COSC212 Assignment 1

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Site Link

https://jgear.cspages.otago.ac.nz/212_assignment/

Libraries used

- jQuery is a library used for ease of use for things like HTML dom manipulation, event handling and AJAX.
- Leaflet is a library used for building web applications. This library was used in my application to show the map of Dunedin, head office location, and parks/walks you can take your dogs on/for.

JSHint version and options

Version: esversion 6. I used this version as this was the version that PHPStorm recommended.

Options:

- Warn about using bitwise operators because, bitwise operators are very rare in JavaScript programs.
- Warn about unsafe comparisons, as I could accidentally use == like other languages instead of ===.
- Warn about arguments .caller and .callee as they can make few optimisations impossible.
- Warn about new usage for side effects, as so you can't call constructor functions without assigning its result to any variable.
- Warn when variable is undefined, for spotting leaking and mistyped variables.

How application was tested

```
function clearCart() {
    console.log("clearCart()");
    window.localStorage.removeItem( key: "cart");
    document.location.reload(true);
}


/**
 * returns the cart from local storage if the cart is not empty,
 * else returns null.
 * @returns {null|any}
 */
function getCart() {
    console.log("getCart()");
    let cart = window.localStorage.getItem( key: "cart");
    if(cart !== null){
        return JSON.parse(cart);
    } else {
        return null;
    }
}
```

The application was mostly tested by using console.log.
Unit testing was done by console.log variables, to see how the variables were changing overtime as they were passed through different methods and functions, and to see if the variables ended up in the correct state.
System tests were also done with console.log by logging the function name at the start of each function to see which function was being called as the application was executing. This allowed a programmer to see where errors and weird behaviour were happening (see highlighted code in picture above).
UI testing was done by myself interacting with the application as a user would.

Outstanding problems or issues
Problem 1: Resizing windows can cause div's to overlap on the page.
Problem 2: Date validations only check pickup time of other users and not the entire period they have the dog for (drop-off time).