Software Engineering Project

Test Cases

Test Case

Test Case #: 1.1 Test Case Name: Check Audio Recording Page: 1 of 5

System: Emotion Analyser Subsystem: GUI

Designed by: Jatin Mudgal Design Date: 24/11/22

Executed by: Execution Date: 25/11/22

Short Description: Test the working of the Record button

Pre-conditions:

The required libraries/dependencies are installed.

The client computer has a working mic/recording device.

The user inputs a valid human voice in the recording.

The user has an up-to-date web browser.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Action | Expected System Response | Pass/ Fail | Comment |
| 1 | Click the ‘Click to record’ button | The system starts to record audio from the user interface device. | P | - |
| 2 | Click the ‘Click to record’ button again | The system stops recording the audio | P | - |
| 3 | Check post-condition 1 |  |  |  |
| 4 | Click the play icon on the media-player | The system should playback the recorded audio | P | - |
| 5 | Check post-condition 2 |  |  |  |

Post-conditions

1. Audio is recorded and a media interface to listen to recorded audio pops-up.

2. Recorded audio is successfully played back to the user.

Test Case

Test Case #: 1.2 Test Case Name: Check Audio Re-Recording Page: 2 of 5

System: Emotion Analyser Subsystem: GUI

Designed by: Jatin Mudgal Design Date: 24/11/22

Executed by: Execution Date: 25/11/22

Short Description: Test the working of the Record Button

Pre-conditions:

The required libraries/dependencies are installed.

The client computer has a working mic/recording device.

The user inputs a valid human voice in the recording.

The user has an up-to-date web browser.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Action | Expected System Response | Pass/ Fail | Comment |
| 1 | Click the ‘Click to record’ button | The system starts to record audio from the user interface device. | P | - |
| 2 | Click the ‘Click to record’ button again | The system stops recording the audio | P | - |
| 3 | Check post-condition 1 |  |  |  |
| 4 | Click the play icon on the media-player | The system should playback the recorded audio | P | - |
| 5 | Check post-condition 2 |  |  |  |
| 6 | Repeat steps 1,2,3,4 | The system should record the audio again, replacing the previously recorded audio | P | - |
| 7 | Check post-condition 3 |  |  |  |
|  |  |  |  |  |

Post-conditions

1. Audio is recorded and a media interface to listen to recorded audio pops-up.

2. Recorded audio is successfully played back to the user.

3. The previous audio is replaced and the new audio is recorded and played

Test Case

Test Case #: 2.1 Test Case Name: Predict Emotion Page: 3 of 5

System: Emotion Analyser Subsystem: GUI & ML Model

Designed by: Jatin Mudgal Design Date: 24/11/22

Executed by: Execution Date: 25/11/22

Short Description: Test the working of the Emotion Analyser

Pre-conditions:

The required libraries/dependencies are installed.

The client computer has a working mic/recording device.

The user inputs a valid human voice in the recording.

The user has an up-to-date web browser.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Action | Expected System Response | Pass/ Fail | Comment |
| 1 | Click the ‘Click to record’ button | The system starts to record audio from the user interface device. | P | - |
| 2 | Click the ‘Click to record’ button again | The system stops recording the audio | P | - |
| 3 | Check post-condition 1 |  |  |  |
| 4 | Click the ‘Predict Emotion’ button | The system start processing the recorded audio and predict the emotion from it. | P | - |
| 5 | Check post-condition 2 |  |  |  |

Post-conditions

1. Audio is recorded and a media interface to listen to recorded audio pops-up.

2. The system successfully predicts the emotion from the given recording and outputs it to the screen.

Test Case

Test Case #: 2.2 Test Case Name: Predicting emotion (NO Audio) Page: 4 of 5

System: Emotion Analyser Subsystem: GUI & ML Model

Designed by: Jatin Mudgal Design Date: 24/11/22

Executed by: Execution Date: 25/11/22

Short Description: Test the working of the Record button

Pre-conditions:

The required libraries/dependencies are installed.

The client computer has a working mic/recording device.

The user has an up-to-date web browser.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Action | Expected System Response | Pass/ Fail | Comment |
| 1 | Don’t click the ‘Click to record’ button | The system doesn’t record audio from the user interface device. | P | - |
| 2 | Check post-condition 1 |  |  |  |
| 3 | Click the ‘Predict Emotion’ button | The system should recognise that no audio has been recorded and output ERROR message. | F | Unsuccessful; No error functionality for no audio recording.  Cached result is displayed |
| 4 | Check post-condition 2 |  |  |  |

Post-conditions

1. No audio is recorded.

2. The system displays Error message.

Test Case

Test Case #: 2.3 Test Case Name: Predict Emotion (Audio Defect) Page: 5 of 5

System: Emotion Analyser Subsystem: ML Model

Designed by: Jatin Mudgal Design Date: 24/11/22

Executed by: Execution Date: 25/11/22

Short Description: Test the working of the Emotion Analyser

Pre-conditions:

The required libraries/dependencies are installed.

The client computer has a working mic/recording device.

The user has an up-to-date web browser.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Action | Expected System Response | Pass/ Fail | Comment |
| 1 | Click the ‘Click to record’ button | The system starts to record audio from the user interface device. | P | - |
| 2 | Record Audio using interface | - | P | The recorded audio should not be a human voice. |
| 3 | Click the ‘Click to record’ button again | The system stops recording the audio | P | - |
| 4 | Check post-condition 1 |  |  |  |
| 5 | Click the ‘Predict Emotion’ button | The system starts processing the recorded audio and should display an Error message. | F | The system falsely predicts an emotion from non-human voice. |
| 6 | Check post-condition 2 |  |  |  |

Post-conditions

1. Audio is recorded and a media interface to listen to recorded audio pops-up.

2. The system produces an ERROR message instructing to record an audio of only HUMAN voice.