# STI.CK the custom sticker creator

The app is hosted on http://sti-ck.herokuapp.com/. My programming language of choice to implement this exercise is JavaScript, more specifically Node.js, Express and MongoDB for server side, Angular for client side. The reason I chose this (the MEAN stack) is because this package is considered to be the tool for creating the next generation web and because almost every bit of processing is happening on client side, it makes the app easily scalable. The biggest pro for using it is that you only have to learn JavaScript for implementing a complete web application (and HTML with CSS of course, but that's kind of unavoidable).

## Used libraries/technologies:

**Server side:**

**Express**: This is probably the one and only tool for fast web development for Node, as it provides many widely used functions, therefore not needing to reinvent the wheel while developing.

**Passport/passport-local**: An easy to use authentication library that works nicely together with express and has the option to create custom login strategies. I only used the passport-local but there are other parts that include facebook, google, etc... strategies as well.

**Bcrypt**: An encryption module for storing passwords securely.

**Mongoose**: The most widely used node module for connecting with a Mongo database. It makes storing and querying the database a breeze.

**Client side**:

**Bootstrap**: This is the one of the greatest inventions since sliced bread. Making a project with (Twitter) Bootstrap is unbelievably easy. You just have to distribute classes that are included in the CSS and it makes the site look nice with minimal effort and it's also automagically responsive. On the other hand it needs a lot of div wrapping and requires jQuery but in the end it looks good.

**Angular**: The other most innovative library for web development. It provides expressions that can evaluate inside HTML elements. One of them is ng-repeat which can create repeated HTML elements based on an array of things in the $scope. Also there are other things like 2-way binding which –if implemented correctly - can make you awestruck.

**jQuery**: This library singlehandedly revolutionised the web as it provides many useful functions that replace messy things in JavaScript like getElementById(). It also makes handling events like onClick and others stress-free.

**jQuery** UI: This is an expansion for jQuery that provides easy to use tools for making an interactive web UI. Unfortunately it's a rather heavy library. I used this to make elements draggable, and resizable.

**angular-bootstrap-colorpicker**: A nice library for Bootstrap themed colorpicker popups. Used this to show the colorpicker popups for the text color and background color. I also edited the library so that it doesn't show the # at the start of the color string.

**dropzone**: Very lightweight, standalone JavaScript library that provides drag and drop file uploads, which is highly configurable, but easy to use. I used this to make image uploads easier by providing drag and drop upload on the body.

**html2canvas**: Another standalone library that creates 'screenshots' out of HTML elements. Actually what it does is it makes a canvas that can be handled as an image. I used this for uploading sticker previews to the server. Unfortunately it is very experimental, but it's more than nothing.