

Title: Ptolem's Singing Catacombs

Developer: Narayana Walters

Overview:

There are hardly any games made for blind gamers. Search on Steam and you can find only one.

Ptolem's Singing Catacombs is an experimental rpg for blind gamers I'm developing. There are no visuals; it's entirely audio-based. No special equipment required, just keyboard and regular headphones and optionally a mouse.

SUMMARY OF BASE MECHANICS:

- The character controller -

You play from a first-person perspective with a similar control scheme to the original Doom (WASD to move and mouse to turn left and right).

There is an audio compass that roughly indicates which direction you are facing: a heartbeat sound is continuously played and pitches up the more north you face and down the more south you face; it pans right the more east you face and left the more west you face.

To examine your surroundings there is an echolocation system: After much experimenting the best system I've come up with (one that is both responsive and informative) is to divide distances into tiers and play sounds according to them. The tiers in distance are 0 to 2 meters, 2 to 8 meters, and 8+ meters. I just updated the system to use syllables instead of clicking sounds. An 'ah' (short 'a') sound is played for the first tier, 'ee' for the second, and 'oo' for the third. Notice they are all vowels and go in alphabetical order.

Another part of the echolocation is it will alternate consonants if something important is in front of you: 'na' if an npc is in front of you, 'ra' if an enemy, 'la' for loot, and 'ka' for an interactable object (lever, sign post, door).

For additional spatial awareness an ambient 'windy' sound plays in your ears if there is space in that direction. E.g. if there is a wall to your right and an open corridor to your left you will hear the ambient sound in your left ear but nothing in your right ear. If you are in an open area you will hear it in both ears.

Finally, a footstep sound plays every one meter you step, letting you track distance traveled.

THINGS TO DO STILL: work on the combat system, find a non-intrusive way to communicate how much health you have (perhaps incorporate it with heartbeat?).

- World design -

To have an easy to navigate world requires good level and audio design. Materials you walk on will need unique sounds, so you can know if you're still walking on that road or if you went off into the grass. I plan on having Common Identifier sounds and Unique Identifier sounds.

Common Identifiers: a Common Identifier Sound is one that plays around important objects you can find anywhere in the world. For example, crossroads will have signposts by them that have wind chimes hanging from them. Whenever you hear a wind chime you will know you are near a sign post that you can go up to and examine for directions. Another Common Identifier will be blacksmith hammer and forge sounds, indicating a blacksmith is nearby you can buy weapons and armor from.

Unique Identifiers: a Unique Identifier Sound identifies a specific unique location. For example, if you are exploring a forest, one area may have a songbird that sings a unique melody. Then while you explore if you hear that melody again you'll know you've returned to that area. Other examples; a dungeon may have a room where water drips into a puddle, a castle may have a room with a roaring fire, a cathedral may have a room with a monk chanting.

- Other Stuff -

I'm planning to design the rpg elements similar to old-school rpgs such as Eschalon and Fallout. Like those rpgs, there will be a 'console' that explains events or describes things, just with text-to-speech (TTS) instead. I'm keeping TTS off-limits for regular gameplay (having to hear "the goblin hits you for 4 damage" would get old fast). Events or entering new areas will prompt descriptions, but since your character is blind, all descriptions will be of sounds, smells, and textures.

You will be able to examine most things in the world; if you are close enough (within 2 meters) just press 'R' and a description will play. e.g. "it's a rough wooden level attached to a rusted iron base".

I need an inventory system that's simple to navigate and displays stats, backpack, journal, and current equipment.

Similar Projects: Blind Legend, an adventure game on Steam. Papa Sangre, a puzzle game on IOS (got taken down due to faulty tech).

Past Experience; I've been making games for 5 years, made 14 small games and released one game on steam. Strong experience with level and mechanic design and creating comfortable difficulty curves.

Tech: Using Godot engine and built in scripting tool. Audacity for audio editing.

Risks: Godot is still in development despite having stable releases; I plan to switch to 3.0 when that releases. Audio tech might be faulty. If it is too unreliable I may have to switch to Unity.