

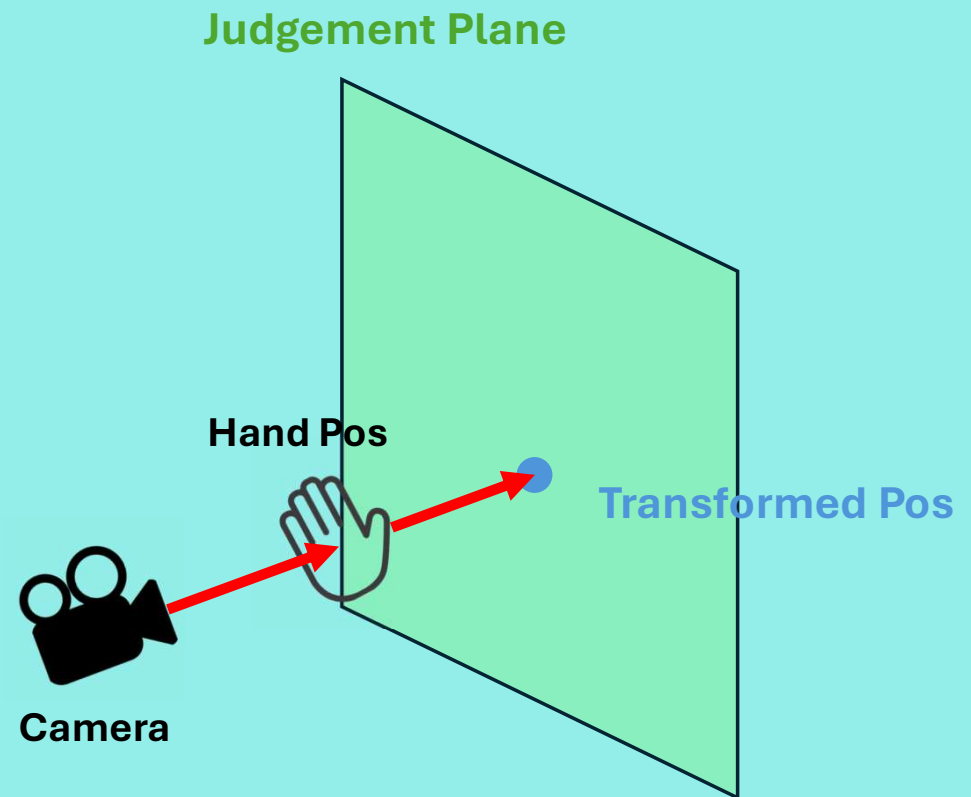
CS Project Progress Report

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Leap Motion Integration

a) Coordinates Transform

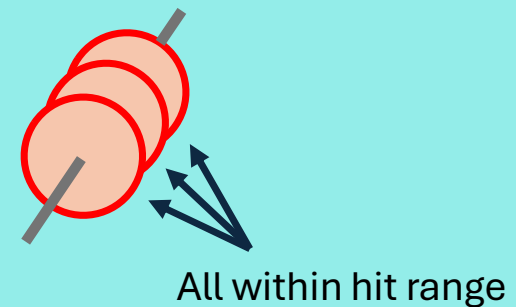
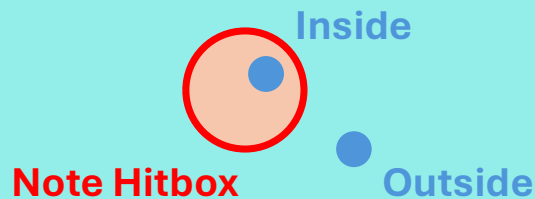
- (1) Get hand position
- (2) **Fix z-position** so that the x&y direction movement is consistent
- (3) Project the hand position to the judgement plane



Leap Motion Integration

b) Hit Detection (Tapping)

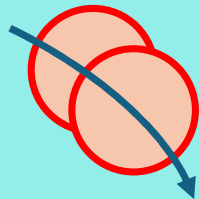
- **Idea:** Check if the hand is within the hit range
- **Problem:** Multiple notes may be detected



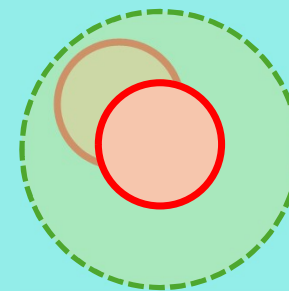
Leap Motion Integration

b) Hit Detection (Tapping)

- **Solution:** List all the touched notes and pick the nearest
- **Experience Enhancing:** Add a leniency/tolerance to prevent mis-hit



Would hit the note behind first if player swipe from this direction



Add **tolerance** to ignore the detection

Possible Problems

(1) The tracker might not be able to handle two hands if they are overlapping

- Change the location of the tracker

(2) The hand position may still be hard to track

- Add more indicators