

MAGIC WAND USER GUIDE



Tech Edge

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Magic Wand User Guide

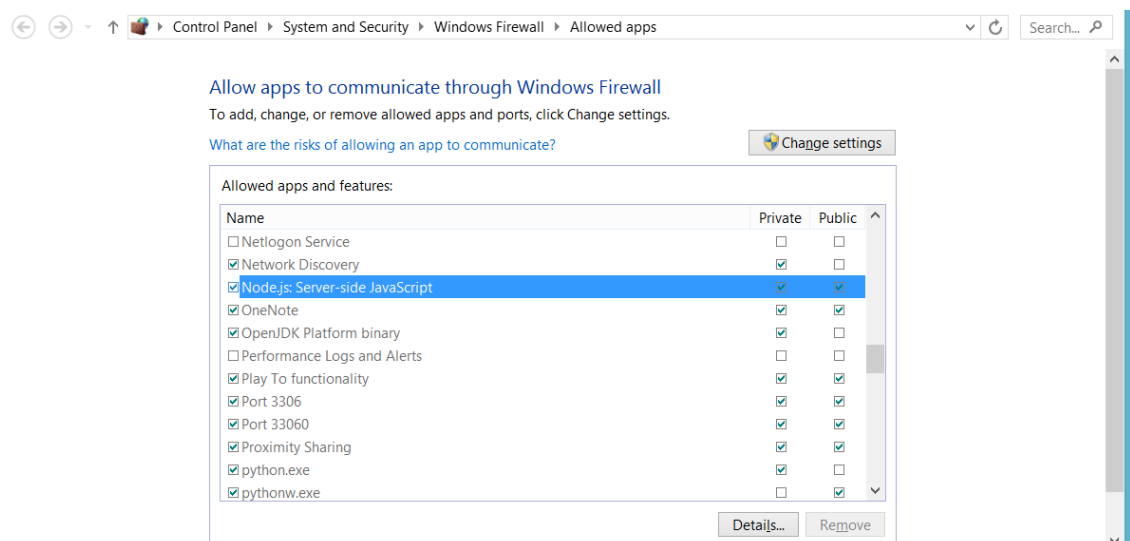
Tech Stack:

- Python
- Node.js
- React Native

Deployment:

- Download project source code from our [Github repository](#)
- Install the required python libraries from requirement.txt

```
>pip install -r requirements.txt
```
- Install [Node.js](#)
- Allow public network access in Firewall if you have it enabled.
For Windows users, go to firewall setting in your PC and allow public network access to node.js server.



- Navigate to MagicWand/ magic-wand-backend directory and run “npm install” on your command prompt (Installs all the node package dependencies)
- Now, run server.js file

```
>node server.js
```
- Navigate to MagicWand/python-client/ directory and run “client.py” file (keeps requesting node server for new gesture and simulates keyboard presses)

```
>python client.py
```
- Install Magic Wand.apk file on an android phone.
- In command prompt, type “ipconfig” (Windows Users), and “ifconfig” (Mac and Linux users) and copy your ipv4 address to input in the mobile app.

Windows:

```

Command Prompt

Wireless LAN adapter Local Area Connection* 3:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . . : 
Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix . . : 
Link-local IPv6 Address . . . . . : fe80::4d46:2aef:9d4f:9e23%6
IPv4 Address. . . . . : 192.168.1.92
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.254

Ethernet adapter Bluetooth Network Connection:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . . : 
Ethernet adapter Ethernet:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . . : 

```

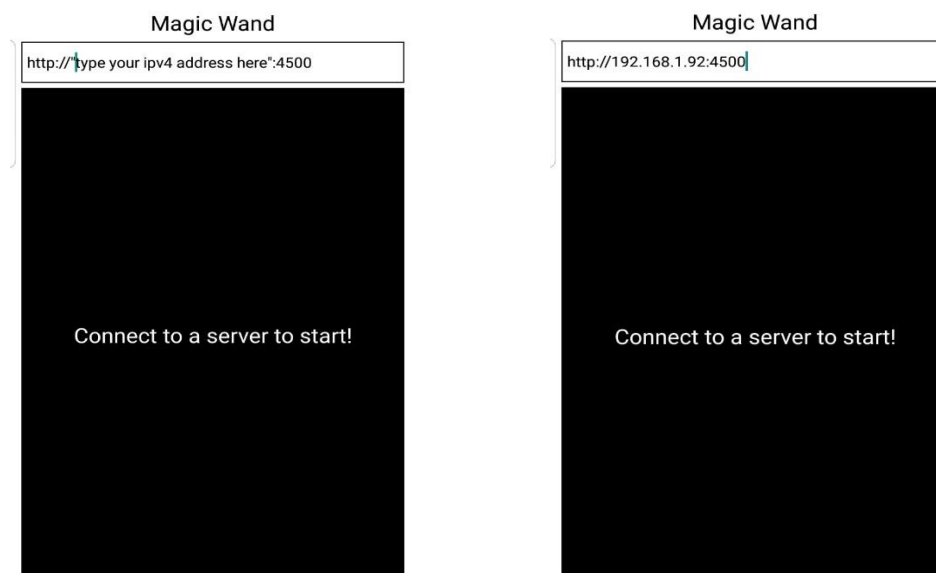
Linux and Mac:

```

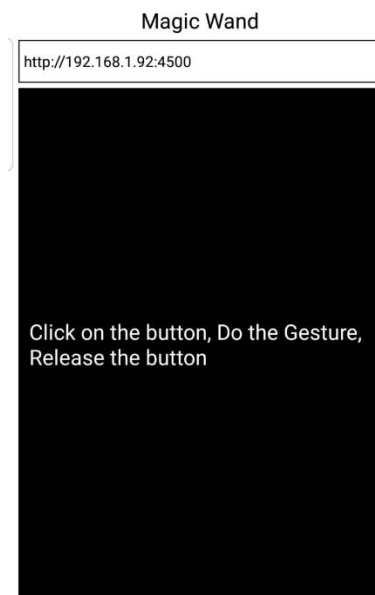
Last login: Mon Sep 30 18:56:33 on ttys000
(base) ~ ifconfig
lo0: flags=8049<UP,LOOPBACK,RUNNING,MULTICAST> mtu 16384
options=1203<RXCSUM, TXCSUM, TXSTATUS, SW_TIMESTAMP>
inet 127.0.0.1 netmask 0xff000000
inet6 ::1 prefixlen 128
inet6 fe80::1%lo0 prefixlen 64 scopeid 0x1
nd6 options=201<PERFORMNUD,DAD>
gif0: flags=8010<POINTOPOINT,MULTICAST> mtu 1280
stf0: flags=0<> mtu 1280
XHC20: flags=0<> mtu 0
XHC0: flags=0<> mtu 0
en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
ether 38:f9:d3:55:ab:21
inet6 fe80::4a4:141d:7075:4536%en0 prefixlen 64 secured scopeid 0x6
inet 192.168.1.71 netmask 0xffffff00 broadcast 192.168.1.255
nd6 options=201<PERFORMNUD,DAD>
media: autoselect
status: active

```

- In the mobile application, connect to the local server using the following format
For example:



- After the application is opened, the below window will open:



- Hold the black button and perform any gesture. To check if it works, check the node server.js logs if you can see the accelerometer and gyroscope values.
- If you need to change the keyboard mapping for any gesture, you can change it in client.py file
- For a demo of the working of the app, you can view:
<https://youtu.be/U9QK4XHbvvk>