Part B—Refine the List of Potential Classes

The potential classes that have been highlighted will be our final list of classes to be used for developing this application.

|  |  |
| --- | --- |
| Potential Classes | Reason for Elimination |
| Application |  |
| Sound Player |  |
| ~~Configuration Options~~ | This defines the user input that will be required for each type of player. This input is defined by the player APIs, which have been defined for us. |
| ~~Set of Sounds~~ | This is a redundant form of sound. |
| Sound |  |
| Demo Application |  |
| Sound Card |  |
| Visualizer |  |
| ~~Device ID~~ | Device ID is a numeric defined for us by the Sound Card API in LabVIEW. We do not have to define this data type. |
| ~~Number of Samples/Channel~~ | Number of Samples/Channel is a numeric defined for us by the Sound Card API in LabVIEW. We do not have to define this data type. |
| ~~Sound Format~~ | Sound Format is a cluster defined for us by the Sound Card API in LabVIEW. We do not have to define this data type. |
| ~~Volume~~ | Volume is a numeric defined for us by the Sound Card API in LabVIEW. We do not have to define this data type. |
| ~~User Specifications~~ | This is a redundant form of configuration options. |
| ~~Bounding Rectangle~~ | The bounding rectangle data type is defined for us by the sound visualizer API. We do not have to define this data type. |
| ~~Visualization Window~~ | Visualization window is a dialog defined for us by the sound visualizer API. We do not have to define this data type. |
| ~~Colors~~ | The color box control is defined for us as a built-in LabVIEW data type. No additional encapsulation is required. |
| ~~Waveforms~~ | Waveform is defined for us as a built-in LabVIEW data type. No additional encapsulation is required. |
| ~~Configuration File~~ | The file I/O API is already well-defined within LabVIEW. No additional encapsulation is required. |
| Silence |  |
| ~~Duration~~ | Duration can be handled as a simple numeric attribute of Silence or Single Tone. No additional encapsulation is required. |
| Single Tone |  |
| ~~Frequency~~ | Frequency can be handled as a simple numeric attribute of Single Tone. No additional encapsulation is required. |
| Recorded Sound |  |
| ~~WAV File~~ | In LabVIEW, this will be handled as a sound file path. |
| ~~Sound File Path~~ | The File Path Control is defined for us as a built-in LabVIEW data type. No additional encapsulation is required. |
| ~~Error~~ | The error cluster is defined for us as a built-in LabVIEW data type. No additional encapsulation is required. |
| Aggregate Sound |  |
| Fade |  |
| Modified Sound |  |
| ~~Array of Waveforms~~ | This is a plural form of waveform, which is a built-in LabVIEW data type. No additional encapsulation is required. |
| ~~Format~~ | This noun was used to describe the player APIs that have been provided to us. We do not have to develop this data type. |
| ~~Player APIs~~ | The player APIs are being provided to us. We do not have to define this data type. |
| ~~System Speakers~~ | Interaction with the system speakers will be handled by the sound card API. We do not have to define this data type. |
| ~~Waveform Graph~~ | The waveform graph is defined for us as a built-in LabVIEW indicator. No additional encapsulation is required. |