The University of the West Indies
Cave Hill Campus
Faculty of Science and Technology
Department of Computer Science, Mathematics and Physics
SWEN1005: Mobile Web Programming
Assignment Three
Report on Mobile Web Frameworks
Due: April 14, 2023

INSTRUCTIONS

1. There are many mobile web development frameworks on the market. This can make deciding on which framework to use to develop a cross-platform application challenging. The aim of this assignment is to help you develop technology assessment and communication skills so that you can evaluate new technologies and explain clearly the pros and cons of their adoption. For this assignment you must first determine what the top frameworks are. Start by asking ChatGPT for a list and then verify that list by identifying at least five *credible* sources that have ranked mobile web development frameworks. Select what you assess to be the top 10 frameworks and clearly explain how you arrived at your ranking. Include your ChatGPT interaction and all references to your sources.

2. From the top 10 mobile web frameworks you have identified, create a shortlist of **two** frameworks. Provide detailed justifications for your selections. To do this, identify **at least five** criteria that you deem important–stating why they are important–and then assess the frameworks based on these criteria. Possible criteria can be ease-of-use or product maturity; however, familiarity with the product will not be considered as a reasonable criterion.

3. **Create an example application** that you can use to evaluate both frameworks. The application must be **simple**, but should include two of the following HTML5 features:
    a. Persistent Local Storage: localStorage or sessionStorage
    b. Canvas: programmable 2D drawing.
    c. Audio & Video: embedded audio or video without the need for third-party plugins.
    d. Geolocation: share current location
    e. Drag and drop move items from one area to the next.
You must explain why the application you chose was appropriate for evaluating the framework given the simplicity constraint. Include a link to the application code with any framework or application installation instructions as well as the instructions required to run the applications. Do not include the source code in the report.

4. **Write an evaluation of the two frameworks** you used to create the application. Your evaluation should discuss any strengths, weaknesses or challenges you identified or encountered while creating the application. Conclude the evaluation by recommending which framework should be used. Provide 3-5 reasons to explain why you made the recommendation.

5. Present all the information requested as a single cogent report using appropriate headings, sections, and subsections to clearly lay out and articulate your work and findings.