

# - CS Project Updates -

# // Selling Point – Gameplay //

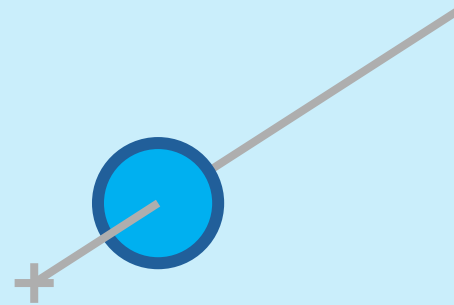
- Use the **features** of the hand tracker while being simple
  - Modify the TRACK note -> Player needs to control the **rotation** as well
- Add other note variants
  - TAP -> Tap the note
  - AVOID -> Cannot touch the note
  - RANDOM -> **Randomize** the location of the note in every play

# // Selling Point – AI Charting //

- The chart of a song is manually designed and playtested traditionally
  - This is to ensure that the level is enjoyable and more “human”
- We might be able to use machine learning to mimic that
  - For melody/drumbeat finding, FFT could be used
  - For actual charting requires a dataset

# // Judgeline Visibility //

- The player is difficult to know when to hit the note without a clear indication (i.e., judgeline)
- Make the notes follow a visible **path**, then the player should hit them when they reaches the end of the path
- Could also make charting easier



# // Chart Format //

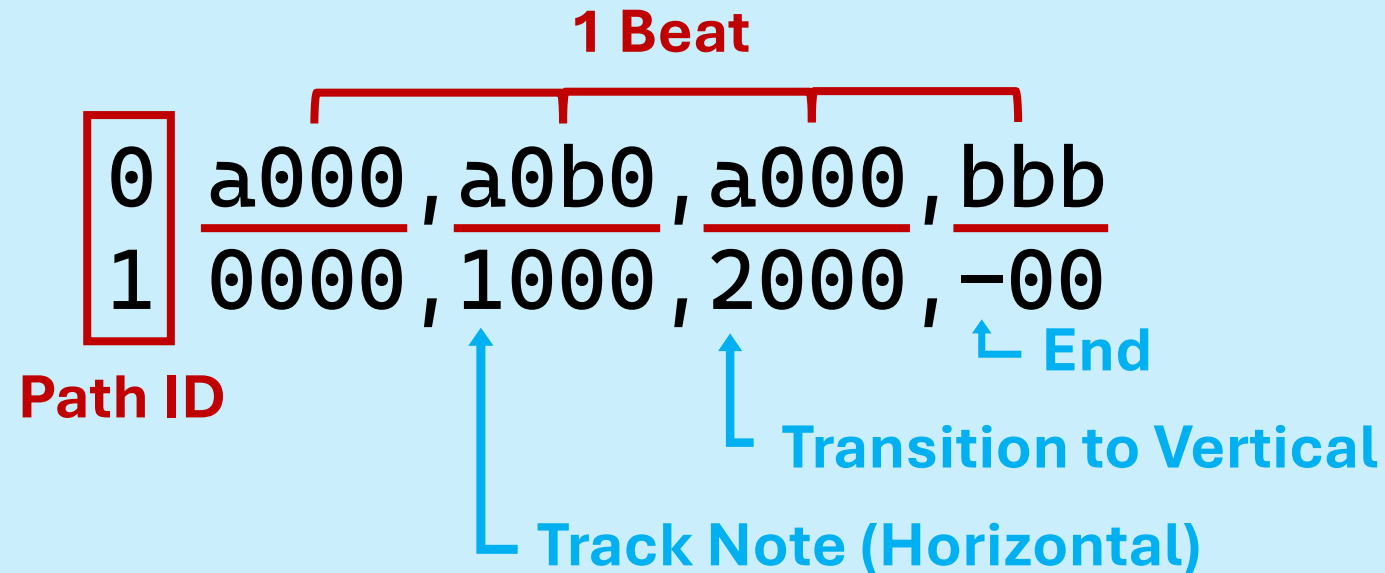
- A file contains basic song information, difficulty, and the chart itself

Song name				BPM	Length
Momentum.				134.	118.
11#	11#	11#	11#	Notes	
00&	00&	00&	00&		
00#	00#	00#	00#		
11&	11&	11&	11&		
11#	11#	11#	11#		
00&	00&	00&	00&		
00#	00#	00#	00#		
11&	11&	11&	11&		
10#	10#	10#	10#		
01&	01&	01&	01&		
10#	10#	10#	10#		
01&	01&	01&	01&		

One of the chart I designed for the final project of a previous course (2 Lanes)

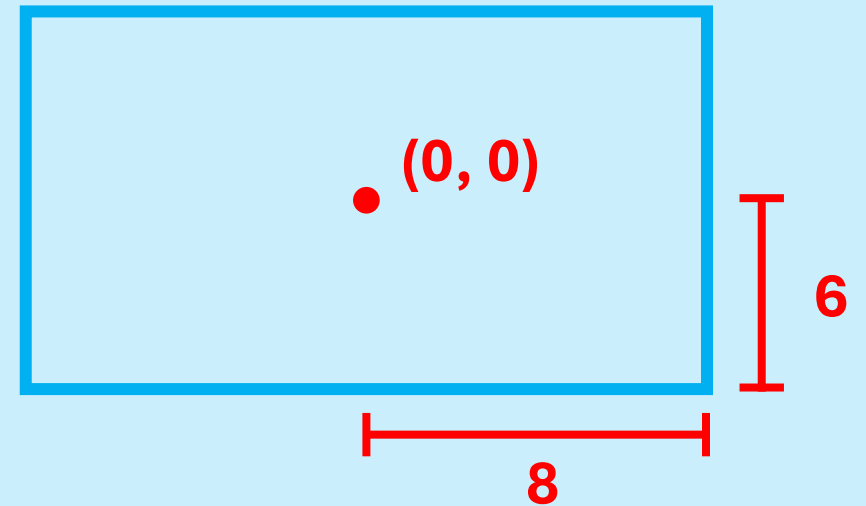
# // Chart Format //

- Note Patterns
  - Assign notes to different Path IDs
  - Using comma ( ',' ) to separate beats



# // Chart Format //

- Paths
  - Control the **position** of the notes



0 =  $(-3, -2)$  a000, a0b0, a000, bbb  
1 =  $(3, -2)$  0000, 1000, 2000, -00  
**Path Position**