Tech Demo

(Motion sensor's inputs using web technologies)

Demo:

https://keshavnagpal.github.io/gyro

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Objective

To build a proof of concept which can take inputs from mobile's motion sensors using web technologies only

Requirements

1. Any device with gyroscope and/or accelerometer sensor(s) (preferably a smartphone)
2. A JavaScript enabled web browser
3. Permission to use device's motion sensors

Features and how to use

1. User need to open the application in a JavaScript enabled web browser then it will automatically take inputs from device's motion sensors.
2. The proof of concept includes a ball which moves respective to device's motion, the aim is to place the ball inside the circle and keep it inside it for as long as possible and a timer will start

when it comes inside the circle and will reset when it comes out of it.

3. High score will keep track of the longest duration the ball was inside the circle.

Logic

Ball's movement with respect to device's motion

Used Device-Motion-Event to listen to device's motion which triggers a JavaScript function when device's motion is detected which then takes input of accelerations on x and y axis of the device which is multiplied by a factor speed and appended to the ball's (x, y) co-ordinates.

Timer

When the co-ordinates of the ball are inside the circle's parameter the timer starts and it stops when it is detected that the ball is outside the parameter of the circle

High-Score

If the current timer's value is higher than the previous high-score's value, then it sets the high-score value to current timer's value when the ball leaves the circle

gravity consulting

Technologies and frameworks used

Used only JavaScript functions and html-CSS, no library or frameworks used.

Ideas for future

We can add obstacles outside the circle or collectible points inside the circle to make it more engaging.