

# **REPORT**

This is project on game automation of the game stick hero which can be installed from playstore or can refer the following link <https://play.google.com/store/apps/details?id=com.ketchapp.stickhero> in android device. The script is written in python.

Basically with the help of this script we let the computer play the game on itself. To run this we will need to import few modules and need to do android debugging(adb).

The script will work only for android devices.

First connect your android device to laptop using an usb cable and make sure that you turn on the usb debugging and turn on Revoke USB debugging authorisations.

Then you need to download using pip and import the following modules.

1.numpy

2.os

3.matplotlib

4.pause

5.opencv-python

The idea we used here was we take the screen shot of the game and then crop it.

After cropping it we turn the whole image into a black canvas.

Then we colour the band of the hero and the dot in green color.

Then we take the distance between the pixels of the band and dot.

Then using the rate we find the time needed to swipe the screen until the necessary length of stick is made such that it approximately falls on the dot.

And after running the code u can see that the computer starts playing the game on itself.

The challenges we faced was in cropping the image and then finding the particular dimensions needed to run it(though it depends on each device need to to just edit the dimensions code a bit.)

The things we learnt from this was how to implement different modules at a time, co-ordination between each other.