

render.com: Deployment Guide

Description

The intent of this guide is to walk students through the configuring and deployment of an application to render.com (Node.js, Angular, and MEAN Stack). This guide assumes you have a basic understanding of GitHub, git, and CLI commands. If you are not comfortable with any of these topics, please refer to the notes you took in previous courses.

Applications deployed to Render are accessible through *[website-name].onrender.com*. The value *[website-name]* will be replaced with the actual name of the application you are deploying. For example, let's say I want to deploy an application named *my-app*. The URL for *my-app* would be *my-app.onrender.com*. For all of the applications that you deploy in this cohort, use the following naming convention: *[yourLastName-appName]*. For example, *krasso-my-app*. All website-names should be lowercase with words separated by dashes.

Instructions

Sign-up for a free account at: <https://dashboard.render.com/#>

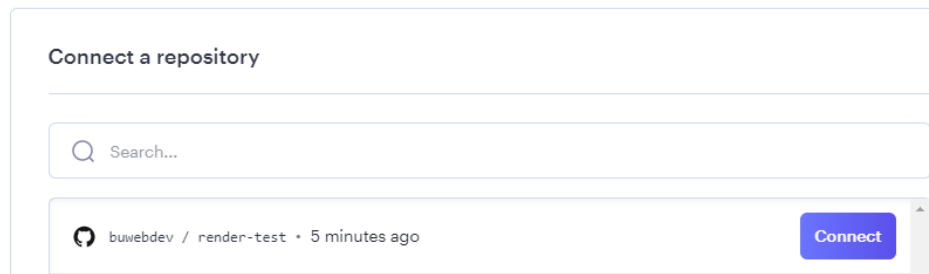
Deploy a Static Site

1. Sign-in to render.com and select **New > Static Site** from the top navigational menu.
2. Under GitHub select Connect account.
 - a. **Special note.** Render should auto-direct you to GitHub's sign in page. Sign in to GitHub using your credentials and allow Render access to your GitHub repositories. You will only need to accomplish this step once.

Exhibit 1.

Create a new Static Site

Connect your Git repository or use an existing public repository URL.



Connect a repository

Search...


buwebdev / render-test • 5 minutes ago [Connect](#)

3. Fill out the deployment web form:
 - a. Name: give the application a unique name (follow the guidelines under the Description section).
 - b. Branch: main.
 - c. Root Directory: accept the default.
 - d. Build Command: accept the default.
 - e. Publish directory: accept the default.
 - f. Select **Create Static Site**.

Special note. Once you select **Create Static Site**, Render will initiate the deployment process. Assuming there were no errors in the project or configuration steps, you should be able to access the static website using the following URL: **[website-name].onrender.com**

Exhibit 2.

Name A unique name for your static site.	render-test
Branch The repository branch used for your static site.	main
Root Directory <small>Optional</small> Defaults to repository root. When you specify a root directory that is different from your repository root, Render runs all your commands in the specified directory and ignores changes outside the directory.	e.g. src
Build Command This command runs in the root directory of your repository when a new version of your code is pushed, or when you deploy manually. It is typically a script that installs libraries, runs migrations, or compiles resources needed by your app.	\$
Publish directory The relative path of the directory containing built assets to publish. Examples: <code>./</code> , <code>./build</code> , <code>dist</code> and <code>frontend/build</code> .	.

Advanced 

Create Static Site

4. Test the deployment by opening a new browser and testing the link.
 - a. **Special note.** You can also test the website by clicking on the URL under the websites name in the Render dashboard.

Exhibit 3.

Hands-on Project 3-1	
Lunch selections	Total Order Cost: \$0
<input type="checkbox"/> Fried chicken (\$11.95)	
<input type="checkbox"/> Fried halibut (\$13.95)	
<input type="checkbox"/> Hamburger (\$10.95)	
<input type="checkbox"/> Grilled salmon (\$17.95)	
<input type="checkbox"/> Side salad (\$8.95)	

Deploy a Node Express App:

Project Prerequisite:

1. Set the projects Node and NPM versions. To do this, add a new section to the package.json file called **engines** with entries for your computer's node and npm versions.
 - a. **Special note.** To determine your computers node version, open a new terminal window and enter **node --version**. To determine your computers npm version, open a new terminal window and enter **npm --version**.

Exhibit 4.

A code snippet showing the 'engines' section of a package.json file. The code is:

```
{
  "engines": {
    "node": "16.14.2",
    "npm": "8.5.0"
  }
}
```

Project Deployment:

Resource: <https://render.com/docs/deploy-node-express-app>

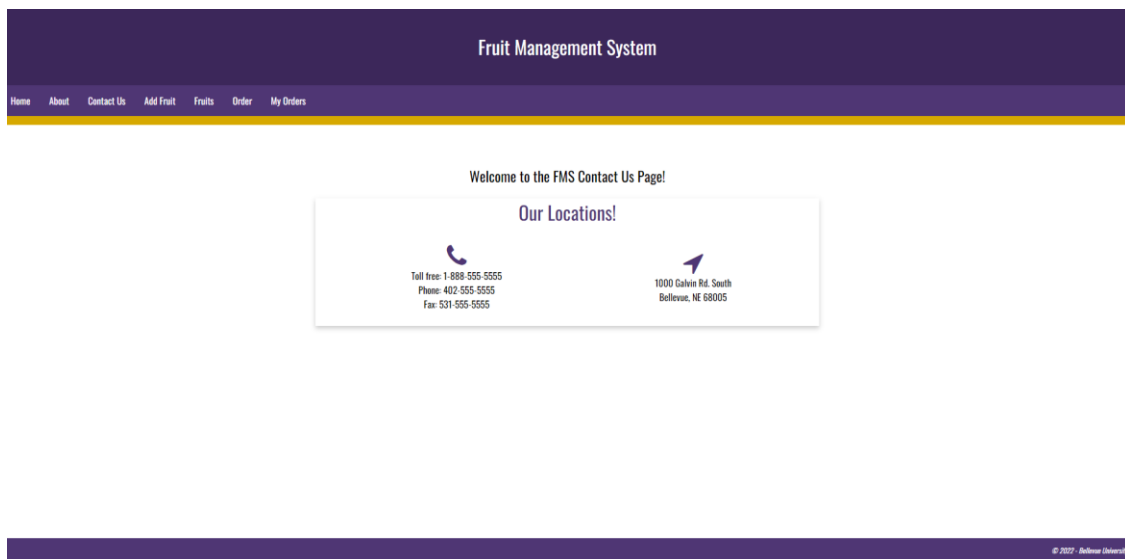
1. Sign-in to Render.
2. Create a new Web Service on Render and give Render permission to access your new repo (follow the steps from the **Deploy a Static Site** example).
3. Under the web deployment form, enter the following values:
 - a. Name: give the application a unique name (follow the guidelines under the Description section).
 - b. Region: accept the default.
 - c. Branch: accept the default.
 - d. Root Directory: accept the default.
 - e. Environment: Node.
 - f. Build Command: yarn.
 - g. Start Command: node *[index.js or app.js]*
 - i. Special note. Replace *[index.js or app.js]* with the name of the file you are using to start the Node.js service. This is the file where you wrote the code for the *app.listen(PORT, () => {})*; Usually this file is named either **index.js** or **app.js**.

- h. Under **Plan Type**, select **Free**.
- i. **Create Web Service**.

Special note. Once you select Create Web Service, the deployment process will be initiated.

4. Test the deployment by visiting the deployment URL.

Exhibit 5.



Deploy a MEAN Stack App:

Project Prerequisites

2. Open the **.gitignore** file and remove **/dist**.
 - a. **Special note.** The easiest way to find this entry is by entering **Ctrl + F** and searching for its name.
3. Add a new entry to the scripts section in the package.json file. Use the following settings:
 - a. **render-deploy: ng build --configuration=production**

Exhibit 6.

```
    "render-deploy": "ng build --configuration=production"
```

4. Set the projects Node and NPM versions. To do this, add a new section to the package.json file called **engines** with entries for your computer's node and npm versions.
 - a. **Special note.** To determine your computers node version, open a new terminal window and enter **node --version**. To determine your computers npm version, open a new terminal window and enter **npm --version**.

Exhibit 7.

```
"engines": {  
  "node": "^16.16.0",  
  "npm": "^8.11.0"  
}
```

5. Using the terminal window: run the deployment command and then push your work to GitHub. The deployment command is **npm run render-deploy**.
 - a. **Special note.** Moving forward, before you push your work to GitHub you will need to run the deployment command. This command is needed to update your Angular project with the most recent changes. If you do not run this command, the Angular portion of your project will not be updated.
 - b. **Special note.** If you receive an error for

Exhibit 8.

```
Error: bundle initial exceeded maximum budget. Budget 1.00 MB was not met by 732.16 kB with a total of 1.71 MB.
```

- i. Open the angular.json file and search for a section titled **Budgets**. Under this section update the **maximumWarning** to **2mb** and **maximumError** to **5mb**.

Exhibit 9.

```
"budgets": [  
  {  
    "type": "initial",  
    "maximumWarning": "2mb",  
    "maximumError": "5mb"  
  },  
  {  
    "type": "runtime",  
    "maximumWarning": "2mb",  
    "maximumError": "5mb"  
  }  
]
```

Project Deployment:

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3. Under the web deployment form, enter the following values:
 - a. Name: give the application a unique name (follow the guidelines under the Description section).
 - b. Region: accept the default.
 - c. Branch: accept the default.
 - d. Root Directory: accept the default.
 - e. Environment: Node.
 - f. Build Command: yarn.
 - g. Start Command: node ./server/index.js
 - h. Under **Plan Type**, select **Free**.
 - i. **Create Web Service**.

Special note. Once you select Create Web Service, the deployment process will be initiated.

5. Test the deployment by visiting the deployment URL.

Exhibit 10.

Welcome to WEB 450's - nodebucket Project

Pay close attention to the requirements, double and triple check the files for code attribution, and do not wait until the last minute to begin working on your tasks.

Enter a task name...

+

ToDo

Done

go to bed early	
Go to school	
Write a book	
do homework	
wake up late	

References

Render.com. (n.d.). *All New Free Plans on Render*. render.com <https://render.com/blog/free-tier>