user to the main page when the user triggers the screen to be displayed - valid. | Left Click anywhere on screen Button Press - Click to continue | The splash screen successfully fades away, taking the user to the main page, where the keyboard, volume slider, metronome and other features are visible. | Welcome to the next generation of music creation The splash screen successfully responded to the left click, bringing the user to the main page. | As expected, when on the splash screen, the splash screen fades away on the user's click and the user is successfully taken to the main page, where they are then able to view the digital piano, volume slider, metronome and other features. The page loads without any issue or delay. Moreover, the splash screen also disappeared with a short animation, letting the user know that they were transitioning from the splash |

screen to the main page. 2.1 To make sure The user is able to click **FAILED** that the user is and drage the grey Left click Unfortunately, the volume able to adjust circle either left (to a slider did not work Button Press - on the volume lower value) or right (accordingly when testing its the grey circle and to a higher value) to slider functionality. This causes the drag to adjust the successfully, lower or raise the webpage to crash when the volume slider (on both to a volume, the program user attempts to adjust the the top-right hand higher and should respond by volume slider without side of the main lower value adjusting the audio pressing a key first meaning page). immediately output to a higher or that the volume slider didn't after being lower decibel. The work correctly. To fix this taken to the decibel value should The main crashes with the following issue, I have to modify the errors, thus not successfully doing what main page. scale accordingly to the function so that it only was expected valid. position of the volume attempts to modify the slider. current value of the volume after a key has been pressed, otherwise it should

| | | | | | use the default value. |
|-----|--|--|---|---|--|
| 2.2 | To make sure that the user is able to adjust the volume slider successfully, both to a higher and lower value immediately after being taken to the main page valid | Left click Button Press - on the grey circle and drag to adjust the volume slider (on the top-right hand side of the main page). | The user is able to click and drage the grey circle either left (to a lower value) or right (to a higher value) to lower or raise the volume, the program should respond by adjusting the audio output to a higher or lower decibel. The decibel value should scale accordingly to the position of the volume slider. | Clicking and dragging the grey circle (volume slider) to the left or right of the bar works successfully. | After modifying the respective code for the volume slider, this test passed since the value automatically adjusts to what the users changed it to once they have made a keypress. The user is able to both adjust the volume toa a higher or lower value and the slider stays in its position and is still fully functional as intended. |

3.1 To ensure that the correct key notes are played when the user presses a key on the digital piano.

Keyboard key press
or piano field left
click- 'Key Press"

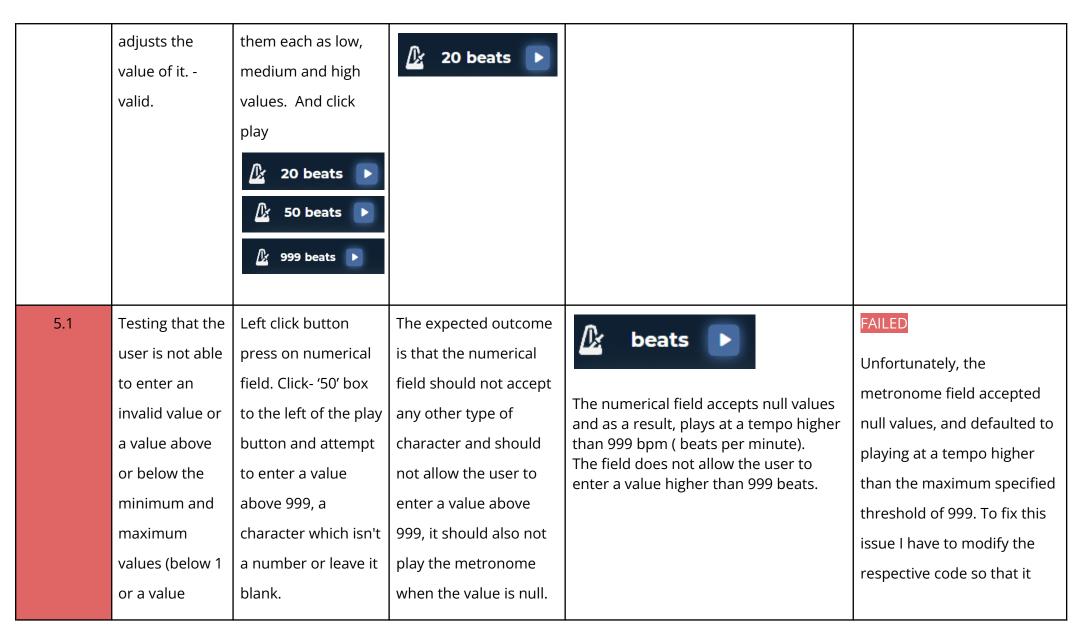
After the user interacts with piano keys, the program should immediately play the corresponding note. At the specified value according to the volume slider



PASSED

As expected, The note played successfully corresponds to the key pressed on the piano. In this case; The key bound to each keyboard key works when both clicked or pushed on the keyboard. The note of the key pressed is displayed on the pitch detecting software.

| | | | | Pitch class C = {, C2, C3, C4,} Pitch class C = {, C2, C3, C4,} C3 DF2 FF2 GF2 AF2 C3 DF3 FF3 GF3 AF3 GF4 DF4 FF4 GF4 AF4 Octave Octave The note played successfully corresponds to the key pressed on the piano. | |
|-----|---|--|---|--|--|
| 4.1 | To check whether the user is able to interact with the metronome and testing whether or not the metronome plays at different tempo's after the user | Left click button press on number field. Click- '50' box to the left of the play button. After clicking the number field with the default value of '50', test if this default value works then type the numbers '999', '20', into the field, testing | After typing in the new value, the metronome should play at the speed of the specified tempo. And the user is able to pause the metronome and use different tempo's. 999 beats 50 beats | p999 beats II to beats II The tempo plays at the specified speeds of 999, 50 and 20 beats per minute. And the user is able to play different tempos by stopping and editing the numerical field next to the play button. | Following the expected outcome the metronome plays at the correct speeds which were specified in the numerical field. The user is able to stop and play a new tempo in the metronome by editing the numerical field. |



| abo | oove 999). | <u>№</u> Deats | | | does not accept null values. |
|---|--|---|---|--|---|
| use to e inv a v or min ma val | valid value or value above r below the hinimum and haximum | Left click button press on numerical field. Click- '50' box to the left of the play button and attempt to enter a value above 999, a character which isn't a number or leave it blank. Let Deats | The expected outcome is that the numerical field should not accept any other type of character and should not allow the user to enter a value above 999, it should also not play the metronome when the value is null or below 1. | 999 beats II The minimum and maximum values the user can enter. | As expected the metronome does not accept null values or values below 1, nor will it allow you to enter values above 999. |