

## THEME 1: DYNAMIC MAP APPLICATION

| Items  | Instances  |
|--|--|
| Consume the GET endpoint of an API, or consume a CSV/JSON file                                     | <ul style="list-style-type: none"><li>• Consumed 2 GeoJSON files<ul style="list-style-type: none"><li>○ CHAS clinics</li><li>○ Pharmacies</li></ul></li></ul>  |
| Adding or removing DOM elements to the display (map, DOM tree, game screen) base on user's actions | <ul style="list-style-type: none"><li>• Added description box of location when user clicks on marker</li><li>• Added search suggestions based on user's input</li><li>• Removed location tracking popup when user clicks on the toggle or close button</li><li>• Added "about us" popup when user clicks on "about us" in navigation bar</li><li>• Removed "about us" popup when user clicks on close button</li></ul> |
| Modifying the CSS of DOM elements based on the user's actions                                      | <ul style="list-style-type: none"><li>• Toggle layers button expands and shrinks on click</li><li>• Buttons and links changes colour when hovered over</li><li>• Buttons and links changes to cursor pointer when hovered over</li></ul>   |
| Use of 1D traversal of array   | <ul style="list-style-type: none"><li>• Used for loops to add markers to Leaflet map</li><li>• Used for loops to retrieve details of clinics and pharmacies</li><li>• Used for loops to check if user's search input matches details of clinics and pharmacies</li></ul>   |
| Each use of a unique functional mapping method (map, reduce, filter)                               | -  |
| Each use of CSS layout technique (Bootstrap columns, flex box, grid)                               | <ul style="list-style-type: none"><li>• Used flex box to style navigation bar</li><li>• Used flex box to style description box</li><li>• Used flex box to style search bar</li></ul>   |

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|--|---|
|  | <ul style="list-style-type: none"> <li>• Used flexbox to style location tracking popup and about us popup</li> </ul>  |
| Each possible search or filtering criteria in the user interface | <ul style="list-style-type: none"> <li>• Search bar provide immediate suggestions based on user's key input</li> <li>• Clicking on search button zooms user directly to the closest result</li> <li>• Clinic and pharmacy layers can be toggled on/off to show the respective markers</li> </ul>  |
| Each case of the map updating base on the user's actions         | <ul style="list-style-type: none"> <li>• Clicking on search suggestions zooms user to target marker depending on search input</li> <li>• Clicking on search button zooms user to target marker depending on search input</li> <li>• A Leaflet radius circle can be created when user clicks toggles the "show pharmacies within 500m" on/off</li> <li>• Clicking on marker brings up description box</li> </ul> |
| Each group of layers in the Leaflet map                          | <ul style="list-style-type: none"> <li>• 3 layers <ul style="list-style-type: none"> <li>○ CHAS clinic layer</li> <li>○ Pharmacy layer</li> <li>○ Circle layer</li> </ul> </li> </ul>   |
| Each group of marker clustering                                  | <ul style="list-style-type: none"> <li>• 2 groups of marker clustering <ul style="list-style-type: none"> <li>○ CHAS clinic cluster</li> <li>○ Pharmacy cluster</li> </ul> </li> </ul>  |
| Each type of custom marker (using images or custom behaviour)    | <ul style="list-style-type: none"> <li>• Customized icon for clinic markers</li> <li>• Customized icon for pharmacy markers</li> <li>• Customized icon for "you are here" marker</li> <li>• Bind popup to all markers</li> </ul>  |

## BONUS SCORING

| Items  | Instances  |
|--|--|
| Consume the POST endpoint of an API                                | -  |
| Use of 2D traversal of array                                       | -  |
| Use of custom sorting algorithm (bubble sort, insertion sort etc.) | -  |
| Each extra feature   | <ul style="list-style-type: none"><li>• Current location tracking</li><li>• Text field validation in search bar (i.e. searching empty field, invalid input)</li><li>• Debounce in search bar</li></ul> |
| Use of model view controller                                       | -  |
| Single Page Application  | <ul style="list-style-type: none"><li>• Web page is done only using one index.html</li></ul>   |