

WORKSHOP #4

CREATE-REACT-APP

LETS BECOME FRIENDS WITH THE COMMAND PROMPT.


- ▶ Open the command prompt by pressing the Windows key + R and type in `cmd` into the
- ▶ This should open a lovely command prompt that will allow us to do all sorts of fun things.
- ▶ We first want to check if we have node installed. Type `"npm -version"` without the quotes in your command prompt. If we see a version that is above 5.0 we're all set.
- ▶ If not we will see an error saying `"npm is not a recognized program"`, and we'll want to follow the directions in the next few slides.

INSTALLING NODE

If node isn't installed on our computers, we need to navigate to <https://nodejs.org/en/download/>

We want to click on the Windows Installer button highlighted below

LTS
Recommended For Most Users


Windows Installer
node-v10.13.0-x86.msi

Current
Latest Features


macOS Installer
node-v10.13.0.pkg


Source Code
node-v10.13.0.tar.gz

Windows Installer (.msi)

Windows Binary (.zip)

macOS Installer (.pkg)

macOS Binary (.tar.gz)

Linux Binaries (x64)

Linux Binaries (ARM)

Source Code

32-bit	64-bit	
32-bit	64-bit	
64-bit		
64-bit		
64-bit		
ARMv6	ARMv7	ARMv8
node-v10.13.0.tar.gz		

INSTALLING NODE

- ▶ Once we click on the windows button a download should start. Run the file once the d/l has completed.
- ▶ Follow along the prompts to install node on your computer. Once the installer is complete it might have you restart your computer (hopefully not).
- ▶ Close any command prompt windows, and reopen a new one, and type in "npm -version" without the quotes. Now we should see a version number and this will allow us to install packages with the "Node Package Manager".

INSTALLING CREATE-REACT-APP

- ▶ So now we want to set up our create-react-application to be installed on our computer. This will allow us to use the create-react-app command to create projects and install the correct files necessary for our react application.
- ▶ In our command prompt, we want to make a directory that we will install our react applications into. First we need to navigate into our Documents folder. We do this by using the cd command (which stands for Change Directory).
- ▶ The format is `cd directoryNameGoesHere`.
- ▶ From the command prompt type `mkdir react-applications` without the quotes.

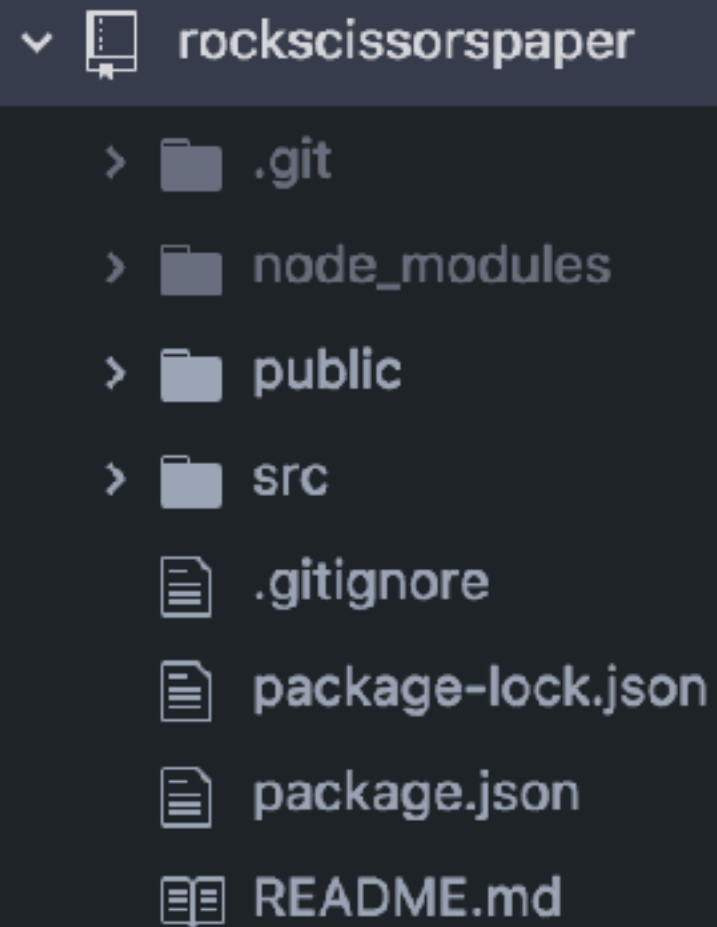
- ▶ Now that we have a directory that we can install our react applications. Lets create our rock scissor paper project.
- ▶ In our command prompt make sure we are in our react-applications folder by using the command "cd" - this stands for change directory. The command "cd react-applications" should bring us into the correct directory.
- ▶ Now lets type "create-react-app rockscissorspaper"
- ▶ It'll take a minute to set up the correct files.

CREATE-REACT-APP










- ▶ Now that we have our application initialized. Lets open it up and check out the directory structure that create-react-app initially gives us. (Here is where you want to open the project in your local IDE to see the directory structure)

```
my-app
├── README.md
├── node_modules
├── package.json
├── .gitignore
├── public
│   ├── favicon.ico
│   ├── index.html
│   └── manifest.json
└── src
    ├── App.css
    ├── App.js
    ├── App.test.js
    ├── index.css
    ├── index.js
    ├── logo.svg
    └── serviceWorker.js
```

CREATE-REACT-APP










A screenshot of a file explorer interface showing the directory structure of a project named 'rockscissorspaper'. The project name is at the top with a dropdown arrow and a folder icon. Below it, there are four subfolders: '.git', 'node_modules', 'public', and 'src', each preceded by a right-pointing arrow and a folder icon. At the bottom, there are four files: '.gitignore', 'package-lock.json', 'package.json', and 'README.md', each preceded by a document icon.

- ▼  rockscissorspaper
 - >  .git
 - >  node_modules
 - >  public
 - >  src
 -  .gitignore
 -  package-lock.json
 -  package.json
 -  README.md

This is what the directory structure will look like in the atom IDE.

CREATE-REACT-APP

✓ src

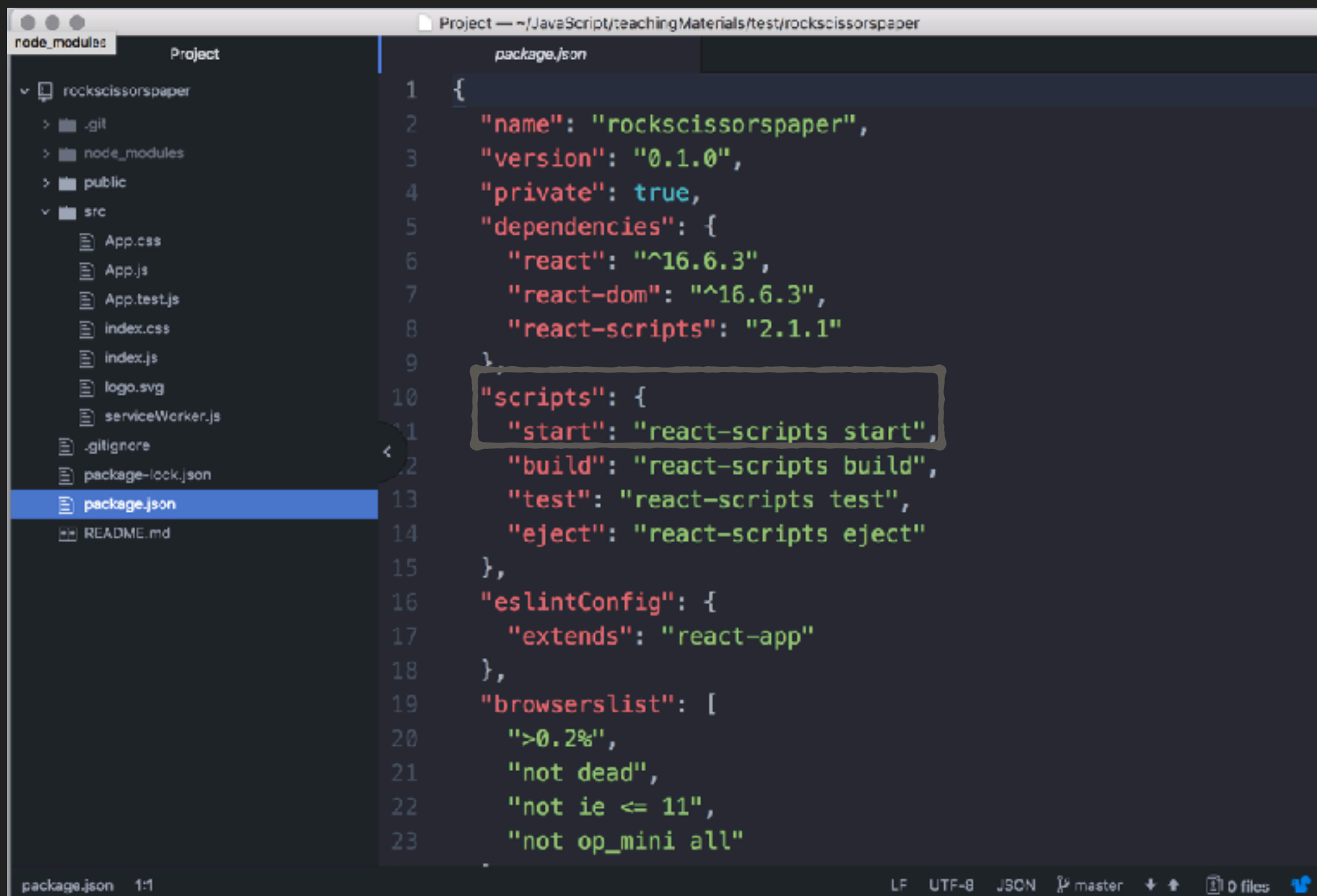
-  App.css
-  App.js
-  App.test.js
-  index.css
-  index.js
-  logo.svg
-  serviceWorker.js

Our src directory is where we are going to be working 99% of the time.

This is where our main App.js file is as well as where we would want to create our component JS files.

CREATE-REACT-APP

- ▶ Now its time to start a server. Select the package.json file.



The screenshot shows a code editor with a file explorer on the left and a code editor on the right. The file explorer shows a project structure with a 'package.json' file selected. The code editor displays the content of 'package.json'.

```
1 {
2   "name": "rockscissorspaper",
3   "version": "0.1.0",
4   "private": true,
5   "dependencies": {
6     "react": "^16.6.3",
7     "react-dom": "^16.6.3",
8     "react-scripts": "2.1.1"
9   },
10  "scripts": {
11    "start": "react-scripts start",
12    "build": "react-scripts build",
13    "test": "react-scripts test",
14    "eject": "react-scripts eject"
15  },
16  "eslintConfig": {
17    "extends": "react-app"
18  },
19  "browserslist": [
20    ">0.2%",
21    "not dead",
22    "not ie <= 11",
23    "not op_mini all"
24  ]
25 }
```

- ▶ We have a script that will allow us to locally run our application, and we run this script by typing in our project directory "npm run start"
- ▶ If successfully compiled you should see this in your console.

```
Compiled successfully!
```

```
You can now view rockscissorspaper in the browser.
```

```
Local: http://localhost:3000/
```

```
On Your Network: http://192.168.1.183:3000/
```

```
Note that the development build is not optimized.
```

```
To create a production build, use npm run build.
```



CREATE-REACT-APP

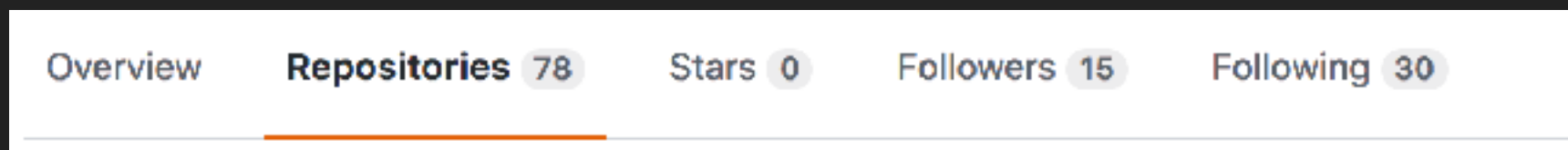
If you open your browser and go to <http://localhost:3000/> you should see the create-react-app boilerplate page loading.



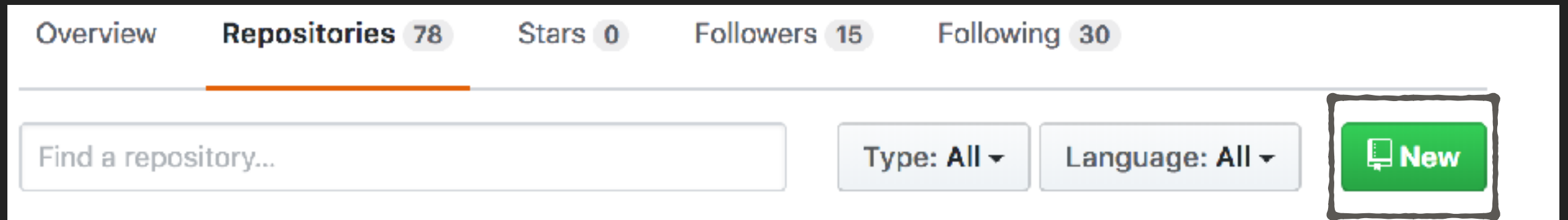
Edit `src/App.js` and save to reload.

[Learn React](#)

- ▶ Now that we have our boilerplate and directory structure created. We want to add this to a repository on github. This way we start using version control to handle our projects.
- ▶ First we have to create this repo on github. Navigate to [GitHub.com](https://github.com) and log in.
- ▶ Then we want to navigate to our repositories tab at the top of your page



- ▶ We want to create a new repository by clicking the “New” button pictured.



- ▶ Then we want to give our repo a declarative name that describes our project.


- ▶ Now lets give our repo a name of rock-scissors-paper in the repository name field.

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner

Repository name

 Voodooobrew ▾

 /

Great repository names are short and memorable. Need inspiration? How about **fluffy-barnacle**.



Description (optional)

☒  **Public**
Anyone can see this repository. You choose who can commit.

☐  **Private**
You choose who can see and commit to this repository.

- ▶ We should see this page if setup correctly.

Quick setup — if you've done this kind of thing before

 Set up In Desktop or **HTTPS** **SSH** `https://github.com/Voodoobrew/rsp.git` 

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# rsp" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin https://github.com/Voodoobrew/rsp.git
git push -u origin master
```



...or push an existing repository from the command line

```
git remote add origin https://github.com/Voodoobrew/rsp.git
git push -u origin master
```



...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

[Import code](#)

- ▶ Lets navigate to our react-applications directory and make sure we change directories into our rockscissorspaper folder.
- ▶ Now we want to initialize the project by typing in **git init** into our command prompt.
- ▶ After our repository is initialized. We want to add in all of our files that we have so far. Run the **git add .** (that's a period after the add word to make sure it adds everything in the directory initialized).
- ▶ Then we want to commit these files to our repo by running the command **git commit -m "First Commit"**

- ▶ Now we need to use that link up in the quick setup to add into our remote repository.
- ▶ You want to run the command.
git remote add origin <https://github.com/YOURNAMEHERE/rock-scissors-paper.git>
- ▶ Then we want to push these files to our repo's master branch.
In the command prompt run
git push -u origin master

- ▶ Here are some useful links to reference:

<https://help.github.com/articles/adding-an-existing-project-to-github-using-the-command-line/>

<https://github.com/facebook/create-react-app>