Hardware requirements:

- Processor: A processor with a clock speed of 1 GHz or higher.
- Memory: At least 4 GB of RAM.
- Storage: Sufficient hard disk space to store the project files and dependencies.

Software requirements:

- Node.js: It's a JavaScript runtime that allows you to run JavaScript on the server-side. The latest version of Node.js is recommended.
- Git: Git is a version control system used for collaboration and code management. You'll need to install Git to clone the repository and run it on your local machine.
- Npm: A package manager such as npm is needed to manage the dependencies of your project.
- Web browser: Any modern web browser such as Chrome, Firefox, Safari, or Edge can be used to view the website.

Password keys:

- Email the contributors to get the appropriate keys for the config.json file. This step is important to connect the back-end to the front-end effectively.
    - Emails:
        - miguel.vazquezbeas@sjsu.edu
        - luc.tang@sjsu.edu

Once you have installed the required software, you can use a command-line interface to create a new React project and start building your website.

Automation of Instructions:

- Jest will be used for testing purposes. Jest is a popular testing framework for JavaScript applications.
- Jest will be installed when the user runs the command ‘npm i’ which installs the required dependencies using npm.
- Jest provides a platform that lets the user write automated tests.
- We’ll provide automated tests that make it easier to verify the behavior of the React components and ensure that the application works as desired.

Amount of the time to finish the tests:

- Running a small suite of Jest tests on this React application should take only a few seconds to complete.
- We’ll add the automated tests as soon as we finish our sign-up/login functionalities and after we set up the visualization page.

Coverage of the tests:

1. *Test Case: Sign-Up Page Validation*
    a. Test Steps:
        i. Click on the “Signin” button.
        ii. Click on the “Sign Up Now” button.
        iii. Enter an invalid email address and password.
        iv. Click the "Sign Up" button.
        v. Verify that an error message is displayed indicating that the email address is invalid.
        vi. Enter a valid email address and an invalid password.
        vii. Click the "Sign Up" button.
        viii. Verify that an error message is displayed indicating that the password is invalid.
        ix. Enter a valid email address and a valid password.

x. Click the "Sign Up" button.
xi. Verify that the user is redirected to the login page.

2. *Test Case: Login Page Validation*
    a. Test Steps:
        i. Click on the “Signin” button.
        ii. Enter an invalid email address and password.
        iii. Click the "Login" button.
        iv. Verify that an error message is displayed indicating that the email address or password is incorrect.
        v. Enter a valid email address and an invalid password.
        vi. Click the "Login" button.
        vii. Verify that an error message is displayed indicating that the email address or password is incorrect.
        viii. Enter a valid email address and a valid password.
        ix. Click the "Login" button.
        x. Verify that the user is redirected to the visualization page or the upload page.