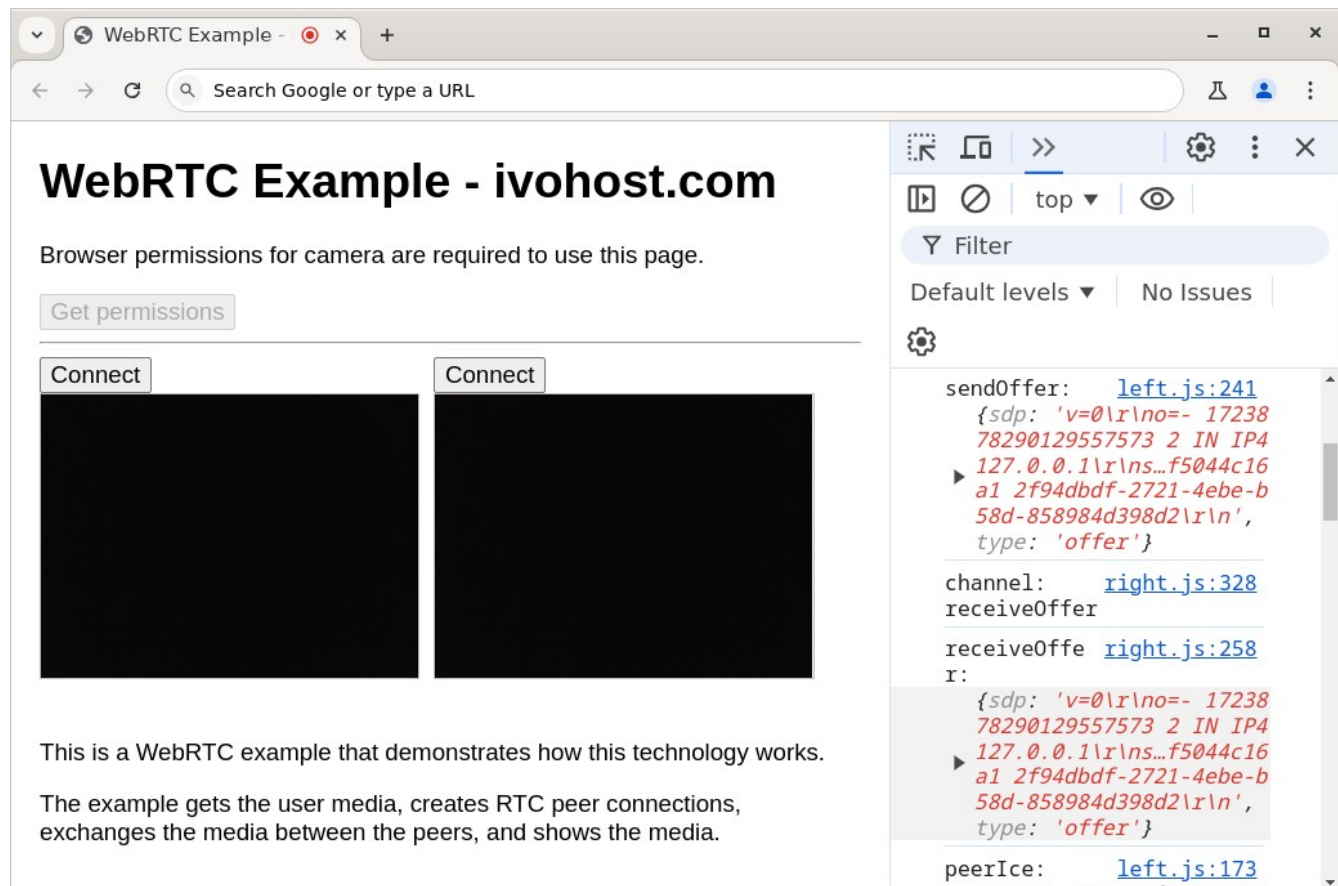# WebRTC Example - ivohost.com

This is a WebRTC example that demonstrates how this technology works

The example gets the user media, creates RTC peer connections, exchanges the media between the peers, and shows the media.

WebRTC Technology

WebRTC is a technology that allows online communication for video, audio and data.

The communication is direct between the peers and it is encrypted with end to end encryption.

The process to use WebRTC is as follows:

- Create RTC peer connection.
- Get user media, video, audio.

- Add media to RTC peer.
- Exchange RTC offer and answer with other peer.
- Exchange RTC ice candidates with other peer.
- Receive media and add it to the HTML video element.

The Example

The example has three files, index.html, left.js, right.js

The index.html file has the HTML video and button elements and connects the JavaScript files as modules.

The left.js file has functions for the left peer, sends offer or answer to the right peer.

The right.js file has functions for the right peer, sends offer or answer to the left peer.

The two JavaScript files have a channel function that simulates the channel between peers for exchange RTC messages.

The Code

The code is in JavaScript, using modules and async/await.

```javascript
// Send rtc offer to the other peer
async function sendOffer() {
    try {
        // Create offer
        const offer = await peer.createOffer();
        await peer.setLocalDescription(offer);
        console.log("sendOffer: ", offer);
        right.channel('receiveOffer', offer);

    } catch (err) {
        console.error("sendOffer: ", err);
    }
}
```

Source Code

The source code can be downloaded on GitHub on link:
https://github.com/ivohost/webrtc-example

Demo

Online demo can be used on link:
https://ivohost.github.io/webrtc-example/

WebRTC Documentation

- https://webrtc.org/getting-started/overview
- https://developer.mozilla.org/en-US/docs/Web/API/WebRTC_API