

Kinect It Up



Dancing with your hands

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Idea

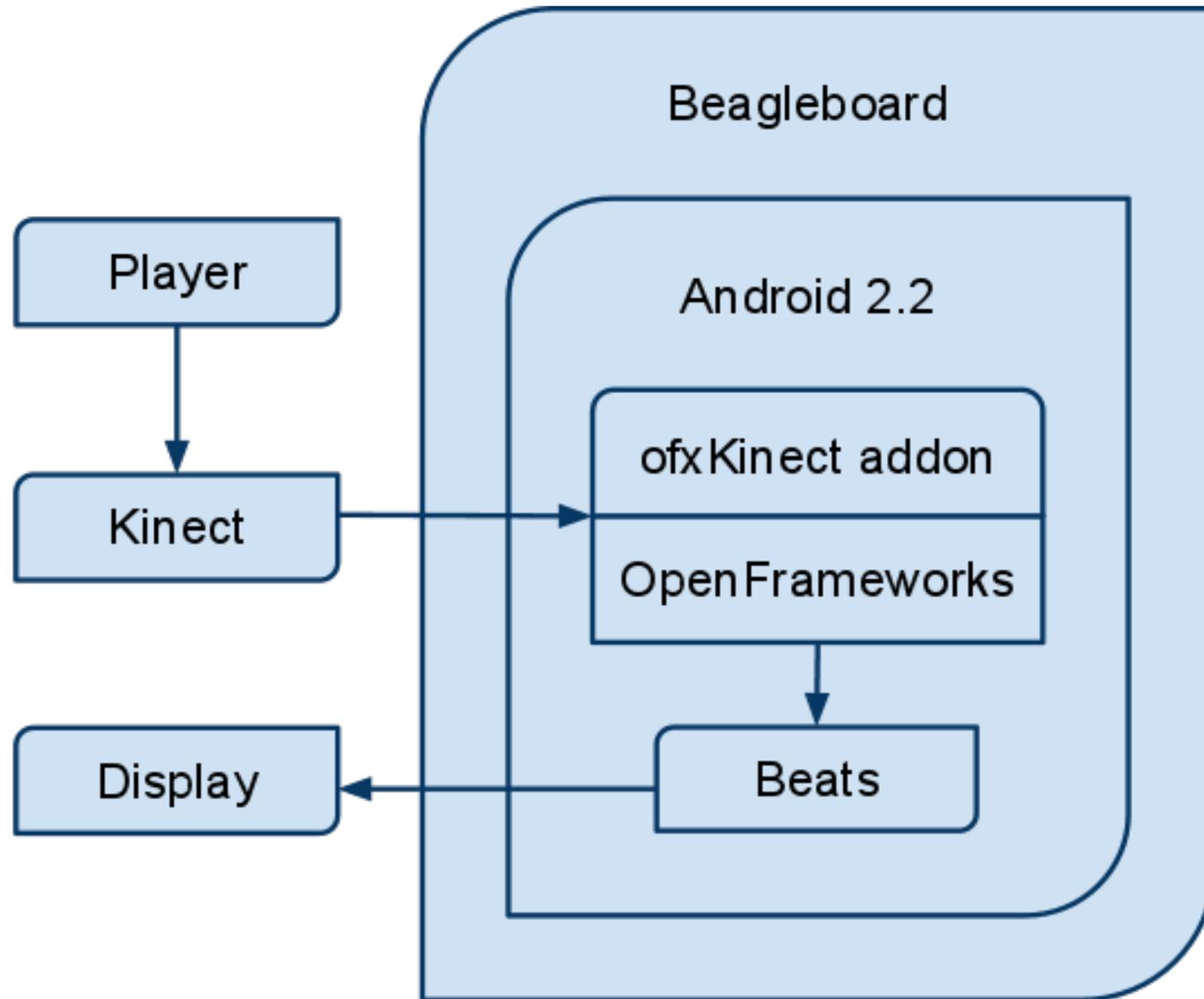
- Existing music-rhythm games
 - require players to play the game with their feet
 - input from keyboard-like buttons tapped by hands.

- Kinect It Up
 - allows players to "dance with their hands" in the space in front of their chest without the need to physically tap a button.

How does it work?

- Our program uses Kinect's depth sensor and splits its view into four vertical sections, ordered from left to right, with each section subdivided further and averaged to account for random interference/unintentional moves
- Each vertical partition represents one of the four directional inputs in the game Beats that we are using.
- The program communicates with Beats portable on Android
- When the number of pixels with distance values less than a certain threshold, the corresponding directional input action is invoked in Beats.

Hardware Flow Chart



Future Potential

- Eliminating the requirement of a physical button allows players to freely move their hands in the air.
- Kinect has also shown the possibility of recognizing specific hand gestures or movements.
- Combining these characteristics of Kinect It Up, it would be possible to program the game so that actual dance moves of one's hands rather than the boring and repeating button/hand movements that is used now.
- This would mean dance music-rhythm games can more realistically have players "*dance*" as gameplay.