Kirby Khaotic Kombat Prject Checkoff list

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## **Video Analyzer Module**

This module will detect the position of the two laser pointer dots and will sned them to the game logic and gesture recognition modules. We will demonstrate the ability to track a red and green laser dot on the screen simultaneously by placing a sprite where the dot is detected. If time permits we will also compensate for different camera orientations.

## **Gesture Recognition Module**

This module looks at the streaming data of the laser position and analyzes it to determine what gesture is being performed. To demonstrate this module we will have it output detected gestures to the hex display or on the screen. It will be able to distinguish between a variety of different gestures, including various combinations of straight lines, circles and more. We will include as many gestures as time permits.

## **Game Logic Module**

This module will be what actually makes the game work, it will determine the position and orientation of all the sprites based on input from the video analyzer, gesture recognition and keyboard modules. It will be the functionality behind the game and will be demonstrated by us playing the game. The game will be two player combat, with platforming done by the keyboard and attacks and defenses done by the gestures. The game may have weapons, powerups or projectile attacks, time permitting.

## Video output and sprite modules

These modules will generate the video for the game given input from the game logic module. They will also be demonstrated by playing the game. We will have a series of sprites to represent Kirby and King Dedede copied from sprites taken from other kirby video games. There will also be sprites for the background and any items we have time to include. Collision detection will be done on a per pixel basis by testing to see if two sprites are trying to draw to the same pixel.