

```
1  #include <iostream>
2  #include "../hdr/SoundBoard.h"
3
4  int main(int argc, char* argv[]) {
5      SoundBoard sound_board;
6
7      sound_board.loadSound("audio/BombHasBeenPlanted.wav");
8      sound_board.loadSound("audio/RecordScratchSoundEffect.wav");
9      sound_board.loadSound("audio/ThrowingFlashbangSoundEffectCSGO.wav");
10     sound_board.loadMusic("audio/RatsBirthdayMixtape.mp3");
11
12     sound_board.playMusic(0);
13
14     int choice = 0;
15     while (choice != -1) {
16         choice = 0;
17         std::cout << "\nEnter a sound to play using num input\n";
18         std::cout << "-1 to exit...\n";
19         std::cout << ">> ";
20         std::cin >> choice;
21
22         if (choice == 9) {
23             sound_board.playPause();
24         }
25
26         sound_board.playSound(choice - 1);
27         std::cin.clear();
28     }
29
30     return 0;
31 }
32
```

```
1 #include <vector>
2 #include "SDL_mixer.h"
3 #pragma once
4
5 class SoundBoard {
6 public:
7     SoundBoard();
8     ~SoundBoard();
9
10    void loadSound(const char file_path[]);
11    void loadMusic(const char file_path[]);
12    void playSound(const int sound_pos) const;
13    void playMusic(const int track_pos);
14    void playPause();
15
16 private:
17     // These pertain to music not sounds
18     bool _is_playing = false;
19     bool _is_paused = false;
20
21     std::vector<Mix_Chunk*> _sound_effects;
22     std::vector<Mix_Music*> _music_tracks;
23 };
```

```
1 #include <iostream>
2 #include "../hdr/SoundBoard.h"
3 #include "SDL.h"
4
5 SoundBoard::SoundBoard() {
6     if (SDL_Init(SDL_INIT_AUDIO) == 0) {
7         int audio_rate = 22050;
8         Uint16 audio_format = AUDIO_S16SYS;
9         int audio_channels = 2;
10        int audio_buffers = 4096;
11
12        // Err out on bad return value
13        if (Mix_OpenAudio(audio_rate, audio_format,
14            audio_channels, audio_buffers) != 0) {
15            SDL_LogError(SDL_LOG_CATEGORY_APPLICATION, "Bad audio mixer
16                init: %s",
17                Mix_GetError());
18            exit(-1);
19        }
20    }
21
22    SoundBoard::~SoundBoard() {
23        SDL_Quit();
24    }
25
26    void SoundBoard::loadSound(const char file_path[]) {
27        Mix_Chunk* new_chunk = Mix_LoadWAV(file_path);
28
29        if (new_chunk != nullptr) {
30            _sound_effects.push_back(new_chunk);
31            std::cout << "Sound " << _sound_effects.size() << ": " << file_path
32                << " load success...\n";
33        }
34        else {
35            SDL_LogError(SDL_LOG_CATEGORY_APPLICATION, "Bad sound chunk load: %
36                s",
37                Mix_GetError());
38        }
39    }
40
41    void SoundBoard::loadMusic(const char file_path[]) {
42        Mix_Music* new_track = Mix_LoadMUS(file_path);
43        if (new_track != nullptr) {
44            _music_tracks.push_back(new_track);
45            std::cout << "Track " << _music_tracks.size() << ": " << file_path
46                << " load success...\n";
47        }
48        else {
```

```
48     SDL_LogError(SDL_LOG_CATEGORY_APPLICATION, "Bad track load: %s",
49                 Mix_GetError());
50 }
51 }
52
53 void SoundBoard::playSound(const int sound_pos) const {
54     // Check input is legal
55     if (sound_pos < _sound_effects.size()) {
56         Mix_PlayChannel(-1, _sound_effects[sound_pos], 0);
57         std::cout << "Playing track: " << sound_pos+1 << "\n";
58     }
59 }
60
61 void SoundBoard::playMusic(const int track_pos) {
62     if (track_pos < _music_tracks.size()) {
63         Mix_PlayMusic(_music_tracks[track_pos], -1);
64         _is_playing = true;
65     }
66 }
67
68 void SoundBoard::playPause() {
69     if (_is_playing && !_is_paused) { // Is playing
70         Mix_PauseMusic();
71         _is_paused = true;
72     } else if (_is_playing && _is_paused) { // Is Paused
73         Mix_ResumeMusic();
74         _is_paused = false;
75     }
76     else if (!_is_playing && !_is_paused) { // No track has been played yet
77         playMusic(0);
78     }
79 }
```