

# Development Manual

## Development

Algorithms in Action is written in JavaScript, using the React framework. To work on it locally, you will need to install Node.js on your machine. Node.js is a JavaScript runtime that will allow us to view the website locally. NPM (Node package manager) is installed alongside when Node is installed. It is a multipurpose tool that will install 3rd party dependencies, start the app, and run test suites.

### First-time Setup

Ensure you have node version 12.x and npm version 6.x

To verify, type the following commands in your terminal/ command prompt -

```
node --version
```

```
npm --version
```

Navigate to the root directory of the project and run `npm install` to install all the dependencies in package.json

### Running a local development server

Navigate to the root directory of the project and run `npm start` this will start the development server on your local machine on port 3000. The application will be launched automatically in your default browser at <http://localhost:3000>

## Deployment

We currently have an accessible link to the application via: <https://algorithms-in-action-staging.herokuapp.com/>

The link above includes changes made by teams at the end of each sprint and is accessible to anyone who has the link. The version of the algorithm in action web application in the above link tracks the changes made to the `dev` branch in the Github repository.

We have set up automatic deployments using GitHub integration alongside Heroku. When a pull request is submitted, approved, and merged into the `dev` branch from respective team branches, the application will be redeployed with the updated changes. Also, when a pull request is submitted, a temporary review app is deployed to assist the assigned reviewer to ensure the incoming changes will not break the system.