Building React Apps With GUlP

Lesson 11

Capgemini

Lesson Objectives

At the end of this module you will be able to:

- Gulp-JavaScript Task Runner
- Gulp API
- Creating React Component modules
- Creating gulpfile.js

Gulp – JavaScript Task Runner

Gulp is a JavaScript task runner

Gulp's use of streams and code-over-configuration makes for a simpler and more intuitive build.

Gulp is a streaming build system that uses node streams, wherein all the file manipulation is done in the memory; thus, a file is not written until the developer/programmer commands it to do so.

- Gulp is easy to get installed and running. The steps to install and run Gulp are:
  - Install Gulp Globally: npm install -g gulp
  - Install Gulp In devDependencies: npm install --save-dev gulp
  - Optionally install package Gulp-Util log the message in console: npm install gulp-util
  - Create a gulpfile.js
  - Packages required to work with React are: gulp-browserify, gulp-concat, react, react-dom, reactify

Gulp API

The gulp API is incredibly light containing the following top level functions:

- gulp.task: It is used to define the tasks.
- gulp.src: It is the beginning of the stream which points to the files we want to use. It uses .pipe for chaining it's output into other plugins.
- gulp.dest: It points to the output folder we want to write files to.
- gulp.watch: It allows us to watch files and then performs a task or function.

```
D:\Node-Demos>type NUL > gulpfile.js
```

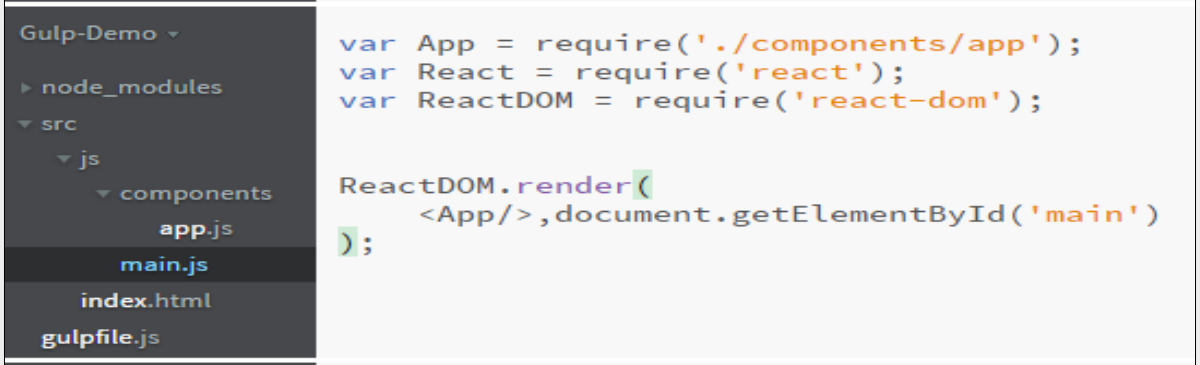
```
/*gulfile.js*/
var gulp = require('gulp');
var gutil = require('gulp-util');
// create a default task and just log a message
gulp.task('default', function() {
  return gutil.log('Gulp is running!')
});
```

```
D:\Node-Demos>gulp
[11:18:55] Using gulpfile D:\Node-Demos\gulpfile.js
[11:18:55] Starting 'default'...
[11:18:55] Gulp is running!
[11:18:55] Finished 'default' after 42 ms
```

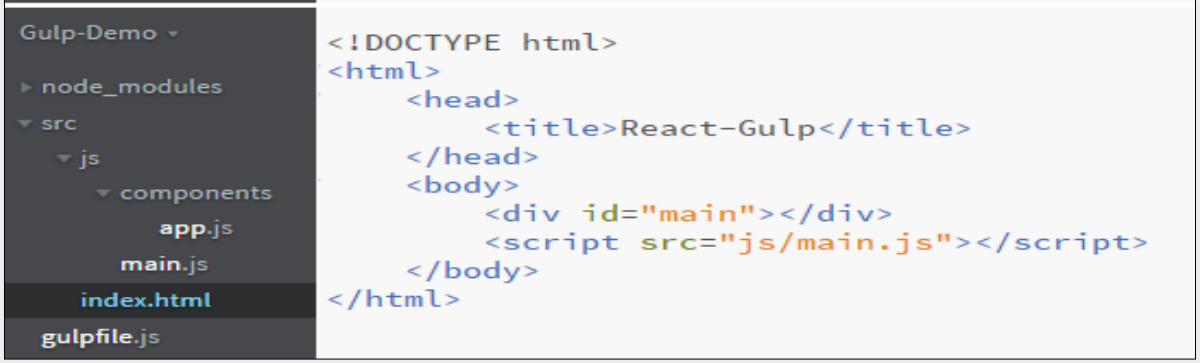
Creating React Component modules

app.js

main.js



index.html



Creating gulpfile.js

Demo

Gulp-Demo

react-create-gulp

Summary

In this module you learnt that:

- Gulp is a JavaScript task runner which make use of streams and code-over-configuration.
- Gulp task must be created in a file named “gulpfile.js”.

Review

1. Which component is needed to import when working with modules?

    1. require()
    2. import()
    3. export()
    4. module.export()

2. Is Flux an Framework? True or False?

3. What are the 4 components of Flux Architecture?

4. _____is a singleton, and operates as the central hub of data flow in a Flux application.

    1. Flux store
    2. Flux Dispatcher
    3. Flux Model
    4. Flux Action