

SOUND MANAGER (USE CASE SCENARIO)

The Player launches the game.

The Sound Manager initializes audio components:

- Background music system
- Sound effects system
- Volume and mute settings

The Player performs an action that triggers sound.

The Sound Manager processes the request:

4.1. If Background Music Play → Selected music track begins or resumes.

4.2. If Sound Effect Trigger → Plays the assigned sound effect.

4.3. If Volume Adjusted → Updates volume level for music or SFX.

4.4. If Mute/Unmute → All audio output is muted or restored.

4.5. If Track Changed → Stops current track and loads/plays new one.

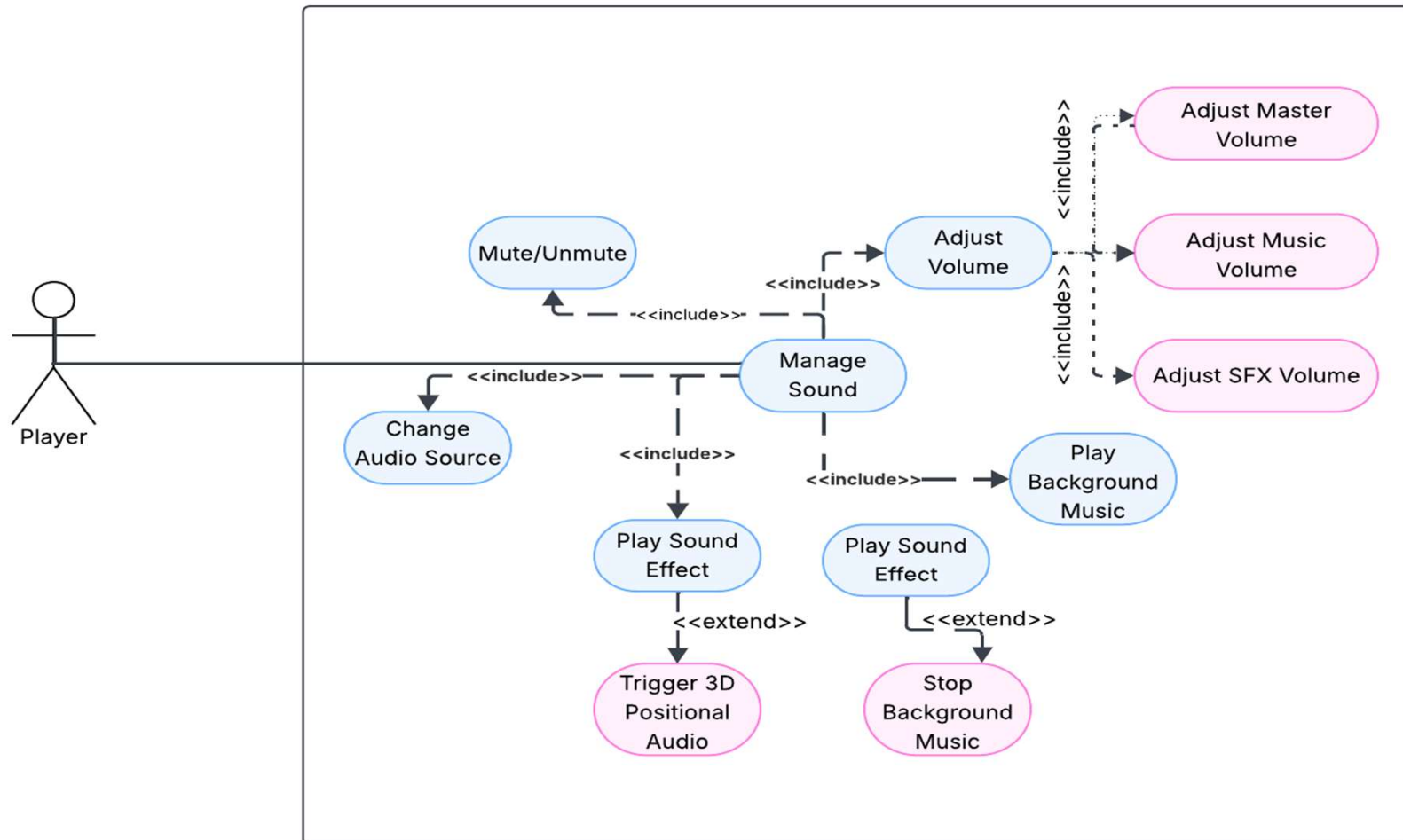
4.6. If Game Paused → Background music volume decreases (or pauses), sound effects disabled until resumed.

4.7. If Game Exits → Sound system shuts down gracefully.

- **Exceptions:**

- If an audio file is missing or corrupted → The Sound Manager skips it and logs an error.
- If multiple sound effects trigger simultaneously → The system queues or mixes them without crashing.
- If no audio device is detected → Game runs silently without breaking functionality.

Use Case Diagram



Class Diagram

