# Thesis: user scenario brief

My project is a computer game available for free download (at least initially; it could be developed into a commercial release), so it presupposes the following in its audience: 1) access to a mid-range computer; 2) access to the Internet; 3) access to free time; 4) an interest in playing games. The game mechanics draw upon familiar run-and-jump tropes so there is some dependence on manual dexterity and reflex. However, the focus of the game is on the manipulation of the environment as a way to solve puzzles and navigate, so the action is more cerebral. The game visualizes sheet music as a physical environment to explore by means of an avatar, with the musical notation becoming physical objects in the world with which the avatar can interact. Manipulation of these notes through game mechanics such as recording and playback, repetition, and changes in spatial position (i.e. pitch, timing, etc.) introduces and exploits principles of music theory and composition. Here is an image from an early prototype:
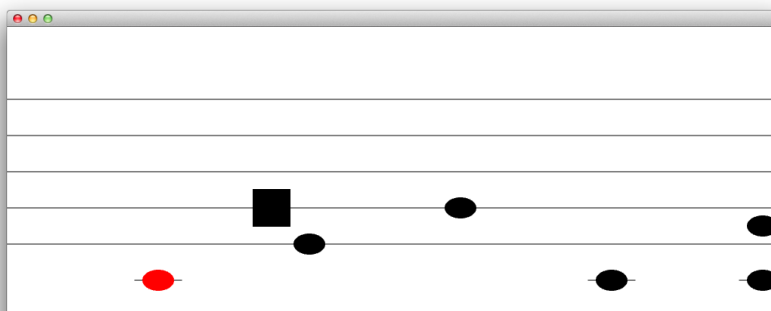


*Fig 1. The avatar (square) leaps over the second note in a musical sequence.*

The gameplay deemphasizes violence and celebrates exploration, playfulness and musical experimentation, on top of the puzzle-solving aspect. Because it is musically-driven it does draw upon my own musical tastes, knowledge and tools, and there is no denying that building puzzles around specific chords, melodic progressions, etc. does require a musical

agenda about what is interesting to play (in both senses of the term) and fun to hear.

Still, the focus is on imbuing the player with the powers of a composer and thus allowing personal musical expression, within the limits of the tools I provide (i.e. specific notes and instrumentation). Consequently I envision one major demographic-split into three groups: those who know something about music and composition, those who do not but could become musicians, and those who have no "ear" for music and no knowledge of the theory.

## Case 1: preaching to the choir

The goal of the game from a demographic perspective is to provide an enjoyable experience to any player regardless of musical expertise or aptitude. That means that any information conveyed about the structure and composition of music must be embedded within game mechanics with integrity that is not dependent on that information. That is to say, someone who is already a composer should not be bored by playing the game. For this reason, the puzzles are environmental (meaning, for instance, figure out how to get up to that ledge or to drain the moat, etc.) and the action has a twitch element (dodge the stream of notes, capture the one you need). These activities are fun and challenging on their own; the fact that they are based in music theory, that it is all taking place upon a world of literal sheet music (but set in motion), is to some degree incidental, or a bonus as it were.

The powers granted to the player also allow for some freedom in their deployment. For instance gaining the ability to record and manipulate the notes means the composer can step away from the stated goals of the game (solve this puzzle to move onward) and have fun constructing sequences that may have no value for puzzle solving but do have a "good sound" or are otherwise compositionally interesting. For these players, the gameplay is fun and the music aspect is a sandbox or toy to play with as desired.

## Case 2: have an ear, want to learn

Those who do not know about music theory but have an ear for music may to some degree be the ideal audience, because they can enjoy the gameplay, play around with the sound, and perhaps gain some new understanding of the way these principles translate to the page. For instance, a player might drag a note from one pitch to another, hear the difference, and then connect this with the differing positions of written notes on actual sheet music, which have the same structure. The game does not need to be educational to be successful, but it has the potential to be educational as well.

## Case 3: tin-eared and tone-deaf

The vast number of people who either do not enjoy music or do enjoy it but cannot carry a tune or differentiate between higher and lower notes cannot be ignored, and it is this group that presents the greatest challenge to reach, because the musical aspect is entirely lost. That being said, in a way this group blends the experiences of the first two. Like Case 1, they embrace the gameplay-focused goal-driven entertainment. And, though they may not be able to "hear" music or understand composition as a musician would, they still have the potential to connect their actions with the elements on a printed page of sheet music, as in Case 2. To this extent, there is the potential for their experiences--which, after all, are compositional whether they realize it or not--to inform their view of written music, transforming it from arcane symbols into a system with which they have interacted and which they have to some degree comprehended.

In all cases, regardless of musical expertise, the hope is that people will think about music (and specifically look at sheet music) differently, as a physical space that may be explored, played with and composed to pleasing effect.