Applied Computer Science

ACS-2909-050
Internet Programming

Fall 2018

<u>Assignment 3</u>

Due Date: Nov 14th, 2018 11:59 pm   **Total Marks: 24**

Motification

The goal of this assignment is use geolocation, webstorage and web services. You will use the provided HTML files located at https://courses.acs.uwinnipeg.ca/2909-050/assignments/A3.zip.

1. (10 marks) Create an application that will display your current location using the provided *A3Q1.html* in the zip file. We will first check if the location has been stored in the localStorage at the key *"myLocation"*. The value at this key will need to be an object format like :

   {"lat": number, "lon": number}

   If the value does not exist, leave the default map view at the default location provided. Otherwise, we will update the map. Finally, we want a button to get the latest location coordinates, store in localStorage and update the map.

- In the *// JS CODE START* section, all JS code should reside

- On load of the application, check the localStorage for a stored location and map it if there using the method provided below.

Assignment 3 (cont'd)

- Add a click handler to the button provided that will retrieve the users current location using the *geolocation* api.

- When the location is retrieved, store the location into localStorage using the format provided above and update the map using the provided method

- Whenever the map should be updated use the following method:

    ```
    Mapping.resetLocation(latLngObject);
    ```

- Ensure that the *latLngObject* is the correct structure

2. (14 marks) Using the *A3Q2.html* file provided, we want to create an application that will retrieve and store data related to a students Student Number. We will be given two input boxes, and two buttons. The first button will store a message for the given student number (entered in the input box), and the second button will retrieve the message for the same student number.

- Add a click event handler to the button with an id of "saveMessage". This handler should retrieve the values from the input box with an id of "studentNumber", and from a textarea with an id of "message". It will then make a web service request (using Fetch API). This request must be a POST, the url will be retrieved using the provided url (shown later), and the request must send the data retrieved from the "message" text area as part of the request body. In the fetch response handler, parse the JSON response, and if the key "message" says "Saved", call the following function:

    ```
    success()
    ```

- Add a client event handler to the button with an id of "getMessage". This handler should retrieve the values from the input box with an id of "studentNumber", and make a GET request to the provided URL. Put the retrieved content into an element with an id of "messageOutput"

Hand In Instructions:

Zip all files into a single archive named *StudentNumber_Assignment3.zip*. Submit the zip file to Nicole Van Hove at *vanhove-n@webmail.uwinnipeg.ca*.