

## Requirements

- Graphical User Interface
  - Present sound file metadata
  - Buttons to use sound player functions
- Record sound
- Playlists
  - Store playlist data
  - Delete existing playlists
  - Temporary playlists (queue)

<b>Use Case Name</b>	<b>UC-1: GUI</b>
Summary	A graphical user interface allows users to use the sound archive more efficiently and in a user-friendly way
Rationale	The sound archive application has many commands and features that make the CLI complex. By introducing a GUI we can use physical buttons and inputs for the user to interact with the sound archive. Rather than typing each command, the user can simply click a button or check a checkbox to trigger the desired action.
Users	All users
Preconditions	Installed all required Python modules before running
Course of events	<p>We couldn't possibly account for all cases of course of events that would take place when a user interacts with our GUI. Therefore, we are going to write the course of events for the most important and basic feature of our GUI which is playing a single sound file.</p> <ol style="list-style-type: none"> <li>1. The user launches the GUI by running the gui.py Python file</li> <li>2. The user sees the list of available sounds to play in the Sounds widget</li> <li>3. The user selects the sound they want to play by clicking with a mouse on a sound</li> <li>4. The user loads the sound into the player by pressing the "Load Sounds" button on the top right of the GUI screen</li> <li>5. The user navigates the mouse to the play button located in the Player Controls widget at the bottom of the GUI screen and presses the button</li> <li>6. The sound is played</li> </ol>
Exceptions	<ol style="list-style-type: none"> <li>1. If the user does not select and load the sound into the player in Step 3, no sound will be played when the play button is pressed in Step 5</li> <li>2. If the user has a sound that is already loaded into the sound player, playing a new sound won't be available if steps 3 and 4 are not executed correctly. Instead, the sound that was previously loaded into the sound player will be played if the user presses the play button</li> </ol>
Alternative paths	<ol style="list-style-type: none"> <li>1. In Step 3, the user can select more than one sound from the list of available sounds. The player will then handle this input in the same</li> </ol>

	<p>way as for a single sound.</p> <p>2. In Steps 1 to 5, the user can quit the application anytime by closing the window, and no sound will be played.</p>
Postconditions	The sound is played. The user interacted with the program in a simpler and user-friendly way.

<b>Use Case Name</b>	<b>UC-2: Record sound</b>
Summary	A feature that allows users to record audio files and save them in the sounds library
Rationale	A user might be interested in recording new sounds from time to time about things that they are interested in so they can listen back to them later or share them with others.
Users	All users
Preconditions	Install all modules and dependencies so that the program has access to the device's microphone
Course of events	<ol style="list-style-type: none"> <li>1. The user runs the gui.py file and waits for the UI to open</li> <li>2. The user then clicks the record audio button and the device asks for permission to allow the program to access the microphone</li> <li>3. After granting access, the recording starts and instead of the 'record audio', there is a 'stop recording' button that shows up</li> <li>4. The user can click on stop recording when they wish or until the 10-second timer runs out in which case the recording will stop automatically.</li> <li>5. A window opens prompting the user to name the audio file that was just recorded</li> <li>6. After naming the file, the user presses enter on their keyboard or presses the "OK" button, and the file gets saved in the sounds folder and shows up in the sounds library after it updates itself</li> </ol>
Exceptions	<ol style="list-style-type: none"> <li>1. In Step 2, if the user does not grant permission to access the microphone, they will not be able to record the audio</li> <li>2. In Step 3 if the user exits the GUI app while the sound is recording, the sound file will not get saved.</li> <li>3. In Step 6, if the user presses the "Cancel" button instead, the sound will not get saved.</li> </ol>
Alternative paths	<ol style="list-style-type: none"> <li>1. In Steps 1 to 6, the user can quit the application anytime by closing the window, and no sound will be played.</li> </ol>
Postconditions	A sound is recorded and a new sound file is saved in the sounds folder

	which can be played by the sound player
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<b>Use Case Name</b>	<b>UC-3: Playlists</b>
Summary	A feature that allows the user to create custom playlists and organize their sounds based on different criteria such as mood activities e.t.c.
Rationale	A user might need an enhanced way of organizing and interacting with their audio library. This feature allows the user to group sounds and tailor their own experience with the library.
Users	All users
Preconditions	The GUI is running, and the user has sounds already in the “sounds” folder.
Course of events	<ol style="list-style-type: none"> <li>1. Click on the Create Playlist button</li> <li>2. Enter the name of the playlist in the dialogue box that pops up</li> <li>3. Select the sounds to be placed in the playlist through the file manager window that pops up after the dialogue box.</li> <li>4. Click on the playlist created to see the sounds and play the sounds.</li> </ol>
Exceptions	<ol style="list-style-type: none"> <li>1. If the user attempts to create a playlist with an existing name, the application displays a message telling the user the playlist already exists</li> </ol>
Alternative paths	<ol style="list-style-type: none"> <li>1. The user can choose to delete a playlist instead through the delete playlist button by providing the name of the playlist they wanted deleted.</li> </ol>
Postconditions	<ol style="list-style-type: none"> <li>1. A new playlist has been created and is displayed under the Playlist section</li> <li>2. The selected sounds are added to the chosen playlist.</li> <li>3. The selected sounds are added to the chosen playlist.</li> </ol>