| **Use Case ID** | UC 7 |
| --- | --- |
| **Use Case Name** | User changes the sound output for the application |
| **Author Name** | Shane Arwood |
| **Primary Actor** | Subscriber |
| **Actor’s Goal** | Actor wants to switch the sound output to a specific device. |
| **Business Value** | IMPORTANT |

## Description

The use case details the event that the user wants to switch the sound output device. The system shows the user a list of available devices and allows them to choose, then confirms that they want to switch before it is actually changed.

## Main Success Scenario

| **Step** | **Actor Action** | **System Response** |
| --- | --- | --- |
| **1** | User selects the icon on the media player to choose a sound output device. | System shows the user a list of the sound output devices connected to the user’s device. |
| **2** | User selects the sound output device they want to switch to. | System confirms that the sound output device they chose is available. |
| **3** |  | System prompts the user to confirm with the message “Switch to <output device name>?” |
| **4** | User selects “Yes” | System closes the dialogue box and pauses the currently playing song. |
| **5** |  | System switches the sound output to the device the user chose. |
| **6** |  | System displays a checkmark next to the new sound output device to confirm that the output has been successfully changed. |
| **7** | User presses play for the song, or selects a new song to play. | System plays the given song on the given sound output device. |

## Alternative Failure Scenario 1: User fails to confirm to switch to the device they chose

**Trigger Condition**: The user selects “No” when the system prompts them to confirm the switch.

| **Step** | **Actor Action** | **System Response** |
| --- | --- | --- |
| **1** | User selects the icon on the media player to choose a sound output device. | System shows the user a list of the sound output devices connected to the user’s device. |
| **2** | User selects the sound output device they want to switch to. | System confirms that the sound output device they chose is available. |
| **3** |  | System prompts the user to confirm with the message “Switch to <output device name>?” |
| **4** | User selects “No” | System closes the dialogue box. |
| **5** |  | System does not switch the sound output to the device the user chose. |
| **6** |  | System continues to play the sound output on the device currently being used. |

## Alternative Failure Scenario 2: No other sound output devices are available.

**Trigger Condition**: The user selects the icon to change the sound output device, but the system does not detect any other output devices available.

| **Step** | **Actor Action** | **System Response** |
| --- | --- | --- |
| **1** | User selects the icon on the media player to choose a sound output device. | The system checks if there are any other sound output devices available and does not find any. |
| **2** |  | The system displays an error message: “No other output devices available”. |
| **3** | User clicks the “x” on the dialogue box. | The system closes the dialogue box. |
| **4** |  | The system continues playing the sound output on the current device. |

| **Secondary Actors** | N/A |
| --- | --- |
| **Trigger Event** | The user clicked the icon on the media player to change the sound output device. |
| **Precondition** | The user is already playing music on a given sound output device. |
| **Frequency of Execution** | Occasionally (fewer than several times a week) |
| **Success Criteria (optional)** | The system is playing the sound output to the device the user chose. |
| **Development Cost** | AVERAGE |

## Discussion

N/A

## Issues / Risks

The system switching the sound output without the user confirming the switch could cause disturbance issues if the user is using the application in a sensitive or public space.

The system could pick up sound output devices that are not associated with the user as being available, which could cause more disturbance issues if the user selects such a device and confirms the switch without the consent of the owner of the other sound output device.

## Non-Functional Requirements

The switch to the new sound output device should occur in less than three seconds to ensure there is no lag when the user presses play after confirming the switch.

## UML Activity Diagrams

