

**Brief:**

Music game is a training game in Master Dancer which aims to teach players to dance using twisting motions, alongside using generally gentle movement, as opposed to the strong, direct movement necessary for Star Maker. Throughout it, the player should feel engaged and interested in the music created in the atmosphere, as well as engaged in the movement necessary to complete levels.

**Core:**

- The player can learn to dance using light and twisting movements
  - Includes a quick, light tapping movement
- The player can feel as though they are recreating their own music throughout the game by interacting with the orbs
- Level based gameplay loop

**Dependencies**

- Stereoscope System
- Save System

**Systems:**

- Orb spawning
- Orb
  - Charging/tap checking
- Background music
  - The music changes in accordance with interacted orbs
- Level completion/Menuing
- Environment change
  - This is a stretch goal

**Specs**

- Speed of orb rotation
- Orb Size
- Orb charge radius
- Arm Span
- Volume
- Music Tempo

**Game loop summary:**

1. The player will spawn into an empty and abstract space (using the stereoscope system)
  - a. Possibly just a quiet ambient track playing
2. They will be presented with 3 options (maybe we can make them like orbs or something) for the 3 difficulty levels, upon choosing one, they start the level
  - a. Also should have settings somewhere, maybe attached to hand
3. Light background music will start playing, and 1 orb will fade into existence, rotating around the player

4. When the player follows the orb with their hand, it will slowly charge up, and at full charge the player can tap it to activate it (at the right timing)
  - a. If they fail in any way, the orb will shatter, and then fade back in existence a little later, allowing the player to retry indefinitely
5. The corresponding section of the music will have a melody added, the orb will move to an outer ring, and the next orb (for the next section) will spawn
6. After the player finishes a level, the background music (now orb enhanced), will continue playing until the player selects the next level, and the 3 level select options will reappear
  - a. I thought about making it fade out, but I think players may prefer listening to the final music, and should be allowed to. If they hate it, then they can leave the game or they can choose the next level
  - b. The outer ring orbs will also stay until the player selects a new level
7. The player can exit using a nearby stereoscope at any time.

#### **Detailed info/beat-by-beat:**

- Music
  - The music will play immediately after starting a level, it will be playing the quiet version.
  - When the player correctly activates an orb, it will cause a section of the music to have its melody added
    - The background music will remain the same volume, but it will have a new melody added to the corresponding section
    - This section will start at the start of the song, and slowly move forwards throughout the song, until by the end the music should all be the loud version
  - When a level ends, the music will continue playing until a new level is selected
  - When an orb is successfully activated
    - There are two tracks for each orb, one is for when it's not activated and one is for when its activated
    - Initially, the not activated track is playing
    - When the orb is activated, the not activated track swiftly fades out
    - At the same time, the activated track fades in
    - Hopefully by doing this, the transition is both relatively seamless, and there is also immediate audio feedback for a player successfully activating an orb
- Orbs Spawning/movement
  - The first orb will spawn soon after a level starts.
    - Maybe spawn it at the same time as it's section of the music
  - Orbs will rotate around the player at arms length (can be changed later)
  - Upon activation, orbs will move to an outer ring, and continue their rotation
  - Orbs will only move to the outer ring if activated correctly.
    - Upon interacting with an orb, but failing, the orb will shatter, disappear momentarily, then reappear later

- During this time, the orb will continue it's rotation, so the orb will appear where they would be had they not been touched at all
- Orbs will always "ring" at the same location (in terms of compass direction) according to their corresponding section's location in the music loop
- The next orb will only spawn once the last orb has moved to the outer ring
- When the level is complete AND the player has selected a new level, all orbs will fade out.
- Orb activation
  - Orbs will start in an uncharged state.
    - During this state, if the player touches it, it is considered a failed interaction
  - As the player keeps their hand within a certain radius of the orb, it will charge up
    - If the player's hand is not within the radius, the orb will slowly lose charge (note: the charge will not instantly dissipate)
    - Either hand can be in the radius, but using both will not increase the charge speed
  - Whenever the orb's corresponding section of the background music plays, the orb will "ring"
    - Orbs will always "ring" at the same location (in terms of compass direction) according to their corresponding section's location in the music loop
    - If the player touches the orb significantly outside of this ring duration, it is considered a failed interaction
  - The orb must be activated using a tapping motion
    - If the player does not use a tapping motion, it's considered a failed interaction
  - If all 3 conditions are met, the orb is activated, the music is changed, the orb moves to the outer ring and the next orb is spawned.
- Level complete
  - The level is considered complete once every orb has been activated, and the music has been completely transformed
  - At this time, the level select menu will reappear for the player.
    - The music from the last level will continue to play until a new level is selected
    - Similarly, the outer rings orb will continue to exist until a new level is selected
  - The player will not receive a score, since there's no real way to fail or perform better anyways
- Settings
  - Same ones as star maker probably
  - Pause not really necessary since there is no fail condition
- Stereoscope
  - The stereoscope will be within reach for the player the entire game, and they should be able to use it at any time

- If the player leaves using the stereoscope during a game, the music should cease playing, and the player is of course sent to the hub room.
- If the player returns back to Music Game after leaving midway through the game, when they come back, they will be back at the level select menu (will not save progress).
- Save System
  - The save system should save whether or not the player has completed at least one of the levels of music game for the chapter progression.
- Scoring
  - Tbd, suggested # of tries/success rate