ITSP-2k15

Team Name- Robotrons

Team Members-
Prabhav Mohta
Kanishka Panda
Prakirt Jhunjhunwala
Shivam Garg

*We have submitted another abstract with the same team name and the same team members but with project name ‘Autonomous Tennis Ball Collector’.

VIRTUAL MOUSE

Introduction

Virtual mouse is a hand gesture controlled wearing device. Its functioning and control is same a normal mouse pad. But instead of pad sensing the movement of fingers, our device would sense the movement of the fingers and would function accordingly. It would also be able to process single and double tap features. Virtual mouse would be able to work on any opaque surface.

Implementation

We will use an array of photodiode and click buttons. Photodiodes would sense the movement of the index finger and would decide the movement of the cursors on the computer screen. We can click by applying pressure on the fingers. The glove will transfer the input data (received from the sensors) through the USB cable. But we are planning to use a wireless module to omit the use of USB cable.

Timeline

1st week-

Searching for the correct sensors and photodiodes, purchasing them, learning about the coding part.

2nd week-

Building the final prototype of our device, by fitting the sensors, photodiodes and completing the IC's.

3rd week-

Beginning the coding for the driver of the mouse.
Working on the transfer of data.

4th week-

Completing the driver.
Beginning the work on the wireless module.

5th week-

Working on wireless module.
Debugging.

6th week-
Fixing the glitches.
Improving our device aesthetically.

Cost Estimate
8k