BROWSERSYNC(BS)

*https://scotch.io/tutorials/how-to-use-browsersync-for-faster-development*

What for: [**BrowserSync**](https://browsersync.io/) is an automation tool that makes web development faster. In the past we've automated a lot of actions like compilation of **SASS** files, image compression etc.

HOW IT WORKS

It creates a separate server. If there is one existing already, it can hook into that and act as a proxy.

Next, it injects a JS file into every page.

This file makes use of WebSockets to communicate b/w the server and the client to watch changes to code or browser action.

As soon as BS detects an action, it performs a page reload.

TRY IT OUT

Create project directory containing:

folder css with main.css

folder js with main.js

Index.html

*Install:* npm install -g browser-sync

*Use:* browser-sync start --server --files "\*.html, css/\*.css"

It will open a new browser window with the index.html page there. **BrowserSync** monitors the directory defined in baseDir and whenever we run the command, the page reloads.

In the terminal there will be following:

➜ ***browser-sync start --server --files "\*.html, css/\*.css"***

[Browsersync] Access URLs:

--------------------------------------

Local: <http://localhost:3000> - represents the address of the local machine

External: <http://192.168.1.104:3000> - represents the address that any user on your local

Network (**LAN** or wifi) can view the project

--------------------------------------

UI: http://localhost:3001

UI External: http://192.168.1.104:3001

--------------------------------------

[Browsersync] Serving files from: ./

[Browsersync] Watching files...

BS WITH GULP

Create gulpfile.js at root directory with following code in it:

const gulp = require('gulp');

const bs = require('browser-sync').create(); // create a browser sync instance.

gulp.task('browser-sync', function() {

bs.init({

server: {

baseDir: "./"

}

});

});

Can be used with WebSockets

--------WEBSOCKETS---------

*ENABLES two-way browser-server (client-server) communications*

[*https://medium.com/@dominik.t/what-are-web-sockets-what-about-rest-apis-b9c15fd72aac*](https://medium.com/@dominik.t/what-are-web-sockets-what-about-rest-apis-b9c15fd72aac)

Then in the terminal:

***npm init***

***npm install browser-sync –save***

***npm install gulp --save-dev***

***gulp browser-sync***

USING SASS & WATCH/LIVE RELOAD (see the website tutorial)