

Team Treehouse Full Stack JavaScript Techdegree Curriculum

Unit 1: A Random Quote Generator Project

Practice your knowledge of basic JavaScript syntax and data structures by building a Random Quote Generator, a program that displays a randomly selected quote each time the user clicks a button.

List of courses and workshops you need to complete in order to do the project:

Note: *Some of the courses/workshops/short instructional videos listed below won't be available to you unless you enroll in the Techdegree program.*

Go through the courses that are available to you with a regular Team Treehouse membership.

1. Introducing the Random Quote Generator
2. Introducing JavaScript
3. 3 Ways to Build a Habit of Learning
4. JavaScript Basics
5. Practice JavaScript Basics
6. JavaScript Loops, Arrays, and Objects
7. Practice JavaScript Loops, Arrays, and Objects
8. Start the Random Quote Generator Project
9. Battling Imposter Syndrome
10. Introduction to HTML and CSS
11. Share your Techdegree Projects with Github Desktop
12. Introducing Text Editors
13. Overview of Project 1: Random Quote Generator
14. Reusing Code in a techdegree Project

Examples of the completed project:

- Select the *live demo* on this student's portfolio to view the live version of the project:
<https://fsjs-portfolio.herokuapp.com/project/0>
- Click on the link in this student's README file to view the live version of the project:
<https://github.com/rliess/js-techdegree-project1>

Unit 2: List Pagination and Filtering Project

Displaying a long list of items on a web page, like a list of 200 movie titles or 400 products, can overwhelm a user with too much information at once. A common solution is to display a handful of items on one page and provide navigation to jump to a list of more items. In this project, you'll write JavaScript to divide a long list into a series of "pages" and improve the user experience of a web page.

List of courses and workshops you need to complete in order to do the project:

1. Introducing the Pagination and Filtering Project

2. Build a Learning Mindset
3. Getting Started with ES2015
4. Practice ES2015
5. What you need to know about CSS Selectors
6. JavaScript and the DOM
7. Practice JavaScript and the DOM
8. DOM Scripting by Example
9. Debugging JavaScript in the Browser
10. Overview of Project 2: Pagination

Examples of the completed project:

- Select the *live demo* on this student's portfolio to view the live version of the project:
<https://fsjs-portfolio.herokuapp.com/project/1>
- Click on the link in this student's README file to view the live version of the project:
<https://github.com/rliess/js-techdegree-project2>

Unit 3: Interactive Form Project

Full Stack JavaScript developers create forms to collect information from users for nearly every website and application they build. For this project, you'll use your skills to enhance a form so that it's engaging, interactive, and easy to use.

List of courses and workshops you need to complete in order to do the project:

1. The landscape of JavaScript
2. HTML Forms
3. Learn like an Expert
4. Learn More about CSS & HTML
5. jQuery Basics
6. Practice jQuery Basics
7. Exploring JavaScript Conditionals
8. Regular Expressions in JavaScript
9. Overview of Project 3: Build an Interactive Form

Examples of the completed project:

- Select the *live demo* on this student's portfolio to view the live version of the project:
<https://fsjs-portfolio.herokuapp.com/project/2>
- Click on the link in this student's README file to view the live version of the project:
<https://github.com/rliess/js-techdegree-project3>

Unit 4: OOP Game Show App (Phrase Hunter) Project

Create a browser-based, word guessing game: "Phrase Hunter." You'll use JavaScript and OOP (Object-Oriented Programming) to select a random, hidden phrase. A player tries to guess the phrase by selecting individual letters from an onscreen keyboard. Can they guess the phrase before they run out of attempts?

List of courses and workshops you need to complete in order to do the project:

1. Use Peer Review to Push Yourself Forward
2. Object-Oriented JavaScript
3. Practice Object-Oriented JavaScript
4. Focus Your Mind, Improve your Learning
5. Callback Functions in JavaScript
6. JavaScript Array Iteration Methods
7. Practice Array Iteration Methods
8. Practice Array Iteration Methods
9. Object-Oriented Practice Project

Examples of the completed project:

- Select the *live demo* on this student's portfolio to view the live version of the project:
<https://fsjs-portfolio.herokuapp.com/project/3>
- Click on the link in this student's README file to view the live version of the project:
<https://github.com/rliess/js-techdegree-project4>

Unit 5: Public API Requests Project

Many sites — Twitter, Facebook, IMDB, and Wikipedia to name a few — offer a vast sea of data that you can access and display on your own web pages. Using JavaScript, you'll create an employee directory by communicating with a third-party API (Application Programming Interface).

List of courses and workshops you need to complete in order to do the project:

1. Introduction to the Terminal
2. Introduction to Git
3. HTTP Basics
4. Asynchronous Programming with JavaScript
5. Working with the Fetch API

Examples of the completed project:

- Select the *live demo* on this student's portfolio to view the live version of the project:
<https://fsjs-portfolio.herokuapp.com/project/4>
- Click on the link in this student's README file to view the live version of the project:
<https://github.com/rliess/js-techdegree-project5>

Unit 6: Static Node.js and Express Site Project

Node.js and Express make a powerful pair when used together on the server side, and are used everyday to make fast, modular and dynamic web applications. For this project, you'll use Node.js, Express and Pug templates to create a portfolio site to show off the projects you've built.

List of courses and workshops you need to complete in order to do the project:

1. Use Peer Review to Learn More
2. The JavaScript Ecosystem
3. Node.js Basics
4. npm basics
5. Express Basics
6. Understanding Express Middleware
7. Debugging Node Application with Google Chrome

Examples of the completed project:

- Live version of the project hosted on heroku: <https://fsjs-portfolio.herokuapp.com/>
- Click on the link in this student's README file to view the live version of the project: <https://github.com/rliess/js-techdegree-project6>

Unit 7: React Gallery App Project Project

React is one of the most popular development libraries on the web, which is why React developers are in such great demand. So let's up those skills and get some valuable practice and experience by using React and the handy Create React App tool to build a fast and lightweight gallery app with a modern approach.

List of courses and workshops you need to complete in order to do the project:

1. Introducing the React Gallery App Project
2. Practice React Component Rendering
3. React Components
4. Practice State in React
5. Using Create React App
6. React Context API
7. React Router 4 Basics
8. Data Fetching in React
9. Deploying a React App

Examples of the completed project:

- Live version of the project: <https://dilipagheda.com/react-gallery-app/#/search/cats>
- Click on the link in this student's README file to view the live version of the project: <https://github.com/rliess/js-techdegree-project7>

Unit 8: SQL Library Manager Project

Working with databases — storing, retrieving, updating and deleting information — is an important software developer skill. In this project, you'll create a web application for listing, adding, updating, and deleting books in a library application, using JavaScript, Node.js, Express, Pug, and the SQL ORM Sequelize.

List of courses and workshops you need to complete in order to do the project:

1. Introducing the SQL Library Manager Project
2. SQL Basics
3. Modifying Data with SQL
4. Reporting with SQL
5. We need your Help!
6. Asynchronous Code in Express
7. Using Sequelize ORM with Express

Examples of the completed project:

- Student's Github repo: https://github.com/dilipagheda/sql_library_manager-v1
- Click on the link in this student's README file to view the live version of the project: <https://github.com/rliess/js-techdegree-project8>

Unit 9: REST API Project

In this project, you'll use the popular Express web application framework and a SQL database to create a REST API that lets users create, list, update, and delete items from a school database.

List of courses and workshops you need to complete in order to do the project:

1. Introducing the REST API Project
2. Introduction to REST APIs
3. REST APIs with Express
4. Understanding Closures in JavaScript
5. Data Relationships with SQL and Sequelize
6. REST API Authentication with Express

Examples of the completed project:

- Student's Github repo: <https://github.com/rliess/rest-api-school>
- Another student's github repo: https://github.com/dilipagheda/rest_api-mongo-v1

Unit 10: Full Stack App with React and a REST API Project

In your final project, you'll use React to create a client for your existing school database REST API (that you created in a previous project). When completed, your full stack JavaScript application will allow users to view a list of courses and the detail for a specific course, sign up to create an account or sign in with an existing account, and create, update, or delete courses.

List of courses and workshops you need to complete in order to do the project:

1. Introducing the Full Stack App with React and a REST API Project
2. Learn Agile Software Development
3. Github Basics
4. Learn Algorithms and Data Structures
5. React Authentication

Examples of the completed project:

- Student's Github repo:
https://github.com/dilipagheda/full_stack_app_with_react_and_a_rest_api-v1