



Wish Upon a Star

A Full-Stack MERN Web Application

Purpose

- A Disney-themed coloring website to relax and let your imagination run wild, and your inner child run free
- One that any age can use and love
- Reduce stress and anxiety

Major Features

- Authentication using JWT
- Let your dreams come true by coloring images however you would like and as many times as you want!
 - Can use a color picker if options are not what you're dreaming
 - Can view coloring pages prior to sign up
- CRUD functions
- Showcase to let everyone admire your best work
- Download your awesome coloring pages as a PNG

Technologies Used

Back end

- Environment: Node.js
- Framework: Express.js
- Authentication: JWT

Front end

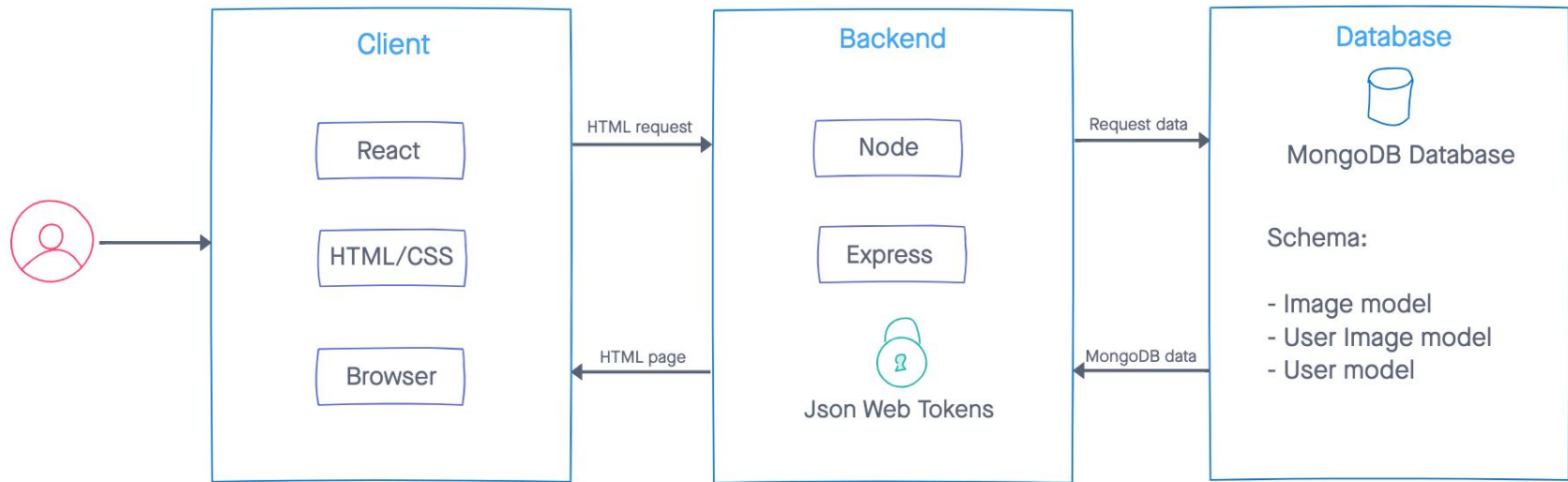
- Javascript
- React + React Hooks

Database: MongoDB

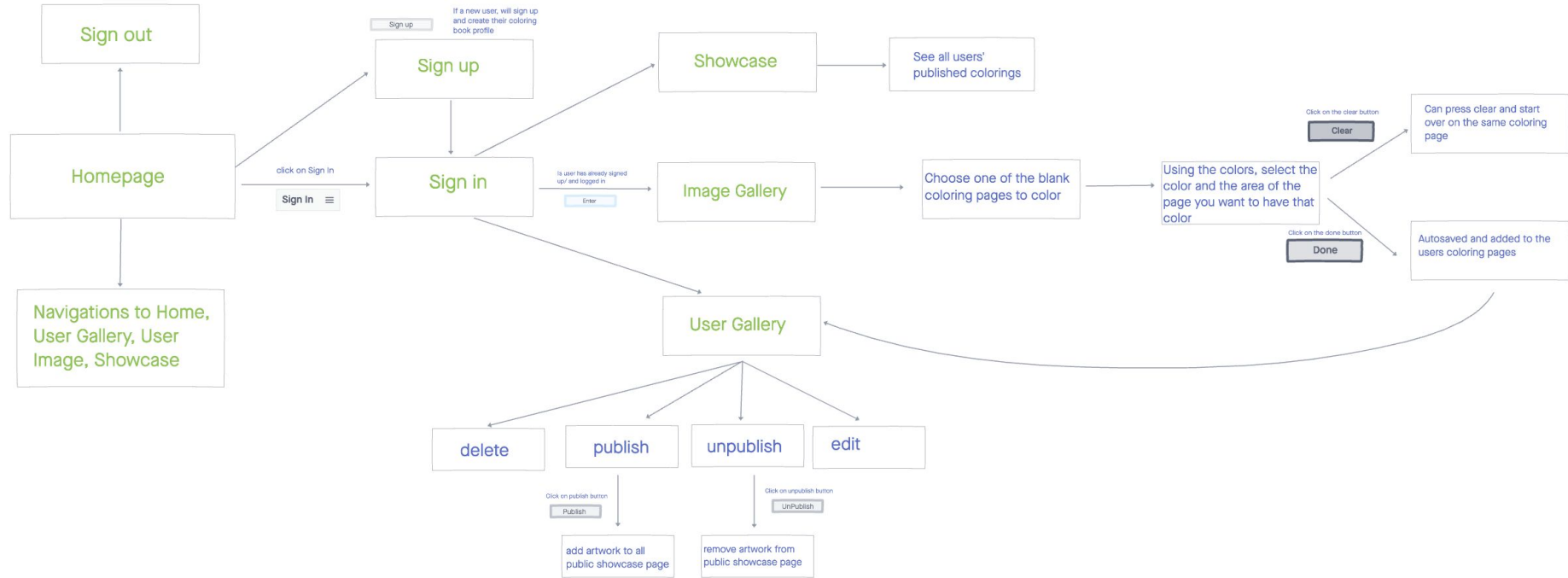
External libraries: mongoose, cors, axios, react-bootstrap

Other: Adobe Illustrator , Inkscape , Convertio.io

Application Architecture



User Story



External Services

Database

- MongoDB used to store images, userImages, and user collections

Authentication

- Utilized JWT standard to send and verify user token

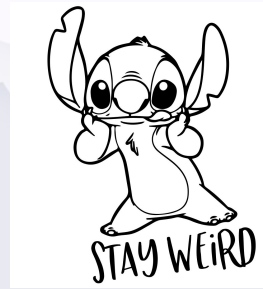
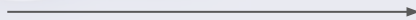
Handling SVG Files

- Adobe Illustrator takes a SVG's compounded path and breaks it into its multiple components
 - This would turn the entire SVG black
- Using Inkscape would turn the non-border's background to white so they can be colored on the site
- Upload SVG's to the images folder and put a `onClick()` handler and an index into our color array onto each path (some up too 400 paths)
 - If it is a border would fill the path to black so it could not be colored

Handling SVG Files



Adobe Illustrator



Inkscape

```
<path onClick={() => this.props.onFill(11)} fill={this.props.fillColors[11]}
```

```
fill-rule="evenodd" stroke="#000000"
```

```
d="M679.5,431.6c1.5,1.6,1.5,1.8-.5,3.8-1.8,1.8-2.2,1.9-3,.6-1.5-2.3-1.2-6,.4-6A5.46,5.46,0,0,1,679.5,431.6Z"
```

```
transform="translate(-1.56 -0.34)"
```

```
id="path32"
```

```
/>
```

** if its a border then instead of stroke it would be fill="000000"

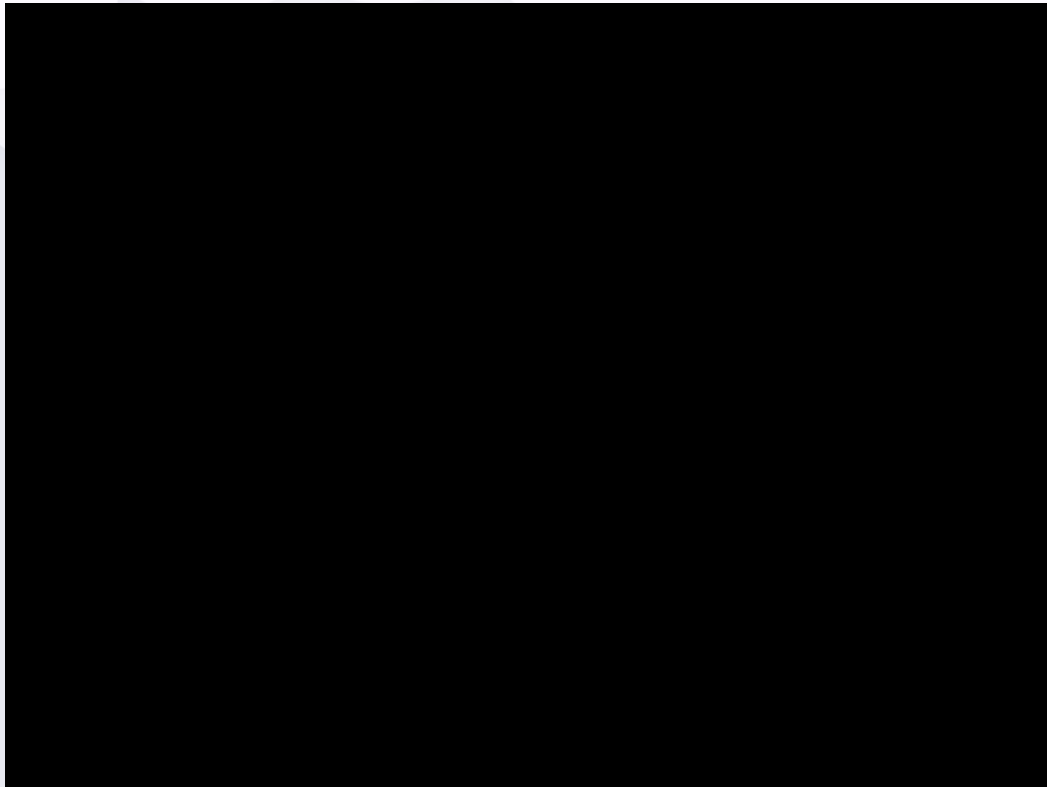
Tests Performed

- REST endpoints tested using Insomnia HTTP client
- Coloring of svgs tested with the IDE and local webpage open side by side for easy debugging
- Responsive front end tested using Chrome DevTools
- Once launched to Heroku, sent to friends and family to test on their own devices

Application Deployment

- Whitelisted all IPs on MongoDB Atlas
- Added MongoDB API key as Heroku config var
- Added a Heroku Postbuild script in the root package.JSON file to ensure creation of build folder
- Added code in server.js file to ensure that if the node environment is in production any requests other than defined routes should load index.html file within build folder
- Added a remote to our local repository and pushed code from the local repository to Heroku master branch

Demo





Thank you for watching!!!