Name: Zane Goodrick Mark ______________________/50

[**Instructions**: Remove everything that is not a heading below and fill in with your own diagrams, etc.]

1. Brief introduction __/3

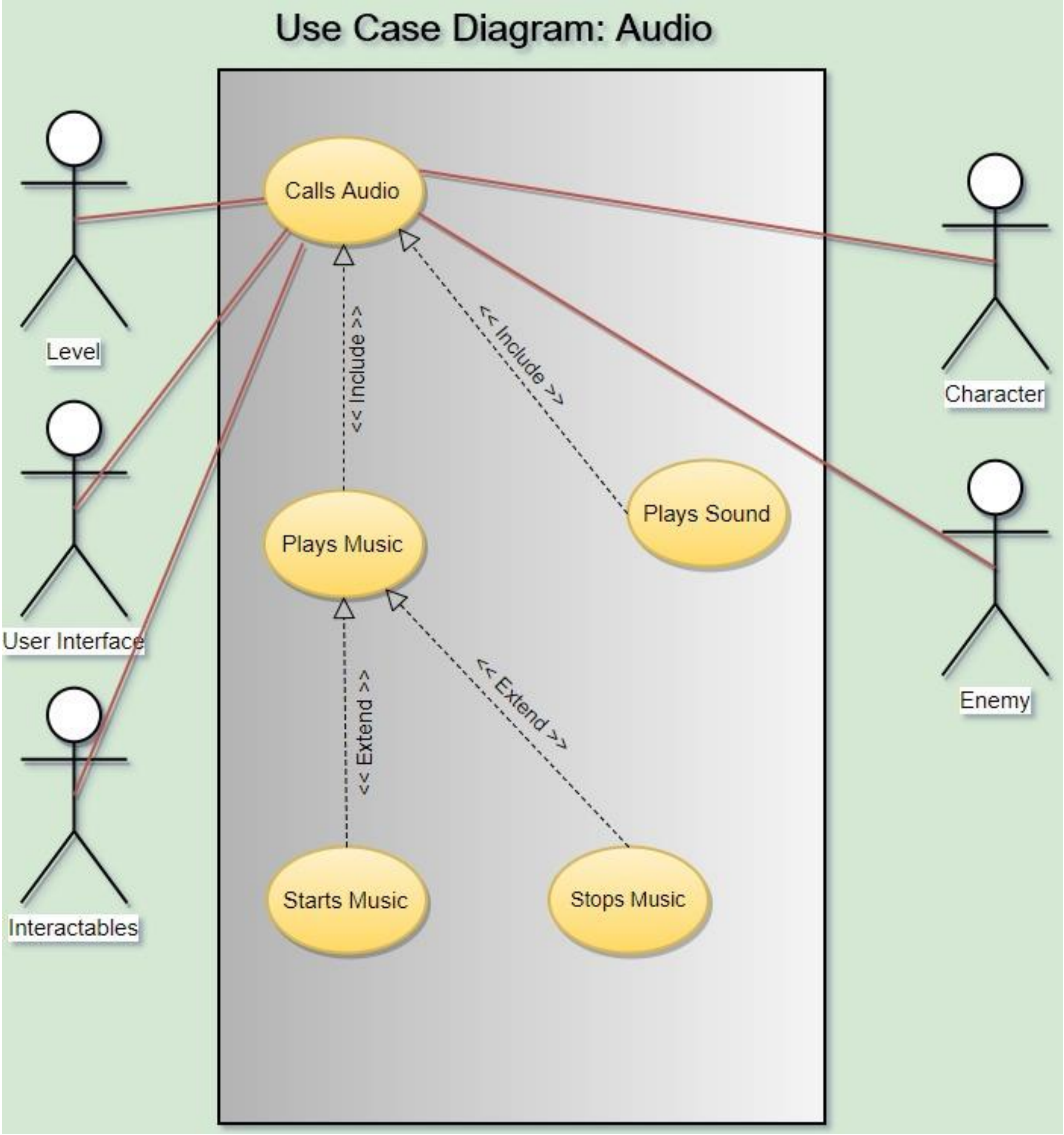
I will be implementing audio functionality into the project. There will be background music in the level based on whether or not the playable character is in conflict. I will design an Audio Manager game object, that will allow other project members to call upon it for various sounds to accompany actions such as, but not limited to:

- The player taking/dealing damage, picking up items
- The enemy taking/dealing damage and being defeated
- User Interface navigation and selection of options
- Items being used

I will also modify/compress audio files to ensure optimal load times. When a sound is requested, it will be returned with a varied pitch from within a random interval range, so the user is not hearing the monotony of repetitious sounds.

2. Use case diagram with scenario __14

Use Case Diagrams



Scenarios

[You will need a scenario for each use case]

Name: calls Audio

Summary: A sound is requested from another game entity; The audio manager returns the appropriate sound to be played

Actors: Character, UI, Interactables, Level, Enemy

Preconditions: The game has been started

Basic sequence:

Step 1: Receive request from game entity

Step 2: Determine if request is for music or sound file

Step 3: Make necessary modifications to sound file

Step 4: Return the audio to be played

Exceptions:

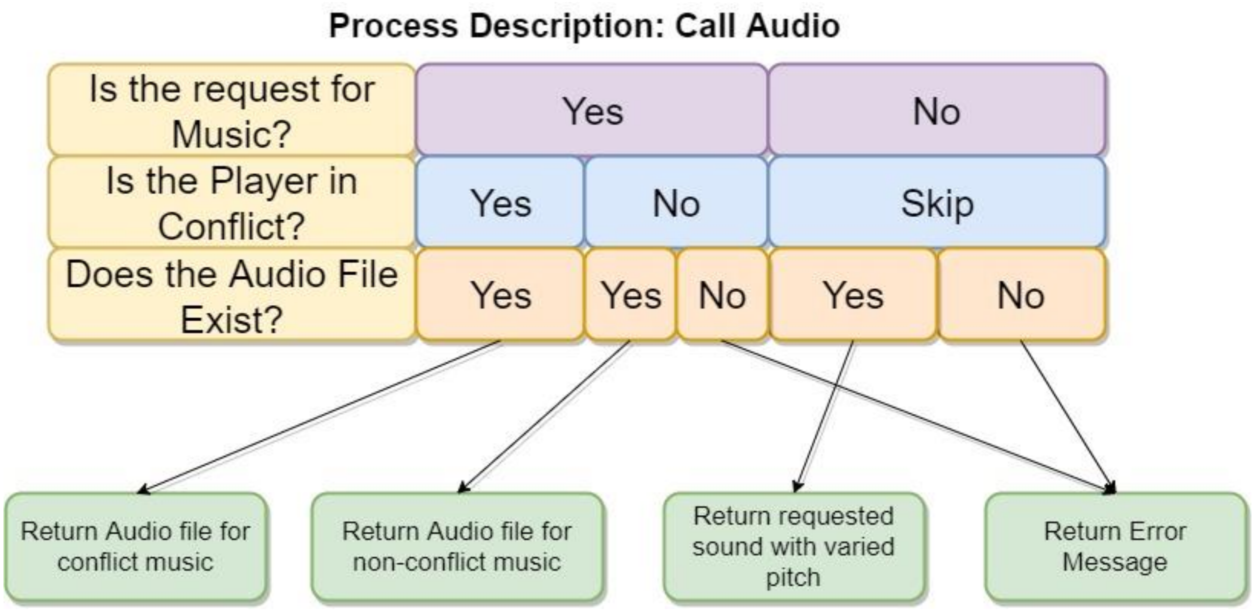
Step 1: The request is for a sound file that does not exist

Step 2: A request is made to play a sound that is already playing

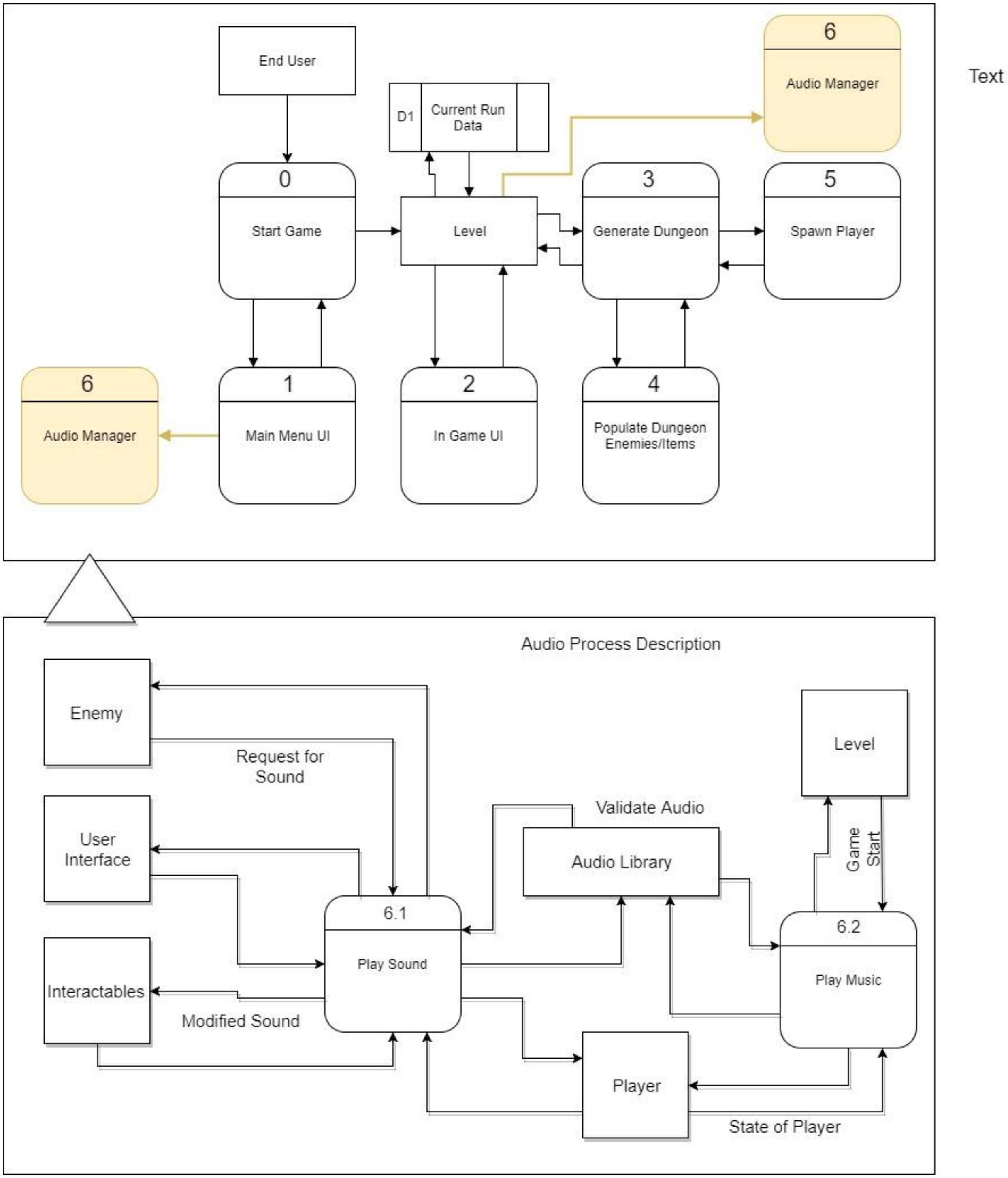
Post conditions: The user hears the sound that correlates with their specific on-screen action

Priority: 2 – Not a necessity for the game to run, but a must-have for purposes of immersion.

Process Descriptions:


Process Description: Call Audio
Is the request for Music?
Yes
No
Is the Player in Conflict?
Yes
No
Skip
Does the Audio File Exist?
Yes
Yes
No
Yes
No
Return Audio file for conflict music
Return Audio file for non-conflict music
Return requested sound with varied pitch
Return Error Message

Data Flow diagram(s) from Level 0 to process description for your feature ______14



3. Acceptance Tests _______9

[Describe the inputs and outputs of the tests you will run. Ensure you cover all the boundary cases.]

** If Audio is requested that does not exist: return error message

If music is requested that is already playing: return error message

If Player requests conflict music but is not in conflict: return error message

If player requests non-conflict music while in conflict: return error message

If entity requests audio that exists: return audio

Timeline ________/10

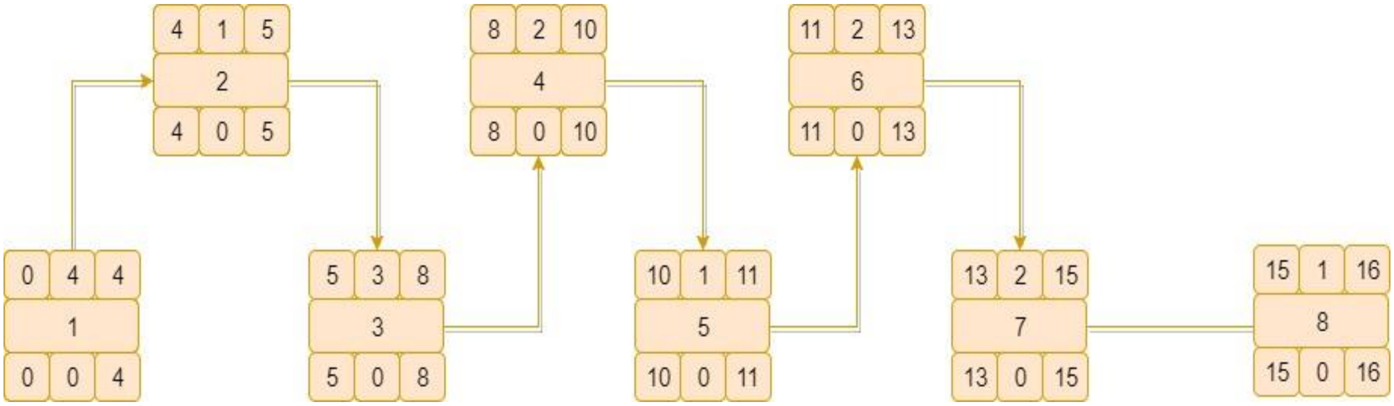
[Figure out the tasks required to complete your feature]

Example:

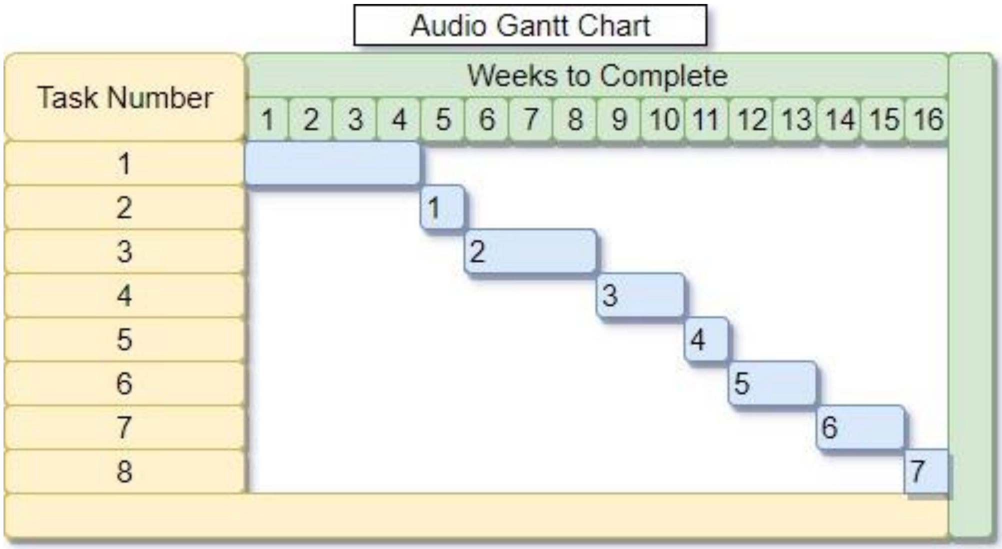
Work items

Task	Duration (PWks)	Predecessor Task(s)
1. Documentation/SA demo	4	-
2. Outline Manager and Functions	1	1
3. Build Sound Library	3	2
4. Working Functions for all possible audio requests	2	3
5. Testing/Debugging	1	4
6. Algorithm for dynamic pitch of sounds	2	5
7. Modify sounds/music for optimal load times	2	6
8. Testing/Debugging	1	7

Pert diagram



Gantt timeline


Audio Gantt Chart
Task Number
Weeks to Complete