

CSCI 3461: Databases

Term Project

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April 1, 2019

To keep track of it's many (happy) customers, MUC employs a large number of technologies into it's [website](#). The web-app is written predominately in Javascript code (ECMAScript 2015) with additional PHP and CSS variants to aid in visuals and clarity.

The client-side is responsible for generating queries to the MySQL database serverside. While this is potentially the least secure way possible to perform this task, it was also the fastest for prototyping and researching.

The site is organized into a few folders¹:

common	HTML shared among many pages, including the head section.
css	Exclusively CSS, completely generated.
external	Tools & scripts for use on the server with no access from the web.
images	Visual data for the website.
sass	SASS source files to be interpreted into raw CSS.
report	Source for this document.
scripts	PHP and JS functions to support the web-app.

Outside of these subdirectories, the files located in the home directory are all loadable webpages, the first of which being **index.php**. It's important to note that despite the PHP extension, the extent of the languages use in this case is limited to includes.

index.php	First page and location to view full tables.
edit.php	Manual management of the various tables.
cancel.php	Cancelling previous orders.
order.php	Creating and submitting new parts orders.
supplier.php	Adding new suppliers into the database.

Inside the scripts folder, the key files to look at would be:

- **db.php**: Routing MySQL calls to the database and returning JSON replies.
- **db.js**: Includes `sendRequest(...)`, which communicates asynchronously with **db.php** to avoid random page loads between requests.
- **helpers.js**: Includes a few common functions, including creating a table based on a database response for a query.

The remainder of the files are related directly to the page they appear on; there is no overlap between the remaining scripts.

Additional technologies/libraries used in the creation of the web-app include **jQuery**, **bootstrap** (with CSS), **popper.js** and **velocity.js**.

¹/**external** contains the files to rebuild and autopopulate the database from scratch.