

# Interactive Multimedia Programming 3. Assignment set

Nowadays we have very elegant Javascript APIs we can use to create interactive multimedia applications

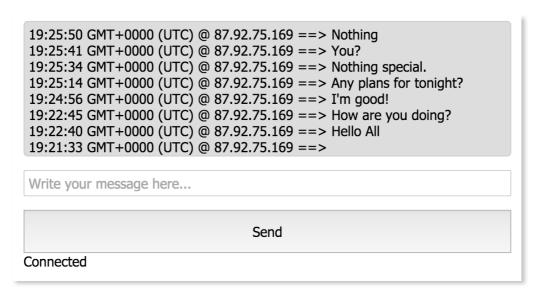
### 1. Web Sockets:

Read this article: <a href="http://www.html5rocks.com/en/tutorials/websockets/basics/">http://www.html5rocks.com/en/tutorials/websockets/basics/</a>. What kind of problems web sockets solve? In what kind of situations you should use them?

I have created a simple chat server which can be used with web sockets. **Create a web chat client** which can be used to chat with the server. Chat server can use unencrypted or encrypted sockets. Protocol is very simple. Just print everything you get from the socket and any data you send will be considered as message. You can find it from:

ws://obscure-waters-98157.herokuapp.com or wss://obscure-waters-98157.herokuapp.com

See example from here:



What happens if you send a message: "LOGO"?

# 2. Local Storage:

Read this article about local storage: <a href="https://developer.mozilla.org/en-US/docs/Web/API/Web Storage">https://developer.mozilla.org/en-US/docs/Web/API/Web Storage API/Using the Web Storage API</a>

a. Do all examples on the page



b. Create a copy of our person list app. If you have not done it yet, modify the app to follow "model/view/controller architecture". After that, modify it so that web app stores the names to local storage permanent and loads them when app is opened again.

## 3. Audio element:

Read this article: <a href="https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Using\_HTML5\_audio\_and\_video">https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Using\_HTML5\_audio\_and\_video</a>

Create a simple web radio (stream) player. Use html5 audio element. Audio player should have "own" play / stop buttons and volume control. Don't use standard controls in this case.

Use for example this stream: <a href="http://stream.basso.fi:8000/stream">http://stream.basso.fi:8000/stream</a>



# 4. Video element:

If you still have time, create a same type of exercise but with video element. (Not mandatory assignment)