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

- generate the APP_ID from the given documentation and copy to clipboard

APP_ID Generation

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
```