**WEbRTC**

WebRTC is a free tool that allows people to talk or message each other in real-time using their web browsers or mobile apps. You can easily use it by following simple codes called APIs.

Google made a new thing in 2011 that lots of people use for talking and working

together on the internet. WebRTC lets people talk to each other online without

needing extra programs or tools. It's an easy way to learn remotely. WebRTC lets

people talk to each other quickly using some rules and tools like RTP, SIP, and ICE.

These rules make sure that communication is safe, works well, and is fast, even when

the network is not easy to use. WebRTC has tools that can make the sound and video better in communication. They can help to stop noise, echoes, and make sure the

volume is good.

 First create and login into AgoraRTC account

[AgoraRTC](https://www.agora.io/en/)

 generate the APP\_ID from the given documentation and copy to clipboard

[APP\_ID Generation](https://docs.agora.io/en/video-calling/reference/manage-agora-account?platform=android)

**Running Backend Server:**

 Clone the repository

git clone <https://github.com/htmw/SimplyOnline.git>

 move to backend directory

cd backend/

 Make sure you have Node, mysql installed and correctly set up.

 Create a new database in MySQL using:

mysql -u root -p

Enter mysql password, then run:

 Download sql file given in the backend directory & Enter the following command and execute to create a database and its related tables required for the project

source sql.sql;

 open .env file in the current directory and replace the following database details with your own and save it.

MY\_SQL\_USER = "myuser"(replace)

PASSWORD = "mypassword"(replace)

DB = "mydb"(replace)

 Run the following command to install packages related to backend

npm install

 Finally run the following command to run backend server

node index.js

 Now you can see the connection is succeed and the server is listening on

**Running Frontend Server:**

 Clone the repository

git clone <https://github.com/htmw/SimplyOnline.git>

 Install NodeJS LTS version from <https://nodejs.org/en/> for your Operating System.  Navigate to client folder and install required libraries:

cd client/

npm install

 In case of any error run audit and install once more:

npm audit fix --force && npm install

 open .env file in the current directory and replace the following database details with your own and save it.

APP\_ID = "youragoraRTC-app\_id"

BACKEND\_URL = "backend-end running port"

 Run the following command to run the front-end(client):

npm start

 Now you can see the client running on localhost

**Running face-recognition server:**

 Clone the repository

git clone <https://github.com/htmw/SimplyOnline.git>

 Install python and pip from python.org

 Navigate to face-recognition folder and install required libraries:

cd face-recognition/

 in the Images folder add your images to train the module

cd images/

 Install the following the command to install dependencies required

pip install -r requirements.txt

 Run the following command to run face-recognition server

python home.py