Pictionary Game

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1. Project description

Pictionary is a drawing and guessing game, where teams alternate turns. Each turn, one player from a given team will be given something to draw. Only the drawer knows what they are drawing. As the drawer is drawing, their team-mates must guess what is being drawn. The object If the team guesses correctly in the time allotted, they get a point. The next team takes their turn.

1.1. RaspberryPi gyroscope sensor (socket programming)

Use the Raspberry Pi 4 as a writing device detecting its move from positions in gyroscope to actually draw on screen

1.2. GUI

White canvas that will be used to calibrate the raspberry pi and make the drawings.

1.3. WEB programming

Multi-user chat where people can form teams try to guess what is being drawn and see the image in real time as it is designed

1.4. ML implementation and improvements

Improve traces and make the game more enjoyable

2. Project motivation

It is fun to feel connected with friends and family during periods of social distance and isolation. This is the reason why we have decided to reinvent the game of Pictionary, but with a digital and more interactive twist. The project has plenty of room to incorporate socket programming, web programming, GUI programming, and even machine learning into one fun to use platform.

3. Project hardware list

Hardware required:

3.1. RaspberryPi with sense hat

3.2. A Computer with an internet connection and Python 3.x