



DMIT2008 Assignment 5

Application Bundling

Task: Application Bundling

Due: Midnight on Friday December 6th, 2019

Weight: 7.5%

Overview

After all development is completed, your application is ready to go live! But, we have many different files, in different locations, and these files are not optimized for web performance. Using a bundler can help us get our applications production ready.

Expectations

Download and extract the included application zip starter package. Your task is to add the webpack package to your build workflow and setup a webpack configuration that will bundle your React application for production. Your updated application must demonstrate the following:

- Bundling of the entire application (i.e. no external dependencies in the HTML document) into a single bundle for production (see marking guide for specifics)
 - Babel loader for compiling source
 - HtmlWebpackPlugin used for HTML templating
 - Webpack dev server for development
 - Hot module replacement
 - MiniCssExtractPlugin for CSS extraction
- Separate build/ directory for quick deployment
- You are solely responsible for all parts of this assignment (all JS code). If a class is missed, you will be responsible for any content missed
- Build is deployed to either Netlify or Firebase hosting and publicly accessible (include URL for your project in the text submission field, as well as the link to your github repository).
- **Any other requirements as laid out by your instructor in class**

Delivery

Zip your project folder and submit it to Moodle by the deadline.

- **Do not include the node_modules/ directory in your zip package.**

Seek help if you need it. **Late submissions will not be graded.**

Grading Key

Tasks	Grade	Marks	Total
Webpack Bundling Scripts are included for production building and development HTML template used for build (includes hashed script and css file entries) All custom application code included in a single bundle (properly compiled from source) No external dependencies in final build (e.g. react and react-dom included in the bundle and no explicit React script tags are required for the app to run) CSS is included in the build process (i.e. separate CSS file is produced via webpack and included in the build/ directory) Dev server is configured for hot module replacement Bonus Bundled JS and CSS files are properly hashed for cache busting Bonus The build/ directory is cleaned for every webpack production build and build/ directory used for deployment		3 3 3 3 3 3 [3] [1]	18
Deployment [Optional] Build is deployed to either Netlify or Firebase hosting and publicly accessible (include URL for your project in the text submission fields.		[3]	[3]
Code Readability and Efficiency <ul style="list-style-type: none"> Efficient and maintainable techniques Code/config format Well documented Etc. Utilizes your own written code (i.e. not gathered from online sources such as StackOverflow)		-5	-5
	TOTAL MARKS		18 [26]

Marking Rubric

Marks	5 Marks Criteria [minus]
5 [0]	Task was completed with the highest of proficiency, adhering to best practices, and followed subject matter guidelines. The task was completed to a professional standard.
4 [-1]	Task was completed well, with some minor mistakes. Well above average work, shows good understanding of the task, and a high degree of competence.
3 [-2]	Task was completed satisfactorily. Some features are missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement.
2 [-3]	Task completion is below average, the task was poorly completed. Shows understanding of the task and the requirements to implement, but implementation was poorly executed.
1 [-4]	Some of the task was completed. Shows a lack of understanding in the subject matter and very poor execution.
0 [-5]	Not completed.

Marks	3 Marks Criteria [minus]
3 [0]	Task was completed well, adhering to best practices, and followed subject matter guidelines.
2 [-1]	Task was completed satisfactorily. Some features are missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement.
1 [-2]	Some of the task was completed. Shows a lack of understanding in the subject matter and very poor execution.
0 [-3]	Shows a little to no degree of competence in completing the task; not completed.

Marks	1 Marks Criteria
1	Task completed satisfactorily
0	Task was not completed