

System and Unit Test Report

Web Audio Editor

Team 5

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System Test Scenarios

Sprint 1:

- A. User story 1 from sprint 1: As a user, I want to access the editor through web so that I can edit
- B. User story 2 from sprint 1: As a user, I want to load an audio file
- C. User story 3 from sprint 1: As a user, I want to save an audio file
- D. User story 4 from sprint 1: As a user, I want to be able to view my loaded audio file as waveform or as spectrum

Scenario 1: $A \rightarrow B \rightarrow D \rightarrow C$

1. start web browser. Access "Web Audio Editor" through "13.56.79.76"
2. click "Add Track" button to add a track
3. click "File" button to popup a window
4. select an audio file to load the audio
5. click open button to load the selected audio file
6. check loaded file in spectrum
7. click 'Download' button to popup a window
8. select a directory and write a file name
9. click save button to successfully download the file

Sprint 2 :

- E. User story 1 from sprint 2 : As a user, I want to click and drag over the waveform so that I can select and perform actions on parts of the waveform loaded on tracks.
- F. User story 2 from sprint 2 : As a user, I want to cut and paste my audio files
- G. User story 3 from sprint 2 : As a user, I want to fade in and fade out my audio files
- H. User story 4 from sprint 2 : As a user, I want to change volume and speed of my audio files
- I. User story 5 from sprint 2 : As a user, I want to selectively listen to tracks
- J. User story 6 from sprint 2 : As a user, I want to zoom in and out of my audio waveforms

Scenario 2: $A \rightarrow B \rightarrow E \rightarrow F$

1. start web browser. Access “Web Audio Editor” though “13.56.79.76”
2. click “Add Track” button to add a track
3. click “ File" button to popup a window
4. select an audio file to load
5. click open button to load the selected audio file
6. click and drag over the spectrum to select part of the spectrum.
7. click “Cut” button to cut the part selected.
8. click “Paste” button to paste the part.

Scenario 3: A → B → G → J

1. start web browser. Access “Web Audio Editor” though “13.56.79.76”
2. click “Add Track” button to add a track
3. click “ File" button to popup a window
4. select an audio file to load
5. click open button to load the selected audio file
6. click “Fade In” button to insert fade in effect.
7. click “Fade In” button to insert fade in effect.
8. click “Zoom Mode” button, click spectrum and drag up or down to zoom in and out spectrum.

Scenario 4 : A → B → H → I

1. start web browser. Access “Web Audio Editor” though “13.56.79.76”
2. click “Add Track” button to add a track
3. click “ File" button to popup a window
4. select an audio file to load
5. click open button to load the selected audio file
6. click and drag over the spectrum to select parts of the spectrum.
7. slide up or down of “volume” to change volume.
8. slide up or down of “playrate” to change speed.
9. click play icon to listen to selected track

Sprint 3 :

- K. User story 1 from sprint 3 : As a user, I want to have login authentication system
- L. User story 2 from sprint 3 : As a user, I want to save my personal Library

M. User story 3 from sprint 3 : As a user, I want to insert sound effect

Scenario 5 : A → K → B → L

1. start web browser. Access “Web Audio Editor” though “13.56.79.76”
2. Click “Sign Up” button to register
 - User Name = <test@test.com>
 - Password = <test>
 - Name = <Test>
 - Click “Sign Up” button
3. User should see “Hello, test2” alert pop-up
4. Click “Sign In” button to log-in
 - User Name = <test@test.com>
 - Password = <test>
 - Name = <Test>
 - Click “Sign In” button
5. User should see “test” next to “logout” button
6. Click “Add Track” button to add a track
7. Click “ File" button to popup a window
8. Select an audio file to load
9. Click open button to load the selected audio file
10. Click “Upload” button to upload to user library
 - Type in description of the audio file = <Test>
 - Click “OK”
11. Refresh the webpage
12. Click “Library” button
13. User should see “Test” in the library pop-up
14. Click “Test” file
15. User should see previously saved audio file loaded.

Scenario 6 : A → B → M

1. start web browser. Access “Web Audio Editor” though “13.56.79.76”
2. click “Add Track” button to add a track
3. click “ File" button to popup a window
4. select an audio file to load
5. click open button to load the selected audio file
6. click a track you want to have sound effect on
7. click “Sound effect” button to insert sound effect on the track
8. confirm the effect is on by checking modified spectrum

Non functional User Scenarios

N. User story 4 from sprint 3 : As a user, I want to use webpage regardless of server's being updated (continuous integration)

O. User story 5 from sprint 3 : As a user, I want webpage to have little or no error (unit testing, system testing)

Unit Tests

Sign up

Equivalence classes:

Username in email form(@), password, name

Username not in email form(@), password, name

Test cases:

Username in email form(@), password, name: "Hello" alert with id

Username not in email form(@), password, name: message to user that he/she needs to include @ in username ; "Please include an '@' in the email address. (email) is missing an '@'."

Sign in

Equivalence classes:

Correct username/password

Incorrect username/password

Test cases:

Correct username/password: popup alert 'Welcome' with id

Incorrect username/password: popup alert with message 'undefined'

Upload file

Equivalence classes:

Audio file

Non audio file

Test cases:

Audio file → upload audio file and show spectrum of the audio file

Non audio file → cannot upload the file

Copy Button

Equivalence classes:

Click “Copy” Button

Test cases:

Click “Copy” Button: alert showing the selected section is successfully copied

Cut Button

Equivalence classes:

Click “Cut” Button

Test cases:

Click “Cut” Button: selected audio spectrum disappears

Paste Button

Equivalence classes:

Click “Paste” Button with audio file “cut” or “copied” beforehand

Click “Paste” button with no “cut” or “copy” operation beforehand

Test cases:

“Paste” without “cut” or “copy” beforehand: Nothing happens

“Paste” with “cut” or “copy” beforehand: previously saved audio spectrum is pasted in the select area.

Fade In Button

Equivalence classes:

Click “Fade In” Button

Test cases:

Click “Fade In” Button: insert fade in effect in the beginning of track

Fade Out Button

Equivalence classes:

Click “Fade Out” Button

Test cases:

Click “Fade Out” Button: insert fade out effect in the last part of track

Zoom mode Button

Equivalence classes:

Click “Zoom mode” Button

Test cases:

Click “Zoom mode” Button: turn “Zoom mode” button to blue

Selection mode Button:

Equivalence classes:

Click “Selection mode” Button

Test cases:

Click “Selection mode” Button: turn “Zoom mode” button to blue

Waveform mode:

Equivalence classes:

Zoom mode

Scroll up

Scroll down

Scroll left

Scroll right

Selection mode

Drag yellow section

Extend yellow section

Test cases:

Zoom mode

Drag up: zoom out the selected track’s spectrum

Drag down: zoom in the selected track’s spectrum

Drag left: move the selected track’s spectrum to left direction

Drag right: move the selected track’s spectrum to right direction

Selection mode

Drag yellow block: move the yellow block

Extend yellow block: extend the yellow block