## Walk, Stop, Run as The Beat

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## Introduction

For my second assignment in Designing Musical Games, I created a side scrolling game which tethers the player's speed and movement to the instrumental soundtrack. As the player walks, runs or halts, a drum machine is sequenced as well as a granular synthesizer. Through this environment, players can explore the nuance of remix and performance as they begin to unpack the musical space through their own movement. Additionally, players have no part in composing or producing the game's soundtrack, so when they enter the space, it must be with the mindset of exploration.

## **Environment**

Walk, Stop, Run to The Beat (WSRTB) was created using Unreal Engine's provided side-scrolling template, which contains assets such as a level layout, character blueprint, etc.. WSRTB contains environmental sounds such as electrical buzzing and footsteps. Footsteps were implemented via a modification to the character blueprint, which uses animation events to trigger a MetaSound, which selects a random footstep file to playback. Electrical buzzing is produced by two invisible objects at each end of the level, which become more and more faint the further the player is from them. In the background of the scene, a granular synthesizer emits a droning tone formed by the positioning of the player; it follows a tonal sequence which is driven by the character's clock. Lastly, small green balls can be seen as the player moves through the level, which when walked on by the player, emit sound.

## Items and The Player

Upon initially entering the space, the player may notice four floating pink balls. When the player walks into these balls, they will disappear, and a piece of a drum kit will begin to play. These percussive sounds are played back by MetaSound patches which receive triggers for their respective sounds. Interacting with these balls simply enables these sounds, because at the core of WSRTB is a drum machine fueled by the player's actions. For further control, the player can also enable drum tracks via the 1, 2, 3 and 4 keys on their keyboard. The player also has four cubes that follow them, each corresponding to some part of the drum machine. When a track of the drum machine is triggered, the cube corresponding to the track will change in height and width. This was an attempt to visualize the player's interaction with the world, and would bring entertainment to those who aren't able to hear the drum sequence itself.