

### UNIVERSITI MALAYSIA TERENGGANU

## CSM3103 FRONT-END PROGRAMMING (K1)

# BACHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING) WITH HONORS

LAB 2

#### **SEMESTER II 2023/2024**

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### Task 1 – Setup and configure Apache cordova on your desktop/laptop

```
Microsoft Windows [Version 10.0.22621.3H47]
(c) Microsoft Windows [Version 10.0.22621.3H47]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ACER>pm install -g cordova
npm MARN deprecated phymici/move-fileg2.0.1: This functionality has been moved to @npmcli/fs
npm MARN deprecated stringify-package@10.1: This module is not used anymore, and has been replaced by @npmcli/package-json
npm MARN deprecated the an-validatorg5.1.5: this library is no longer supported
npm MARN deprecated unide3.4.0: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain circumstances, which is known to be
problematic. See https://v8.dev/blog/math-random for details.
npm MARN deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142

changed 547 packages in 34s

62 packages are looking for funding
run 'npm fund' for details

C:\Users\ACER>cordova --version
12.0.0 (cordova-lib@12.0.1)

C:\Users\ACER>cordova helloworld com.helloworld.io HelloWorld
Cordova does not know helloworld; try 'cordova help' for a list of all the available commands.

C:\Users\ACER>cordova create helloworld com.helloworld. io HelloWorld
Path already exists and is not empty: C:\Users\ACER\helloworld

C:\Users\ACER>cordova devented helloworld

C:\Users\ACER>cordova devented helloworld

C:\Users\ACER>cordova fracte helloworld

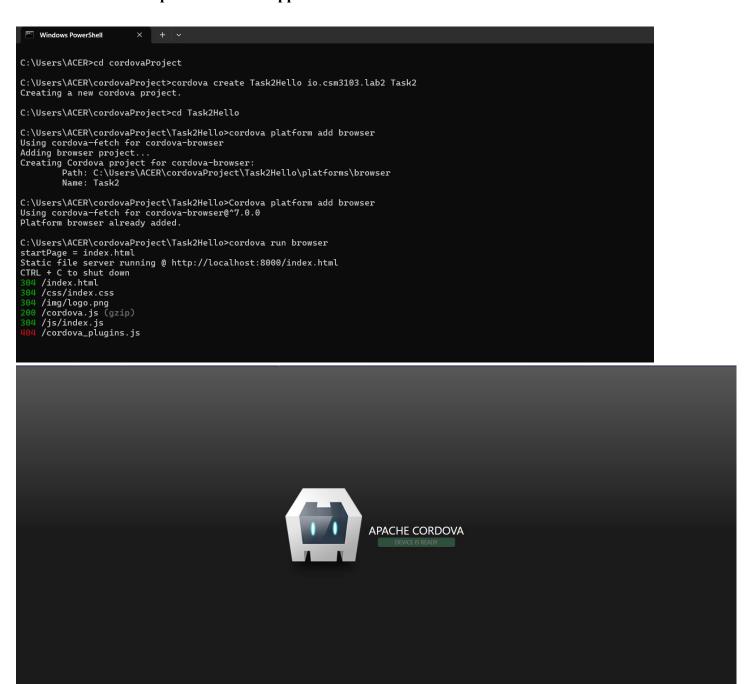
C:\Users\ACER>cordova fracte helloworld

C:\Users\ACER\helloworld>dir

Volume in drive (C is Acer

Volume Serial Number is 7E35-65A5
```

Task 2 – Your First Apache Cordova Application



#### Task3 – Simple eventListener in Cordova Project

```
Windows PowerShell
Microsoft Windows [Version 10.0.22621.3447]
(c) Microsoft Corporation. All rights reserved.
C:\Users\ACER>cd Desktop
The system cannot find the path specified.
C:\Users\ACER>mkdir cordovaProject
A subdirectory or file cordovaProject already exists.
C:\Users\ACER>cd cordovaProject
C:\Users\ACER\cordovaProject>cordova create Task3EventListener io.csm3103.lab2 Task3
Creating a new cordova project.
C:\Users\ACER\cordovaProject>cd Task3EventListener
C:\Users\ACER\cordovaProject\Task3EventListener>cordova platform add browser
Using cordova-fetch for cordova-browser
Adding browser project...
Creating Cordova project for cordova-browser:
        Path: C:\Users\ACER\cordovaProject\Task3EventListener\platforms\browser
C:\Users\ACER\cordovaProject\Task3EventListener>cordova run browser
startPage = index.html
Static file server running @ http://localhost:8000/index.html
CTRL + C to shut down
304 /index.html
304 /css/index.css
304 /img/logo.png
200 /cordova.js (gzip)
304 /js/index.js
 04 /cordova_plugins.js
```

Do some research on how to add two controls to you index.js to do the following:

a. Handle volume up button

```
document.addEventListener('volumeupbutton', onVolumekeyUp, false);

function onVolumekeyUp(){
    alert("You press volume up!");
}

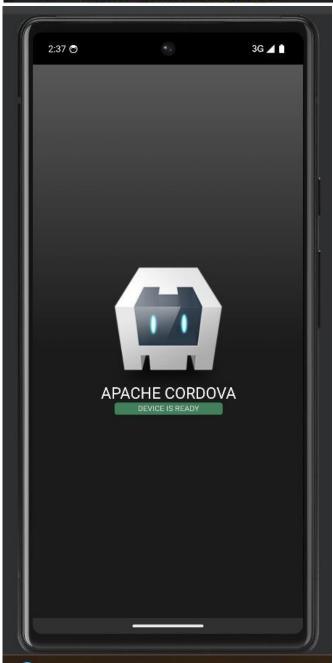
document.addEventListener('upbutton', onUpButton, false);

function onUpButton(e){
    e.preventDefault();
    alert("Up button pressed!");
}
```

# b. Handle menu button

```
document.addEventListener('backbutton',onBackButton,false);

function onBackButton(e){
```



#### Task 4 – Cordova Plugin use case (Simple Geolocation)

```
Windows PowerShell
The system cannot find the path specified.
C:\Users\ACER>mkdir cordovaProject
A subdirectory or file cordovaProject already exists.
C:\Users\ACER>cd cordovaProject
C:\Users\ACER\cordovaProject>cordova create Task4Geolocation io.csm3103.lab2 Task4
Creating a new cordova project.
C:\Users\ACER\cordovaProject>cd Task3Geolocation
The system cannot find the path specified.
C:\Users\ACER\cordovaProject>Cordova platform add browser
Current working directory is not a Cordova-based project.
C:\Users\ACER\cordovaProject>cordova run browser
Current working directory is not a Cordova-based project.
C:\Users\ACER\cordovaProject>cd Task4Geolocation
C:\Users\ACER\cordovaProject\Task4Geolocation>cordova platform add browser
Using cordova-fetch for cordova-browser
Adding browser project...
Creating Cordova project for cordova-browser:
        Path: C:\Users\ACER\cordovaProject\Task4Geolocation\platforms\browser
        Name: Task4
C:\Users\ACER\cordovaProject\Task4Geolocation>cordova run browser
startPage = index.html
Static file server running @ http://localhost:8000/index.html
CTRL + C to shut down
304 /index.html
304 /css/index.css
304 /img/logo.png
200 /cordova.js (gzip)
304 /js/index.js
    /cordova_plugins.js
```

```
<meta charset="utf-8">
            https://cordova.apache.org/docs/en/latest/
        <meta http-equiv="Content-Security-Policy" content="default-src 'self' data: https://ssl.gstatic.com 'unsa</pre>
        <meta name="format-detection" content="telephone=no">
        <meta name="msapplication-tap-highlight" content="no">
        <meta name="viewport" content="initial-scale=1, width=device-width, viewport-fit=cover">
        <meta name="color-scheme" content="light dark">
        <link rel="stylesheet" href="css/index.css">
        <title>Hello World</title>
        <div class="app">
            <h1>Apache Cordova</h1>
            <button id="getPosition">Current Position
            <button id="watchPosition">Watch Position/button>
            <div id="deviceready" class="blink">
                Connecting to Device
                Device is Ready
        <script src="cordova.js"></script>
        <script src="js/index.js"></script>
document.addEventListener('deviceready', onDeviceReady, false);
function onDeviceReady() {
   console.log('Running cordova-' + cordova.platformId + '@' + cordova.version);
   document.getElementById('deviceready').classList.add('ready');
document.getElementById("getPosition").addEventListener("click", getPosition);
function getPosition(){
   var options = {
      enableHighAccuracy: true,
      maximumAge: 3600000
   var watchID = navigator.geolocation.getCurrentPosition(onSuccess, onError, options);
   function onSuccess(position){
       alert('Latitude: '
                               + position.coords.latitude
                               + position.coords.longtitude
                                                                  + '\n' +
                               + position.coords.latitude
                               + position.coords.accuracy
                              + position.coords.altitudeAccuracy
                               + position.coords.heading
           'Speed:
                               + position.coords.speed
                                                                  + '\n');
                               + position.coords.timestamp
   function onError(error){
       alert('code: ' + error.code + '\n' + 'message: ' + error.message + '\n');
```

```
document.getElementById("watchPosition").addEventListener("click", watchPosition);
function watchPosition(){
    var options = {
        maximumAge: 3600000,
        timeout: 3000,
        enableHighAccuracy: true,
    var watchID = navigator.geolocation.watchPosition(onSuccess, onError, options);
    function onSuccess(position){
        alert('Latitude: ' + position.coords.longtitude
'Longtitude: ' + position.coords.longtitude
'Longtitude: ' + position.coords.longtitude
                                                                                 + '\n' +
                                                                               + '\n' +
                                      'Accuracy: '
             'Altitude Accuracy: ' + position.coords.altitudeaccuracy + '\n' +
             'Heading: ' + position.coords.heading + '\n' + 'Speed: ' + position.coords.speed + '\n' + 'Timestamp: ' + position.coords.timestamp + '\n');
    function onError(error){
        alert('code: ' + error.code + '\n' + 'message: ' + error.message + '\n');
```



Github Repository <a href="https://github.com/riezuuuu/CSM3103-Lab2">https://github.com/riezuuuu/CSM3103-Lab2</a>