WebRTC

Alp Tahta

Oğuzhan Yıldırım

-Abstract

WebRTC stands for Web Real-Time Communication. It is basicly a collection of APIs allows direct connection between browser. This allows to exchange and type of data. It looks like Web Sockets, but key word is here the "direct". In WebRTC clients can surpass server and communicate between each other. Since this way reduces a lot of latency, it is very useful for voice chat and streaming.

WebRTC is also very secure since it encryyts data when transfering between clients. It has also codec system which decides how to compress data.

There are some challenges about WebRTC. First of all it uses UDP. UDP is not reliable on transfering data. For example it will not check if data received or not. Another bad thing about WebRTC is, it is not supported by the all browser. For example Internet Explorer and some non-updated browser. But it is working well with Firefox, Chrome and Opera. Some of the browsers like Microsoft Edge will require plug-ins for WebRTC.

Since WebRTC is embeded in web technologies, it will work on browser's Sandbox. With this way you will be very secure. Also browser will always ask for permissions for microphone and camera exclusively.

WebRTC is also open source which is very useful for developers.

-Schedule

-15 April - 29 April

Research about webRTC and learning needed technologies, finding needed libraries.

-29 April - 13 May

Starting coding server side code for webRTC, dealing with signaling and creating API endpoints for webRTC functionalities

-13 May - 27 May

Starting coding client side, enable users to connect browser directly and with using created API endpoints they must be able to knows each other.

-27 May - 10 June

Testing application and fixing issues.