Gesture Assistant

By Invincible Coders

Track

Hybrid World - Vicara sub track 2

Develop an application that can recognize gestures such as swipe up, swipe down, swipe left, swipe right, and grab and allow the user to control their computer by automating the mouse and keyboard using the gestures.

Tech Stack

- Python
- OpenCv
- MediaPipe







What is it About?

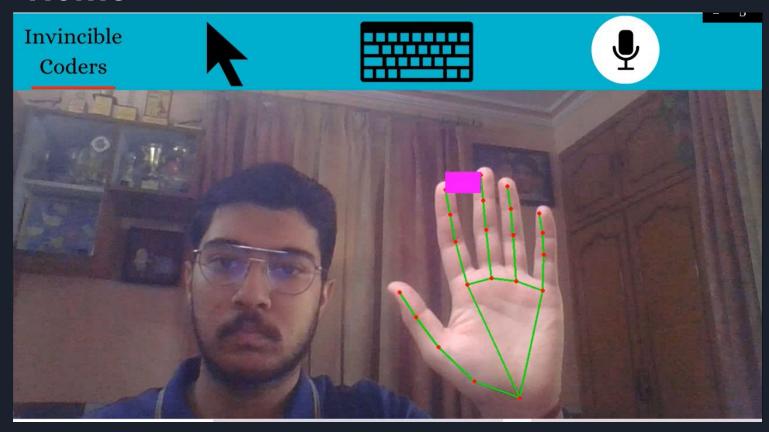
We have made a motion controlled interface for a computer. It consists of a dashboard where a user can select different types of features using their finger whether they want to use the virtual mouse or the virtual keyboard. Then they can control the mouse or keyboard using their palms

Such a motion controlled interface allows touchless interaction with a computer. A potential application of such a system is touchless kiosks in public areas which would especially useful in today's COVID times.

UI Design



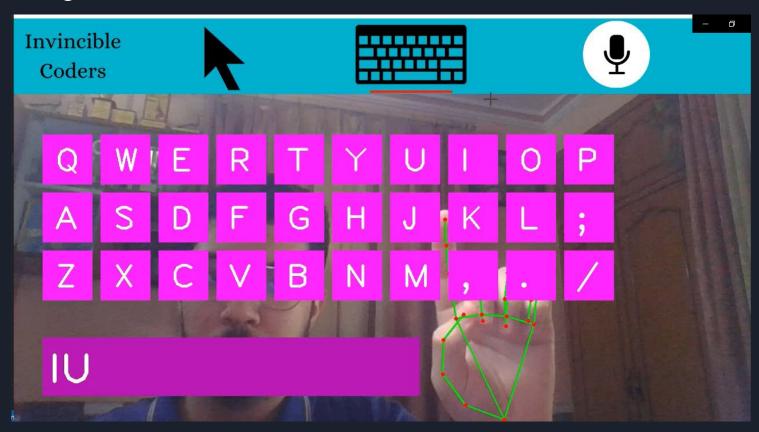
Home



Mouse Select



Keyboard Select



Future Scope

We are planning to expand this project to a much larger extent. Not only users with a computer but also those with just their mobile phones will be able to use our app. We will be adding features like integrated voice controls so that the user can control his device just by speaking commands.

With better camera quality and training of the model, this project will be very efficient and useful.

Team Members

Surbhit Agrawal

Binayak Bishnu

Pranav Desai

Garv Tandon